DOCKETED	
Docket Number:	08-AFC-08A
Project Title:	Hydrogen Energy Center Application for Certification Amendment
TN #:	233603-11
Document Title:	Continuation of Amended AFC Volume III - HECA 11
Description:	*** These documents supersedes TN 65049 which was just the cover letter due to the fact the Amended AFC was too large to docket at the time. *** - Document was on proceeding webpage and is now moved over to the docket log.
Filer:	Raquel Rodriguez
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	6/22/2020 12:59:32 PM
Docketed Date:	6/22/2020



Attachment 1 – Laboratory Reports

Asbestos • Lead • Environmental • Materials & Indoor Air Analysis

EMSL Analytical, Inc.

http://www.emsl.com

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Attn: **Galen Cooter**
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8/26/2009

The following report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 8/12/2009. The results are tabulated on the attached data pages for the following client designated project:

Project ID: 12903-001

The reference number for these samples is EMSL Order #010904102. Please use this reference when calling about these samples.

If you have any questions, please do not hesitate to contact me at (856) 858-4800

Reviewed and Approved By:

Julie Smith, Laboratory Director or other approved signatory
NJ-NELAP Accredited:04653

ACCREDITED IN ACCORDANCE WITH nelac

The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

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Attn: **Galen Cooter**
AECOM Environment
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Long Beach, CA 90810

Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-001 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0001

Method	*Parameter*	*Concentration*	*Reporting Limit*	*Units*	*Analysis Date*	*Analyst*
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.5	0.81	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.74	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	1.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	4.7	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	2.4	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.1	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	8.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	95	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.049	0.021	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	4500	210	mg/Kg	8/13/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	5.63	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-002 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0002

Method	*Parameter*	*Concentration*	*Reporting Limit*	*Units*	*Analysis Date*	*Analyst*
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	3.9	0.80	mg/Kg	8/15/2009	rferrer

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Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-002 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0002

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.45	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	2.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	8.2	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	2.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.1	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	1.4	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	89	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.31	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	5400	420	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	6.00	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-003 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0003

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.58	0.40	mg/Kg	8/13/2009	rferrer

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Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-003 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0003

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Chromium	2.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	11	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	1.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	4.9	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	87	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.14	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	5900	420	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	6.14	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-IN-004 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0004

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	6.1	0.81	mg/Kg	8/15/2009	rferrer
6010B	Barium	<10	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.41	0.41	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.60	0.41	mg/Kg	8/13/2009	rferrer
6010B	Chromium	1.8	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	4.4	2.0	mg/Kg	8/13/2009	rferrer

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Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-IN-004 *Collected:* 8/11/2009 1:45:00 PM *Lab ID:* 0004

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Lead	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	2.7	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	1.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	9.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	98	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.050	0.020	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	4600	210	mg/Kg	8/13/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
The internal standard and surrogate recovery fell below the method criteria. The sample was reanalyzed to confirm matrix interference.						
9045C	pH	5.62	N/A	ph Units	8/14/2009	crybicki
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-001 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0005

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	93	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.0	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	5.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	47	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.0	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	10	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	2.3	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	18	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	12	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	6.8	2.0	mg/Kg	8/13/2009	rferrer

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Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-001 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0005

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Selenium	<10	10	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	23	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	210	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.13	0.021	mg/Kg	8/13/2009	jhess
9045C	pH	6.27	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	43000	130	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-002 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0006

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	84	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.2	2.2	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.9	0.90	mg/Kg	8/15/2009	rferrer
6010B	Barium	24	11	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.45	0.45	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.0	0.45	mg/Kg	8/13/2009	rferrer
6010B	Chromium	8.7	1.1	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Copper	12	2.2	mg/Kg	8/13/2009	rferrer
6010B	Lead	3.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Nickel	7.5	2.2	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<11	11	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	13	1.1	mg/Kg	8/13/2009	rferrer
6010B	Zinc	220	2.2	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.16	0.023	mg/Kg	8/13/2009	jhess

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Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-002 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0006

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
9045C	pH	6.37	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	36000	130	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-OUT-003 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0007

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	95	N/A	%	8/12/2009	cohehir
6010B	Antimony	2.1	2.0	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	8.6	0.80	mg/Kg	8/15/2009	rferrer
6010B	Barium	69	10	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.40	0.40	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	2.6	0.40	mg/Kg	8/13/2009	rferrer
6010B	Chromium	15	1.0	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.7	1.0	mg/Kg	8/13/2009	rferrer
6010B	Copper	30	2.0	mg/Kg	8/13/2009	rferrer
6010B	Lead	11	1.0	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	2.5	1.0	mg/Kg	8/13/2009	rferrer
6010B	Nickel	11	2.0	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<10	10	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.0	1.0	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	31	1.0	mg/Kg	8/13/2009	rferrer
6010B	Zinc	250	2.0	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.091	0.021	mg/Kg	8/13/2009	jhess
9045C	pH	6.26	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	36000	150	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

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Customer ID: ACMV26
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Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-OUT-004 *Collected:* 8/11/2009 1:50:00 PM *Lab ID:* 0008

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	93	N/A	%	8/12/2009	cohehir
6010B	Antimony	<2.1	2.1	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	6.4	0.85	mg/Kg	8/15/2009	rferrer
6010B	Barium	31	11	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.43	0.43	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	1.6	0.43	mg/Kg	8/13/2009	rferrer
6010B	Chromium	6.8	1.1	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	1.3	1.1	mg/Kg	8/13/2009	rferrer
6010B	Copper	13	2.1	mg/Kg	8/13/2009	rferrer
6010B	Lead	3.7	1.1	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.2	1.1	mg/Kg	8/13/2009	rferrer
6010B	Nickel	4.8	2.1	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<11	11	mg/Kg	8/14/2009	rferrer
6010B	Silver	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<1.1	1.1	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	14	1.1	mg/Kg	8/13/2009	rferrer
6010B	Zinc	210	2.1	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.12	0.020	mg/Kg	8/13/2009	jhess
9045C	pH	5.86	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	36000	150	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-BG-001 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0009

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	99	N/A	%	8/12/2009	cohehir
6010B	Antimony	2.0	1.9	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.8	0.76	mg/Kg	8/15/2009	rferrer
6010B	Barium	67	9.5	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.38	0.38	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.98	0.38	mg/Kg	8/13/2009	rferrer

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Long Beach, CA 90810
Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-BG-001 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0009

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Chromium	14	0.95	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.5	0.95	mg/Kg	8/13/2009	rferrer
6010B	Copper	30	1.9	mg/Kg	8/13/2009	rferrer
6010B	Lead	4.6	0.95	mg/Kg	8/13/2009	rferrer
6010B	Molybdenum	1.5	0.95	mg/Kg	8/13/2009	rferrer
6010B	Nickel	10	1.9	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<9.5	9.5	mg/Kg	8/14/2009	rferrer
6010B	Silver	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	24	0.95	mg/Kg	8/13/2009	rferrer
6010B	Zinc	100	1.9	mg/Kg	8/13/2009	rferrer
7471A	Mercury	0.022	0.019	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	74	34	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
9045C	pH	7.24	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	1100	140	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Client Sample Description HECA-BG-002 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0010

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
SM 2540B	Total Solids	99	N/A	%	8/12/2009	cohehir
6010B	Antimony	<1.9	1.9	mg/Kg	8/13/2009	rferrer
6010B	Arsenic	4.5	0.76	mg/Kg	8/15/2009	rferrer
6010B	Barium	58	9.5	mg/Kg	8/13/2009	rferrer
6010B	Beryllium	<0.38	0.38	mg/Kg	8/13/2009	rferrer
6010B	Cadmium	0.58	0.38	mg/Kg	8/13/2009	rferrer
6010B	Chromium	9.4	0.95	mg/Kg	8/13/2009	rferrer
6010B	Cobalt	3.0	0.95	mg/Kg	8/13/2009	rferrer
6010B	Copper	9.4	1.9	mg/Kg	8/13/2009	rferrer
6010B	Lead	6.1	0.95	mg/Kg	8/13/2009	rferrer

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

EMSL Analytical, Inc.
3 Cooper St., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4571 Email: jsmith@emsl.com

Attn: **Galen Cooter**
AECOM Environment
3995 Via Oro Avenue
Long Beach, CA 90810
Fax: (562) 420-2915 Phone: (562) 420-2933

Customer ID: ACMV26
Customer PO:
Received: 08/12/09 11:42 AM
EMSL Order: 010904102
EMSL Proj: 12903-001

Client Sample Description HECA-BG-002 *Collected:* 8/11/2009 1:55:00 PM *Lab ID:* 0010

Method	Parameter	Concentration	Reporting Limit	Units	Analysis Date	Analyst
6010B	Molybdenum	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Nickel	8.7	1.9	mg/Kg	8/13/2009	rferrer
6010B	Selenium	<9.5	9.5	mg/Kg	8/14/2009	rferrer
6010B	Silver	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Thallium	<0.95	0.95	mg/Kg	8/13/2009	rferrer
6010B	Vanadium	19	0.95	mg/Kg	8/13/2009	rferrer
6010B	Zinc	92	1.9	mg/Kg	8/13/2009	rferrer
7471A	Mercury	<0.019	0.019	mg/Kg	8/13/2009	jhess
8015B	Diesel Range Organics	<34	34	mg/Kg	8/14/2009	ehernandez
8260B-Volatiles	See Attached		N/A		8/13/2009	afalasca
9045C	pH	7.76	N/A	ph Units	8/14/2009	crybicki
SM 2310B	Ammonia	97	30	mg/Kg	8/13/2009	mmazur
Subcontract-Associated Laboratories	See Attached		N/A			

Samples analyzed by EMSL Analytical, Inc. Westmont 3 Cooper St., Westmont NJ

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	830	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	16	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	18	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	8.4	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0001	Project:	12903-001
Lab File ID:	V16007.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 8:57:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	8.2	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	720	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	7.1	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	11	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3		U
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0002	Project:	12903-001
Lab File ID:	V16008.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:26:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3		U
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	1500	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	19	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	28	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	6.0	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-003
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0003	Project:	12903-001
Lab File ID:	V16009.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 9:55:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	7.8	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	5.3		U
74-87-3	Chloromethane	5.3		U
75-01-4	Vinyl chloride	5.3		U
74-83-9	Bromomethane	26		U
75-00-3	Chloroethane	5.3		U
75-69-4	Trichlorofluoromethane	5.3		U
107-02-8	Acrolein	21		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	5.3		U
75-35-4	1,1-Dichloroethene	5.3		U
67-64-1	Acetone	53	940	
75-15-0	Carbon disulfide	5.3		U
75-09-2	Methylene chloride	26		U
75-65-0	tert-Butyl Alcohol	53		U
156-60-5	trans-1,2-Dichloroethene	5.3		U
1634-04-4	Methyl-tert butyl ether	11		U
107-13-1	Acrylonitrile	11		U
75-34-3	1,1-Dichloroethane	5.3		U
108-05-4	Vinyl acetate	11		U
594-20-7	2,2-Dichloropropane	5.3		U
156-59-2	cis-1,2-Dichloroethene	5.3		U
78-93-3	2-Butanone	11		U
74-97-5	Bromochloromethane	5.3		U
67-66-3	Chloroform	5.3		U
71-55-6	1,1,1-Trichloroethane	5.3		U
56-23-5	Carbon tetrachloride	5.3		U
563-58-6	1,1-Dichloropropene	5.3		U
71-43-2	Benzene	2.6	15	
107-06-2	1,2-Dichloroethane	5.3		U
79-01-6	Trichloroethene	5.3		U
78-87-5	1,2-Dichloropropane	5.3		U
74-95-3	Dibromomethane	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	5.3		U
110-75-8	2-Chloroethyl vinyl ether	11		U
10061-01-5	cis-1,3-Dichloropropene	5.3		U
108-10-1	4-Methyl-2-pentanone	11		U
108-88-3	Toluene	5.3	18	
10061-02-6	trans-1,3-Dichloropropene	5.3		U
79-00-5	1,1,2-Trichloroethane	5.3		U
127-18-4	Tetrachloroethene	5.3		U
142-28-9	1,3-Dichloropropane	5.3		U
591-78-6	2-Hexanone	11		U
124-48-1	Dibromochloromethane	5.3		U
106-93-4	1,2-Dibromoethane	5.3		U
108-90-7	Chlorobenzene	5.3		U
630-20-6	1,1,1,2-Tetrachloroethane	5.3		U
100-41-4	Ethylbenzene	5.3		U
108-38-3	Xylene (para & meta)	11		U
95-47-6	Xylene (Ortho)	5.3		U
100-42-5	Styrene	5.3		U
75-25-2	Bromoform	5.3		U
98-82-8	Isopropylbenzene	5.3		U
108-86-1	Bromobenzene	5.3		U
79-34-5	1,1,2,2-Tetrachloroethane	5.3		U
96-18-4	1,2,3-Trichloropropane	5.3		U
103-65-1	n-Propylbenzene	5.3		U
110-57-6	trans-1,4-Dichloro-2-butene	11		U
95-49-8	2-Chlorotoluene	5.3		U
106-43-4	4-Chlorotoluene	5.3		U
108-67-8	1,3,5-Trimethylbenzene	5.3	12	
98-06-6	tert-Butylbenzene	5.3		U
95-63-6	1,2,4-Trimethylbenzene	5.3		U
135-98-8	sec-Butylbenzene	5.3		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-IN-004
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0004	Project:	12903-001
Lab File ID:	V16010.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 10:24:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	1 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	5
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	5.3		U
99-87-6	4-Isopropyltoluene	5.3		U
106-46-7	1,4-Dichlorobenzene	5.3		U
95-50-1	1,2-Dichlorobenzene	5.3		U
104-51-8	n-Butylbenzene	5.3		U
96-12-8	1,2-Dibromo-3-chloropropane	5.3		U
120-82-1	1,2,4-Trichlorobenzene	5.3		U
87-68-3	Hexachlorobutadiene	5.3		U
91-20-3	Naphthalene	5.3	8.3	
87-61-6	1,2,3-Trichlorobenzene	5.3		U
79-20-9	Methyl Acetate	11		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	5.1		U
75-00-3	Chloroethane	1.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	4.0		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	1.0		U
75-35-4	1,1-Dichloroethene	1.0		U
67-64-1	Acetone	10	36	
75-15-0	Carbon disulfide	1.0		U
75-09-2	Methylene chloride	5.1		U
75-65-0	tert-Butyl Alcohol	10		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
1634-04-4	Methyl-tert butyl ether	2.0		U
107-13-1	Acrylonitrile	2.0		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	2.0		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	0.51		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	2.0		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	1.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
108-38-3	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	1.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-001
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0009	Project:	12903-001
Lab File ID:	V15996.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 3:37:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	1.0		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
79-20-9	Methyl Acetate	2.0		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	5.1		U
75-00-3	Chloroethane	1.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	4.0		U
76-13-1	Freon 113(1,1,2-Trichlorotrifluoroethan	1.0		U
75-35-4	1,1-Dichloroethene	1.0		U
67-64-1	Acetone	10	40	
75-15-0	Carbon disulfide	1.0		U
75-09-2	Methylene chloride	5.1	5.2	
75-65-0	tert-Butyl Alcohol	10		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
1634-04-4	Methyl-tert butyl ether	2.0		U
107-13-1	Acrylonitrile	2.0		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	2.0		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	0.51		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	2.0		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	1.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
108-38-3	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	1.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U

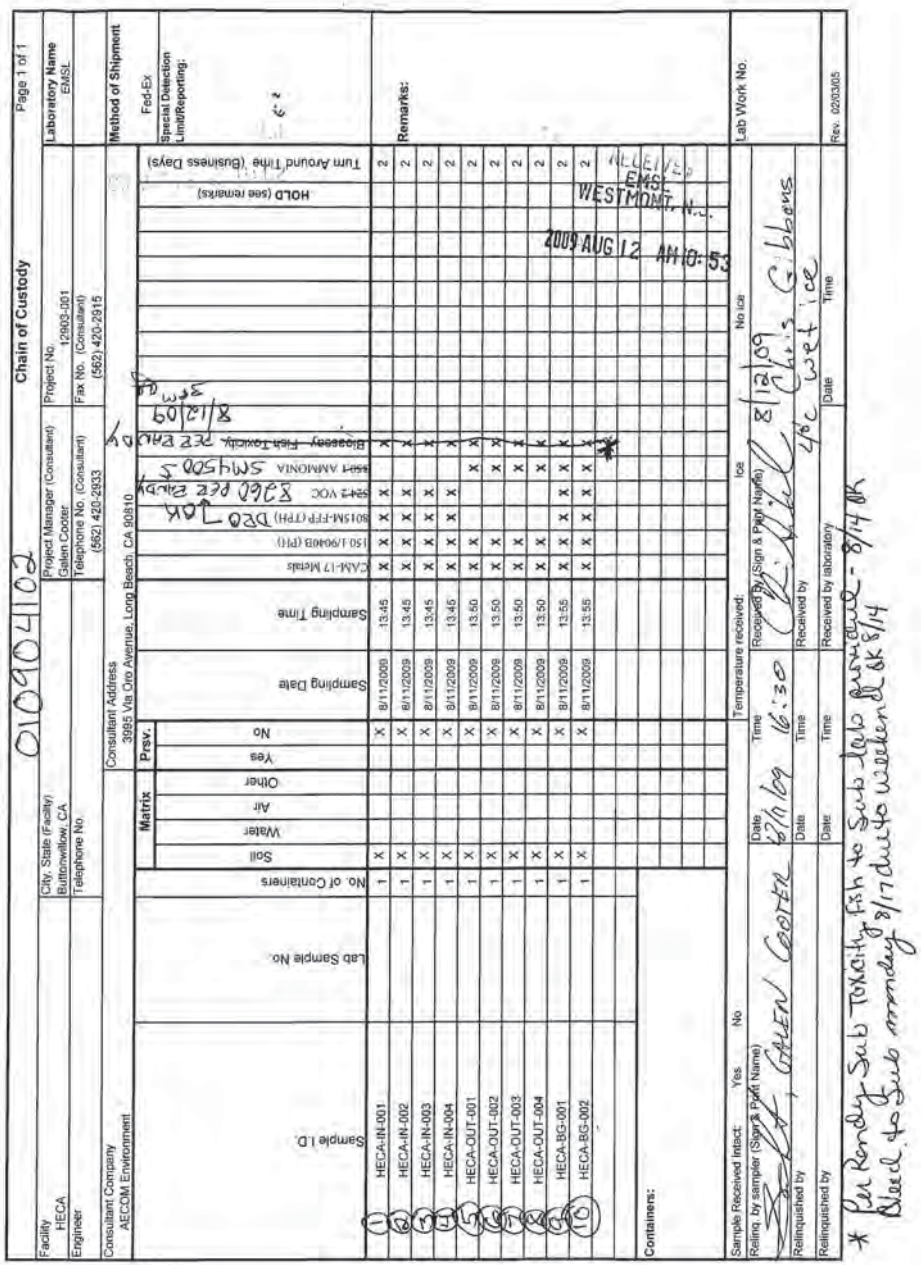
EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	HECA-BG-002
Lab Name:	EMSL ANALYTICAL		
EMSL Sample ID:	010904102-0010	Project:	12903-001
Lab File ID:	V15997.D	Sample Matrix:	Soils
Instrument ID:	VOA MSD-V	Sampling Date:	8/11/2009
Analyst:	AF	Analysis Date	8/13/2009 4:06:00 PM
GC Column:	RTX-VMS X 30m (0.25 mm)	Level (low/med):	LOW
Sample wt/vol:	5 G	Nominal Amount:	5 G
Dilution Factor:	1	Method:	SW846 8260B
Sample Container:	Jar (SW-846 5035)	Moisture(%)	1
Heated Purge (Y/N):	Y		

CAS NO	COMPOUND	Report Limit (µg/Kg)	CONC. (µg/Kg)	Q
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	1.0		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
79-20-9	Methyl Acetate	2.0		U

Qualifier Definitions
U = Undetected
B = Compound detected in method blank
E = Estimated value
J = Estimated concentration.
D = Dilution



Chain of Custody

Page 1 of 1

010904102

Facility: HECA
City, State (Facility): Buttonwillow, CA
Engineer:
Telephone No.:
Project Manager (Consultant): Galen Cooter
Telephone No. (Consultant): (562) 420-2933
Project No.: 12903-001
Fax No. (Consultant): (562) 420-2915
Laboratory Name: EMSL
Method of Shipment: Fed-Ex
Special Detection Limit/Reporting:

Consultant Company: AECOM Environment
Consultant Address: 3985 Via Oro Avenue, Long Beach, CA 90810

Containers:

Sample I.D.	Lab Sample No.	No. of Containers	Matrix: Soil	Water	Air	Other	Prev.: Yes	No	Sampling Date	Sampling Time	CAM-17 Metals	150.1/9040B (PH)	8015M-FFP (TPH) DRO TOX	8260 VOC	8270 VOC	8270 SMSOO S	350.1 AMMONIA	Biossay Fish Toxicity RE ENVS	HOLD (see remarks)	Turn Around Time (Business Days)
HECA-IN-001		1	X					X	8/11/2009	13:45	X	X	X	X			X	X		2
HECA-IN-002		1	X				X		8/11/2009	13:45	X	X	X	X			X	X		2
HECA-IN-003		1	X					X	8/11/2009	13:45	X	X	X	X			X	X		2
HECA-IN-004		1	X				X		8/11/2009	13:45	X	X	X	X			X	X		2
HECA-OUT-001		1	X					X	8/11/2009	13:50	X	X	X				X	X		2
HECA-OUT-002		1	X					X	8/11/2009	13:50	X	X	X				X	X		2
HECA-OUT-003		1	X				X		8/11/2009	13:50	X	X	X				X	X		2
HECA-OUT-004		1	X				X		8/11/2009	13:50	X	X	X				X	X		2
HECA-BG-001		1	X					X	8/11/2009	13:55	X	X	X				X	X		2
HECA-BG-002		1	X					X	8/11/2009	13:55	X	X	X				X	X		2

Remarks:

Lab Work No.

Sample Received Intact: Yes / No
Temperature received: Ice / No ice
Relinq. by sampler (Sign & Print Name): Galen Cooter — Date: 8/12/09 — Time: 16:30
Received by (Sign & Print Name): — Date: 8/13/09 — Time: 9:30
Relinquished by: — Date: — Time:
Received by laboratory: — Date: — Time:

Rev. 02/03/08

2009 AUG 12 AM 10:53
EMSL
WESTMONT, N.J.

8/12/09 Chris G. blams
4°C wet ice

60/12/8 8pm OK

* Per Randy Sub TOXICITY to Sub lab Anaheim - 8/14 BK
Need to Sub Monday 8/17 due to weekend BK 8/14

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900 *FAX 714/538-1209*

CLIENT EMSL Analytical, Inc. (13096)
ATTN: Debbie Kreider
3 Cooper St.
Westmont, NJ 08108

LAB REQUEST 239499
REPORTED 08/26/2009
RECEIVED 08/18/2009

SUBMITTER Client

COMMENTS LC50 > 500 mg/L = Non Hazardous
LC50 < 500 mg/L = Hazardous

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
1016035	010904102-1
1016036	010904102-2
1016037	010904102-3
1016038	010904102-4
1016039	010904102-5
1016040	010904102-6
1016041	010904102-7
1016042	010904102-8
1016043	010904102-9
1016044	010904102-10

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Order #: 1016035 **Client Sample ID:** 010904102-1
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016036 **Client Sample ID:** 010904102-2
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016037 **Client Sample ID:** 010904102-3
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

Order #: 1016038 **Client Sample ID:** 010904102-4
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	< 500		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Order #: 1016039 **Client Sample ID:** 010904102-5
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016040 **Client Sample ID:** 010904102-6
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016041 **Client Sample ID:** 010904102-7
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016042 **Client Sample ID:** 010904102-8
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

Order #: 1016043 **Client Sample ID:** 010904102-9
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

Order #: 1016044 **Client Sample ID:** 010904102-10
Matrix: SOLID
Date Sampled: 08/11/2009

Analyte	Result	DLR	Units	Date/Analyst
600/4-85/013 Fish Bioassay - Adult				
LC50	> 750		mg/L	08/19/09 TD

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

EMSL Analytical, Inc.
Environmental Chemistry Lab Service
3 Cooper St., Westmont, NJ 08108
TEL: (856) 858-4800 FAX: (856) 858-4571

Chain of Custody / Analysis Request Form
Print ALL Information. Incomplete chain of custody could result in the delay of analysis.

EMSL Project #
Account Rep:
Indicate State where samples were collected:

LAC # 239499

REPORT RESULTS TO:
Name: Debbie Kreider PO#:
Company
EMSL Analytical, Inc.
Address: 3 Cooper St.
City: Westmont
State: NJ Zip: 08108
Tel: 856-858-4800 ext. 1225 Fax: 856-854-2362
Email: dkreider@emsl.com

SEND INVOICE TO:
Name: PO#:
Company
EMSL Analytical, Inc.
Address: 107 Haddon Ave
City: Westmont
State: NJ Zip: 08108
Tel: 856-858-4800 Fax: 856-854-2362
of Samples in Shipment: 10

Turnaround Time - 5 Business Days
Associated Laboratories
806 N. Batavia St.
Orange, CA 92868
714-771-6900

PROJECT NAME:

Date of Sample Shipment:

Sampled by: (Signature)

	Lab Sample Number	Client Sample ID	Comp	Grab	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Preservative: HCl	HNO3	H2SO4	OTHER	Sampling: DATE	TIME	List Method and Test Needed: Bioassay Fish Toxicity									
1.	010904102-1					X								8/11/09		X									
2.	010904102-2					X								8/11/09		X									
3.	010904102-3					X								8/11/09		X									
4.	010904102-4					X								8/11/09		X									
5.	010904102-5					X								8/11/09		X									
6.	010904102-6					X								8/11/09		X									
7.	010904102-7					X								8/11/09		X									
8.	010904102-8					X								8/11/09		X									
9.	010904102-9					X								8/11/09		X									
10.	010904102-10													8/11/09		X									

Released By Signature: Date & Time Released: 8/17/09 1115
Delivery Method: Received By Signature:
Agency: ASL
Date & Time Received: 8/18/09 1005
Condition Noted:

Please indicate reporting requirements: ☐1. Results Only ☐2. Results and QC ☐3. Reduced Deliverables ☐4. Disk Deliverable ☐5. Other

Comments:

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 *FAX 714-538-1209*

SAMPLE ACCEPTANCE CHECKLIST

Section 1
Client: EMSL Ana.
Date Received: 8-18-09
Sample(s) received in cooler: (Yes)
Shipping Information:
Project:
Sampler's Name: Yes No
No (Skip Section 2)

Section 2
Was the cooler packed with: X Ice ___ Ice Packs X Bubble Wrap ___ Styrofoam
___ Paper ___ None ___ Other
Cooler or box temperature: 5
(Acceptance range is 2 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	X		
Is it properly completed? (IDs, sampling date and time, signature, test)	X		
Were custody seals present?			X
If Yes – were they intact?			X
Were all samples sealed in plastic bags?	X		
Did all samples arrive intact? If no, indicate below.	X		
Did all bottle labels agree with COC? (ID, dates and times)	X		
Were correct containers used for the tests required?	X		
Was a sufficient amount of sample sent for tests indicated?	X		
Was there headspace in VOA vials?			X
Were the containers labeled with correct preservatives?			X
Was total residual chlorine measured (Fish Bioassay samples only)? *			X

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
Explanations/Comments

Section 5
Was Project Manager notified of discrepancies: Y / N N/A

Completed By: M. Echeat Date: 8-18-09

Lab. No. 239499-1
Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016035

Bioassay Type
Static √ Continuous
Screening √ Definitive

Sample Description: Soil - 0109041102 - 1 Source: Thomas Fish Farm Acclimatization: 13
Test Organism: Pimephales Promelas No. Fish/Concentration: 10 Total Chlorine Residual: N/D Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Sample Conductivity: 310 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Final: 40 mg/l Alkalinity – Initial: 35 mg/l Final: 46 mg/l
Dilution water - Source: Soft Water Hardness – Initial: 45 mg/l Control Alkalinity Initial: 30 mg/l Final 35 mg/l Control Conductivity 220 µmhos/cm
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		750		500		250		Dilution Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	2	20	10	100	0	0	1	10	10	100
	08/21	10	100	√	√	0	0	9	90	√	√	0	0	10	100
	08/22	10	100			√	√	8	80			√	√	9	90
	08/23	10	100					8	80					9	90
Dissolved Oxygen mg/l	09:40	6.9		6.5		6.5		6.5		6.5		6.5		6.5	
	10:10	7.3		6.8		7.0		7.3		6.8		7.0		7.3	
	13:30	7.2		√		6.7		7.4		√		6.7		7.4	
	09:00	7.5				√		7.0				√		7.0	
	11:20	7.0						6.9						6.9	
pH / Temp	Start	7.1	20.0 °C	6.8	20.0 °C	6.9	20.0 °C	7.0	20.0 °C	6.8	20.0 °C	6.9	20.0 °C	7.0	20.0 °C
	24 Hr	7.3	19.8 °C	6.6	19.8 °C	6.7	19.8 °C	6.9	19.8 °C	6.6	19.8 °C	6.7	19.8 °C	6.9	19.8 °C
	48 Hr	7.5	20.0 °C	√	20.0 °C	6.6	20.0 °C	6.8	20.0 °C	√	20.0 °C	6.6	20.0 °C	6.8	20.0 °C
	72 Hr	7.3	19.8 °C		°C	√	°C	6.7	19.8 °C		°C	√	°C	6.7	19.8 °C
	96 Hr	7.4	20.4 °C		°C		°C	6.7	20.4 °C		°C		°C	6.7	20.4 °C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. N/A (TD)
Observation/Remarks

Method of Calculations N/A
95% Confidence Limits N/A
LCso Method

√ Laboratory Supervisor

Lab. No. 239499 - 2

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016036

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 2
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 325 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 72 mg/l Alkaline – Initial: 35 mg/l Final: 48 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	1	10	10	100	0	0	2	20	9	90
	08/21	10	100	✓	✓	0	0	9	90	✓	✓	0	0	9	90
	08/22	10	100			✓	✓	9	90			✓	✓	8	80
	08/23	10	100					9	90					8	80
Dissolved Oxygen mg/l	09:50	6.9		6.4		6.4		6.4		6.4		6.4		6.4	
	10:20	7.7		7.1		6.7		7.2		7.1		6.7		7.2	
	13:40	7.2		✓		7.0		6.8		✓		7.0		6.8	
	09:10	7.5				✓		7.0				✓		7.0	
	11:30	7.0						7.1						7.1	
pH / Temp	Start	7.1	20.0 °C	7.0	20.0 °C	7.1	20.0 °C	7.2	20.0 °C	7.0	20.0 °C	7.1	20.0 °C	7.2	20.0 °C
	24 Hr	7.3	19.8 °C	6.8	19.8 °C	6.9	19.8 °C	7.1	19.8 °C	6.8	19.8 °C	6.9	19.8 °C	7.1	19.8 °C
	48 Hr	7.5	20.0 °C	✓	20.0 °C	6.8	20.0 °C	7.0	20.0 °C	✓	20.0 °C	6.8	20.0 °C	7.0	20.0 °C
	72 Hr	7.3	19.8 °C		°C	✓	°C	6.9	19.8 °C		°C	✓	°C	6.9	19.8 °C
	96 Hr	7.4	20.4 °C		°C		°C	6.9	20.4 °C		°C		°C	6.9	20.4 °C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

✓
Laboratory Supervisor

Lab. No. 239499 - 3

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016037

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 3
Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 340 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 75 mg/l Alkaline – Initial: 35 mg/l Final: 50 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	0	0	2	20	10	100	0	0	1	10	10	100
	08/21	10	100	✓	✓	0	0	9	90	✓	✓	0	0	10	100
	08/22	10	100			✓	✓	9	90			✓	✓	9	90
	08/23	10	100					8	80					9	90
Dissolved Oxygen mg/l	10:00	6.9		6.3		6.3		6.3		6.3		6.3		6.3	
	10:30	7.7		7.0		6.8		7.1		7.0		6.8		7.1	
	13:50	7.2		✓		7.1		7.3		✓		7.1		7.3	
	09:20	7.5				✓		6.8				✓		6.8	
	11:40	7.0						6.7						6.7	
pH / Temp	Start	7.1	20.0 °C	7.1	20.0 °C	7.2	20.0 °C	7.3	20.0 °C	7.1	20.0 °C	7.2	20.0 °C	7.3	20.0 °C
	24 Hr	7.3	19.8 °C	6.9	19.8 °C	7.0	19.8 °C	7.2	19.8 °C	6.9	19.8 °C	7.0	19.8 °C	7.2	19.8 °C
	48 Hr	7.5	20.0 °C	✓	20.0 °C	6.9	20.0 °C	7.1	20.0 °C	✓	20.0 °C	6.9	20.0 °C	7.1	20.0 °C
	72 Hr	7.3	19.8 °C		°C	✓	°C	7.0	19.8 °C		°C	✓	°C	7.0	19.8 °C
	96 Hr	7.4	20.4 °C		°C		°C	7.0	20.4 °C		°C		°C	7.0	20.4 °C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

✓
Laboratory Supervisor

Lab. No. 239499-4

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016038

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 4

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 345 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.54 gm
Dilution water - Source Soft Water Hardness - Initial: 45 mg/l Final: 78 mg/l Alkaline - Initial: 35 mg/l Final: 50 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	2	20	7	70	10	100	1	10	6	60	10	100
	08/21	10	100	0	0	3	30	10	100	0	0	4	40	10	100
	08/22	10	100	✓	✓	2	20	9	90	✓	✓	3	30	10	100
	08/23	10	100			2	20	9	90			3	30	10	100
Dissolved Oxygen mg/l	10:10	6.9		6.6		6.6		6.6		6.6		6.6		6.6	
	10:40	7.7		6.9		7.1		7.2		6.9		7.1		7.2	
	14:00	7.2		6.7		7.0		7.1		6.7		7.0		7.1	
	09:30	7.5		✓		6.7		7.3		✓		6.7		7.3	
	11:50	7.0				6.8		6.9				6.8		6.9	
pH / Temp	Start	7.1	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C	7.0	20.0°C	7.1	20.0°C	7.2	20.0°C
	24 Hr	7.3	19.8°C	6.8	19.8°C	7.0	19.8°C	7.1	19.8°C	6.8	19.8°C	7.0	19.8°C	7.1	19.8°C
	48 Hr	7.5	20.0°C	6.7	20.0°C	6.9	20.0°C	7.0	20.0°C	6.7	20.0°C	6.9	20.0°C	7.0	20.0°C
	72 Hr	7.3	19.8°C	✓	°C	6.8	19.8°C	6.9	19.8°C	✓	°C	6.8	19.8°C	6.9	19.8°C
	96 Hr	7.4	20.4°C		°C	6.8	20.4°C	6.9	20.4°C		°C	6.8	20.4°C	6.9	20.4°C

Results - LC_{50} = < 500 mg/l
< 500 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

____
Laboratory Supervisor

Lab. No. 239499-5

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016039

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 5

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 645 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.56 gm
Dilution water - Source Soft Water Hardness - Initial: 45 mg/l Final: 80 mg/l Alkaline - Initial: 35 mg/l Final: 58 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	9	90	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	8	80	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	8	80	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:20	6.9		6.8		6.8		6.8		6.8		6.8		6.8	
	10:50	7.7		7.0		7.3		7.1		7.0		7.3		7.1	
	14:10	7.2		7.4		6.9		7.0		7.4		6.9		7.0	
	09:40	7.5		6.8		7.0		7.3		6.8		7.6		7.3	
	12:00	7.0		7.3		7.1		7.2		7.3		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

____
Laboratory Supervisor

Lab. No. 239499-6

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016040

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 6

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 535 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness - Initial: 45 mg/l Final: 75 mg/l Alkaline - Initial: 35 mg/l Final: 55 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:30	6.9		6.7		6.7		6.7		6.7		6.7		6.7	
	11:00	7.7		7.1		6.8		7.0		7.1		6.8		7.0	
	14:20	7.2		7.4		7.0		7.3		7.4		7.0		7.3	
	09:50	7.5		7.0		7.2		7.1		7.0		7.2		7.1	
	12:10	7.0		7.2		7.1		6.9		7.2		7.1		6.9	
pH / Temp	Start	7.1	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = >750 mg/l
>750 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-7

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016041

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 7

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 650 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.56 gm
Dilution water - Source Soft Water Hardness - Initial: 45 mg/l Final: 85 mg/l Alkaline - Initial: 35 mg/l Final: 65 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/22	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	10	100	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:40	6.9		6.5		6.5		6.5		6.5		6.5		6.5	
	11:10	7.7		7.3		7.0		7.2		7.3		7.0		7.2	
	14:30	7.2		7.1		7.3		7.0		7.1		7.3		7.0	
	10:00	7.5		6.8		7.2		7.3		6.8		7.2		7.3	
	12:20	7.0		7.4		6.7		7.1		7.4		6.7		7.1	
pH / Temp	Start	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C	7.2	20.0°C	7.3	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.1	19.8°C	7.2	19.8°C	7.3	19.8°C	7.1	19.8°C	7.2	19.8°C	7.3	19.8°C
	48 Hr	7.5	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	72 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	96 Hr	7.4	20.4°C	7.0	20.4°C	7.1	20.4°C	7.2	20.4°C	7.0	20.4°C	7.1	20.4°C	7.2	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. (TD)
Observation/Remarks ____

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-8

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016042

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 8

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 640 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 80 mg/l Alkaline – Initial: 35 mg/l Final: 60 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	8	80	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	8	80	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	10:50	6.9		6.6		6.6		6.6		6.6		6.6		6.6	
	11:20	7.7		6.8		7.3		7.1		6.8		7.3		7.1	
	14:40	7.2		7.4		7.0		7.3		7.4		7.0		7.3	
	10:10	7.5		7.1		7.2		7.0		7.1		7.2		7.0	
	12:30	7.0		7.3		7.1		7.2		7.3		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C	7.1	20.0°C	7.2	20.0°C	7.3	20.0°C
	24 Hr	7.3	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C	7.0	19.8°C	7.1	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C	6.9	20.0°C	7.0	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C	6.8	19.8°C	6.9	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C	6.8	20.4°C	6.9	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

Laboratory Supervisor

Lab. No. 239499-9

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016043

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 9

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - I)
Aquaria Volume: 10 liters Aquaria Depth: 5 inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 330 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.55 gm
Dilution water - Source Soft Water Hardness – Initial: 45 mg/l Final: 72 mg/l Alkaline – Initial: 35 mg/l Final: 46 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

Bioassay Conditions	Date Time	Control		Dilution 750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	9	90	10	100	10	100	10	100	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	11:00	6.9		6.7		6.7		6.7		6.7		6.7		6.7	
	11:30	7.7		7.1		6.8		7.0		7.1		6.8		7.0	
	14:50	7.2		7.3		7.0		7.1		7.3		7.0		7.1	
	10:20	7.5		6.7		7.2		7.3		6.7		7.2		7.3	
	12:40	7.0		7.4		7.1		7.2		7.4		7.1		7.2	
pH / Temp	Start	7.1	20.0°C	7.6	20.0°C	7.5	20.0°C	7.4	20.0°C	7.6	20.0°C	7.5	20.0°C	7.4	20.0°C
	24 Hr	7.3	19.8°C	7.4	19.8°C	7.3	19.8°C	7.2	19.8°C	7.4	19.8°C	7.3	19.8°C	7.2	19.8°C
	48 Hr	7.5	20.0°C	7.3	20.0°C	7.2	20.0°C	7.1	20.0°C	7.3	20.0°C	7.2	20.0°C	7.1	20.0°C
	72 Hr	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C	7.0	19.8°C	7.2	19.8°C	7.1	19.8°C	7.0	19.8°C
	96 Hr	7.4	20.4°C	7.2	20.4°C	7.1	20.4°C	7.0	20.4°C	7.2	20.4°C	7.1	20.4°C	7.0	20.4°C

Results - LC_{50} = > 750 mg/l
> 750 mg/l
% Survival N/A
Toxic Units T.U. ____
Observation/Remarks (TD)

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

✓
Laboratory Supervisor

Lab. No. 239499-10

Date Received: 08/18/09
Date Reported: 08/24/09

LABORATORY WORKSHEET

Report To: EMSL Analytical (147) 1016044

Bioassay Type
Static ✓ Continuous ____
Screening ✓ Definitive ____

Sample Description Soil - 010904102 - 10

Test Organism: Pimephales Promelas Source: Thomas Fish Farm Acclimatization: 13 Days @ 20 deg. C (FB - 1)
Aquaria Volume: 10 liters Aquaria Depth: 5 Inches No. Fish/Concentration: 10 Total Chlorine Residual: N/D Sample Conductivity: 280 µmhos/cm
Organism Characteristics - Length (mm): Min: 34 mm Max: 44 mm Avg: 39 mm Weigh (gm): Min: 0.45 gm Max: 0.65 gm Avg: 0.54 gm
Dilution water - Source Soft Water Hardness - Initial: 45 mg/l Final: 65 mg/l Alkaline - Initial: 35 mg/l Final: 40 mg/l
Aeration: Air Control Hardness Initial: 40 mg/l Final: 55 mg/l Control Alkaline Initial: 30 mg/l Final 38 mg/l Control Conductivity 220 µmhos/cm
Aeration Rate: 100 bubbles/min Aeration Duration: 96 hrs Tanks: All

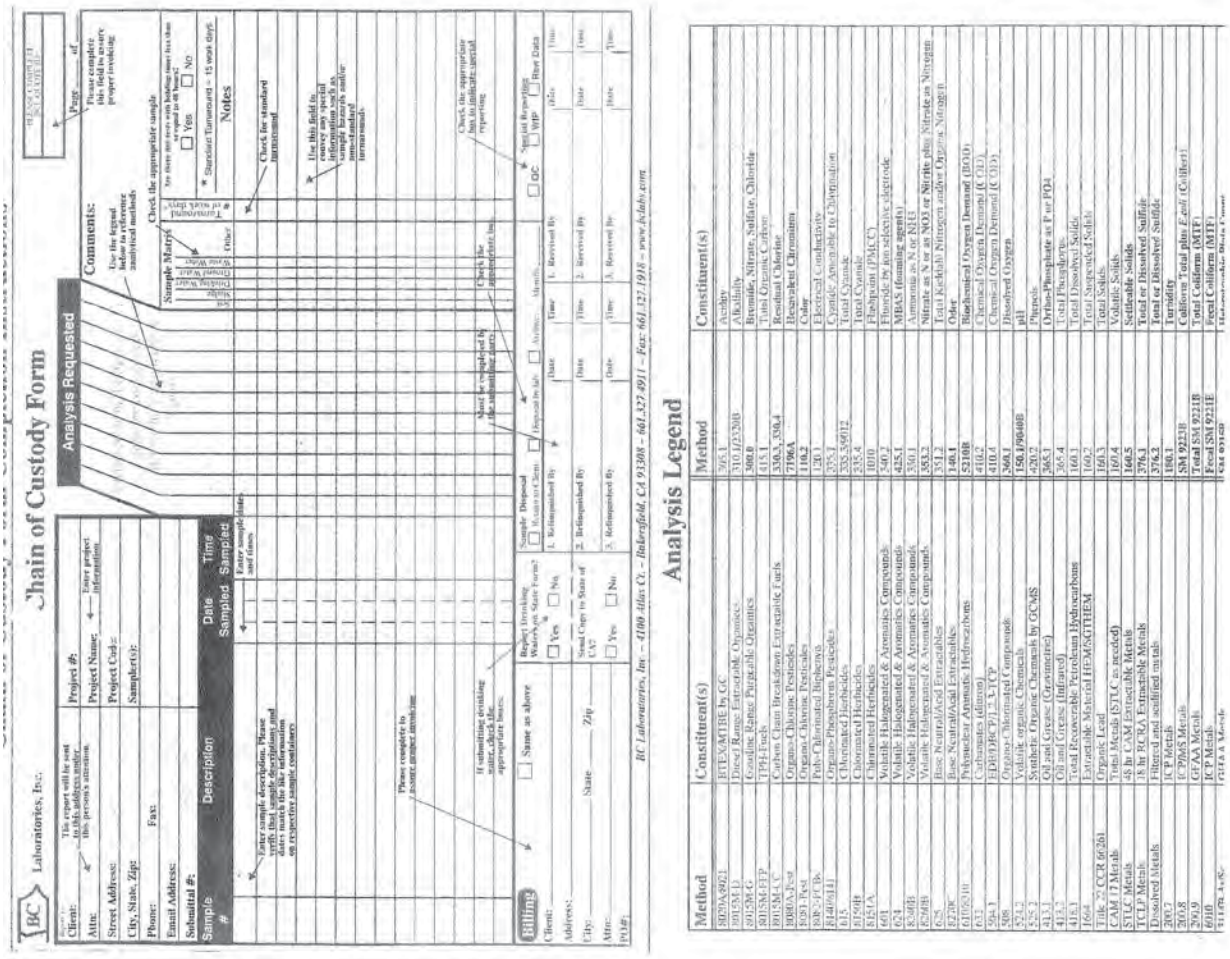
Bioassay Conditions	Date Time	Control		Dilution											
				750		500		250		Dup 750		Dup 500		Dup 250	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organisms Surviving	08/19	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/20	10	100	10	100	10	100	10	100	10	100	10	100	10	100
	08/21	10	100	10	100	10	100	10	100	9	90	10	100	10	100
	08/22	10	100	9	90	10	100	10	100	9	90	10	100	10	100
	08/23	10	100	9	90	10	100	10	100	9	90	10	100	10	100
Dissolved Oxygen mg/l	11:10	6.9		6.4		6.4		6.4	6.6 @ 19	6.4		6.4		6.4	
	11:40	7.7		7.3		7.0		7.2		7.3		7.0		7.2	
	15:00	7.2		7.0		7.3		7.1		7.0		7.3		7.1	
	10:30	7.5		7.1		7.4		7.0		7.1		7.4		7.0	
	12:50	7.0		7.2		6.8		7.3		7.2		6.8		7.3	
pH / Temp	Start	7.1	20.0°C	7.7	20.0°C	7.6	20.0°C	7.5	20.0°C	7.7	20.0°C	7.6	20.0°C	7.5	20.0°C
	24 Hr	7.3	19.8°C	7.5	19.8°C	7.4	19.8°C	7.3	19.8°C	7.5	19.8°C	7.4	19.8°C	7.3	19.8°C
	48 Hr	7.5	20.0°C	7.4	20.0°C	7.3	20.0°C	7.2	20.0°C	7.4	20.0°C	7.3	20.0°C	7.2	20.0°C
	72 Hr	7.3	19.8°C	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C	7.3	19.8°C	7.2	19.8°C	7.1	19.8°C
	96 Hr	7.4	20.4°C	7.3	20.4°C	7.2	20.4°C	7.1	20.4°C	7.3	20.4°C	7.2	20.4°C	7.1	20.4°C

Results - LC_{50} = >750 mg/l
>750 mg/l
% Survival N/A
Toxic Units T.U. ____
Observation/Remarks TD

Method of Calculations N/A
95% Confidence Limits ____
LC_{50} Method ____

✓
Laboratory Supervisor

Results from Kern County Environmental Health Services Department



Chain of Custody Form

BC Laboratories, Inc.

PLEASE COMPLETE: BCL QUOTE ID:

Page ___ of ___

Report To: Client: | Project #:
Attn: | Project Name:
Street Address: | Project Code:
City, State, Zip: | Sampler(s):
Phone: Fax: | Email Address:
Submittal #:

Analysis Requested

Comments:

Sample # | Description | Date Sampled | Time Sampled | Sample Matrix (Soil, Sludge, Drinking Water, Ground Water, Waste Water, Other) | Turnaround # of work days* | Notes

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

Report Drinking Waters on State Form? ☐ Yes ☐ No

Send Copy to State of CA? ☐ Yes ☐ No

Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive: Months

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

1. Relinquished By / Date / Time
2. Relinquished By / Date / Time
3. Relinquished By / Date / Time
1. Received By / Date / Time
2. Received By / Date / Time
3. Received By / Date / Time

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Analysis Legend

Method	Constituent(s)
8020A/8021	BTEX/MTBE by GC
8015M-D	Diesel Range Extractable Organics
8015M-G	Gasoline Range Purgeable Organics
8015M-FP	TPH-Fuels
8015M-CC	Carbon Chain Breakdown Extractable Fuels
8080A/Pest	Organo-Chlorine Pesticides
8081/Pest	Organo-Chlorine Pesticides
8082/PCB	PCB's (Polychlorinated Biphenyls)
8140/8141	Organo-Phosphorus Pesticides
615	Chlorinated Herbicides
8150B	Chlorinated Herbicides
8151A	Chlorinated Herbicides
601	Volatile Halogenated & Aromatics Compounds
624/8260B	Volatile Halogenated & Aromatics Compounds
8240B/8260B	Volatile Halogenated & Aromatics Compounds
625	Base, Neutral/Acid Extractables
8270C	Base, Neutral/Acid Extractables
610/8310	Polynuclear Aromatic Hydrocarbons
632	Carbamates (dioxins)
504.1	EDB/DBCP/1,2,3-TCP
8011/504	Organic Chlorinated Compounds
508	Organic Chlorinated Compounds
524.2	Volatile organic Chemicals
525.2	Synthetic Organic Chemicals by GC/MS
413.1	Oil and Grease (Gravimetric)
413.2	Oil and Grease (Infrared)
418.1	Total Recoverable Petroleum Hydrocarbons
1664	Extractable Material HEM/SGT-HEM
Title 22 CCR 66261	Organic Lead
CAM 17 Metals	Total Metals (STLC as needed)
STLC Metals	48 hr CAM Extractable Metals
TCLP Metals	18 hr RCRA Extractable Metals
Dissolved Metals	Filtered and acidified metals
200.7	ICP Metals
200.8	ICP/MS Metals
200.9	GF/AA Metals
6010	ICP Metals
7000 Series	GF/AA Metals

Method	Constituent(s)
9045C	Acidity
310.1/2320B	Alkalinity
300.0	Bromide, Nitrate, Sulfate, Chloride
415.1	Total Organic Carbon
330.5, 330.4	Residual Chlorine
7196A	Hexavalent Chromium
110.2	Color
120.1	Electrical Conductivity
335.3	Cyanide Amenable to Chlorination
335.3/9012	Total Cyanide
218.4	Fluorescein (FLUC)
340.2	Fluoride by ion selective electrode
425.1	MBAS (foaming agents)
350.1	Ammonia as N or TKN
353.2	Nitrate as NO3 or Nitrite, plus Nitrate as Nitrogen
351.2	Total Kjeldahl Nitrogen, analyst Organic Nitrogen
1401	Odor
5210B	Biochemical Oxygen Demand (BOD)
410.2	Chemical Oxygen Demand (COD)
410.4	Chemical Oxygen Demand (COD)
360.1	Dissolved Oxygen
150.1/9040B	pH
420.2	Phenols
365.1	Ortho-Phosphate as P or PO4
365.4	Total Phosphorus
160.1	Total Dissolved Solids
160.2	Total Suspended Solids
160.3	Total Solids
160.4	Volatile Solids
160.5	Settleable Solids
376.1	Total or Dissolved Sulfide
376.2	Total or Dissolved Sulfide
180.1	Turbidity
SM 9223B	Coliform Total plus E.coli (Colilert)
Total SM 9221B	Total Coliform (MTF)
Fecal SM 9221E	Fecal Coliform (MTF)
CAM 6010B	Hexavalent Chromium

BC Laboratories, Inc.

Chain of Custody Form

PLEASE COMPLETE: BCL QUOTE ID: 46743

Page ___ of ___

Report To: Client: BC Laboratories | Project #:
Attn: Shelly Taylor | Project Name:
Street Address: 4100 Atlas St. | Project Code:
City, State, Zip: Bakersfield, Ca 93308 | Sampler(s):
Phone: 852-4200 Fax: | Email Address:
Submittal #:

Analysis Requested

BLO ASSAY-Ed Tox

Comments: Sub to: AQuatic

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix	Turnaround # of work days*	Notes
05-3842-1		4/18/05	09:56	X		8oz jar
-2			0945	X		
-3			1012	X		
-4			1026	X		

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

Report Drinking Waters on State Form? ☐ Yes ☐ No

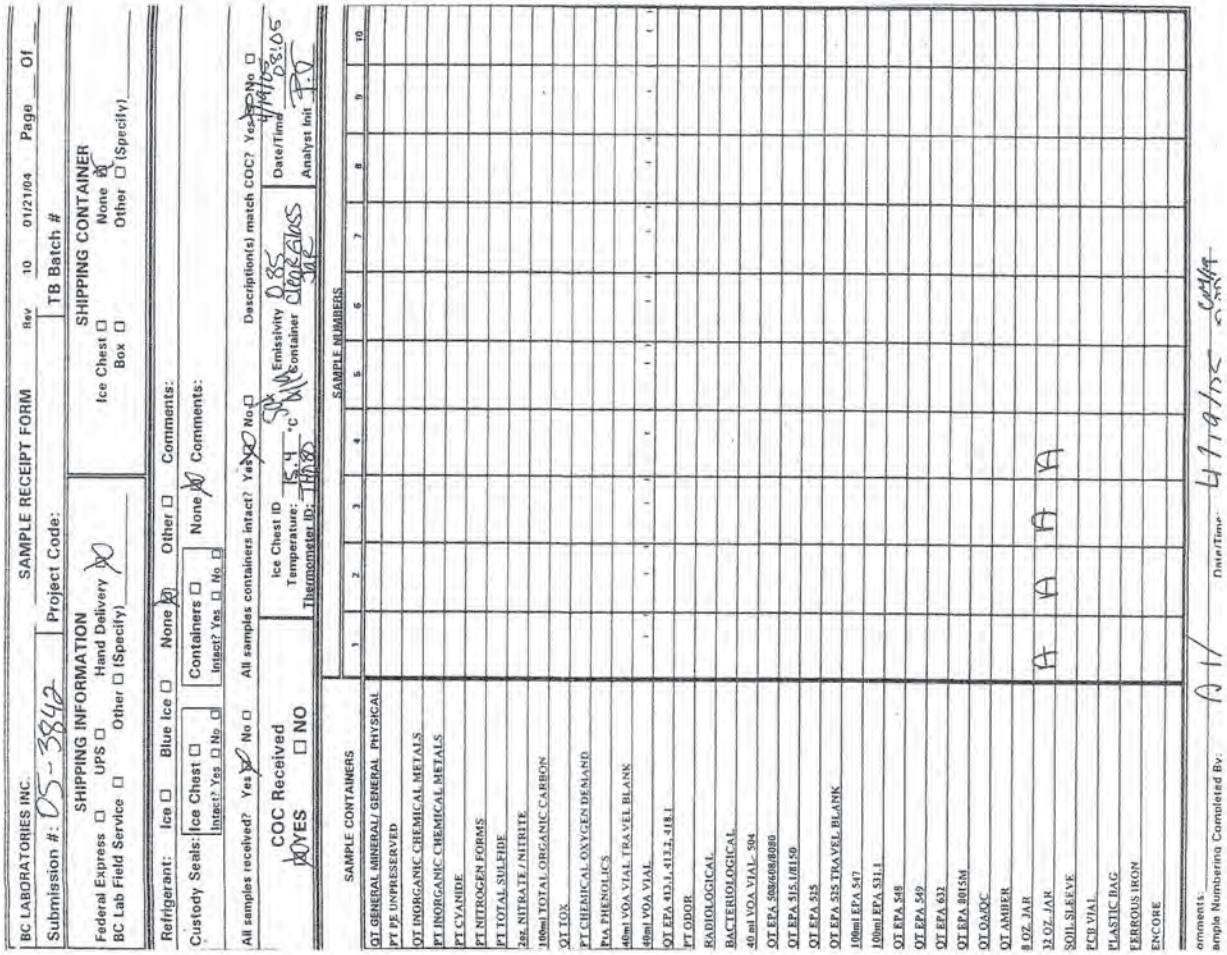
Send Copy to State of CA? ☐ Yes ☐ No

Sample Disposal: ☐ Return to Client ☐ Disposal by lab ☐ Archive: Months

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

	Relinquished By	Date	Time	Received By	Date	Time
1.	Deborah Rineau	4/20/05	7:55			
2.						
3.						

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com



BC LABORATORIES INC. — SAMPLE RECEIPT FORM — Rev 10 01/21/04 — Page ___ Of ___

Submission #: 05-3842 — Project Code: — TB Batch #

SHIPPING INFORMATION: Federal Express ☐ UPS ☐ Hand Delivery ☒ — BC Lab Field Service ☐ Other ☐ (Specify)

SHIPPING CONTAINER: Ice Chest ☐ Box ☐ None ☒ Other ☐ (Specify)

Refrigerant: Ice ☐ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Containers ☐ Intact? Yes ☐ No ☐ — None ☒ Comments:

All samples received? Yes ☒ No ☐ — All samples containers intact? Yes ☒ No ☐ — Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Ice Chest ID: SW — Temperature: 15.4 °C — Thermometer ID: TH80 — Emissivity 0.85 — Container Clear Glass Jar — Date/Time 4/14/05 08:05 — Analyst Init PD

SAMPLE NUMBERS

SAMPLE CONTAINERS	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT DE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
250 NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT OA/QC										
QT AMBER										
8 OZ. JAR	A	A	A	A						
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments: — Sample Numbering Completed By: — Date/Time 4/14/05 — Cooler

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BC Laboratories, Inc.

Chain of Custody Form

PLEASE COMPLETE: BCL QUOTE ID:

46753

Page 1 of 1

Report To:
Client: Port Organic Products
Attn: Jim Zaben
Street Address: PO Box 5203
City, State, Zip: Bakersfield, 93388
Phone: 764-9670 Fax: 764-6719
Email Address: JZaben@Bak.RR.com
Submittal #: 05-3842

Project #:
Project Name: Waste Fish
Project Code:
Sampler(s): Jim Zaben

Analysis Requested

Comments:

Sample #	Description	Date Sampled	Time Sampled	CAM 17 METALS	1SO.1 / SOLIDS, PH	BIOASSAY - FISH TOXICITY	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
-1	Soil - S	4/18/05	0956hrs	X	X	X	X							
-2	Soil - N	4/18/05	0945hrs	X	X	X	X							
-3	Soil - E	4/18/05	1012hrs	X	X	X	X							
-4	Soil - West	4/18/05	1026hrs	X	X	X	X							

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 15 work days

CHK BY HBL — DISTRIBUTION: ORIGINAL — SUB-OUT ☒

Billing ☒ Same as above

Client: ___
Address: ___
City: ___ State ___ Zip ___
Attn: ___
PO#: ___

Report Drinking Waters on State Form? ☐ Yes ☒ No

Send Copy to State of CA? ☐ Yes ☒ No

Sample Disposal: ☐ Return to Client ☒ Disposal by lab ☐ Archive: Months ___

Special Reporting: ☐ QC ☐ WIP ☐ Raw Data

	Relinquished By	Date	Time	Received By	Date	Time
1.		4/19/05	0830hrs	Paige Taylor	4/19/05	0830
2.						
3.						

BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-01 | **Client Sample Name:** SOIL-S, 4/18/05 9:56:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
pH	8.69	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B380	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
0503842-01	COC Number:	---	Receive Date:	04/19/05 08:05	Waste Type: Type I: Millable solid - No Free Liquid
	Project Number:	---	Sampling Date:	04/18/05 09:56	
	Sampling Location:	---	Sample Depth:	---	
	Sampling Point:	SOIL-S	Sample Matrix:	Solids	
	Sampled By:	Jim Zaben			
0503842-02	COC Number:	---	Receive Date:	04/19/05 08:05	Waste Type: Type I: Millable solid - No Free Liquid
	Project Number:	---	Sampling Date:	04/18/05 09:45	
	Sampling Location:	---	Sample Depth:	---	
	Sampling Point:	SOIL-N	Sample Matrix:	Solids	
	Sampled By:	Jim Zaben			
0503842-03	COC Number:	---	Receive Date:	04/19/05 08:05	Waste Type: Type I: Millable solid - No Free Liquid
	Project Number:	---	Sampling Date:	04/18/05 10:12	
	Sampling Location:	---	Sample Depth:	---	
	Sampling Point:	SOIL-E	Sample Matrix:	Solids	
	Sampled By:	Jim Zaben			
0503842-04	COC Number:	---	Receive Date:	04/19/05 08:05	Waste Type: Type I: Millable solid - No Free Liquid
	Project Number:	---	Sampling Date:	04/18/05 10:26	
	Sampling Location:	---	Sample Depth:	---	
	Sampling Point:	SOIL-WEST	Sample Matrix:	Solids	
	Sampled By:	Jim Zaben			

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-02 | **Client Sample Name:** SOIL-N, 4/18/05 9:45:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
...l	6.74	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-01 | **Client Sample Name:** SOIL-S, 4/18/05 9:56:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
...timony	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:49	JCC	TJA61E	0.97	BOD1505	0.32	A02
Arsenic	2.2	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Barium	53	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.015	
Beryllium	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.019	
Cadmium	1.3	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Chromium	16	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Cobalt	2.9	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Copper	24	mg/kg	2.0		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.42	
Lead	5.7	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.053	
Mercury	ND	mg/kg	0.14		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.89	BOD1498	0.0055	
Molybdenum	ND	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Nickel	9.9	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Selenium	0.65	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.068	
Silver	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
...hallium	ND	mg/kg	5.0		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.44	
Vanadium	32	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	ND	
Zinc	170	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:29	JCC	TJA61E	0.97	BOD1505	0.13	

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-03 | **Client Sample Name:** SOIL-E, 4/18/05 10:12:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
	6.78	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-02 | **Client Sample Name:** SOIL-N, 4/18/05 9:45:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
timony	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.63	A01, Q01
Arsenic	1.1	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Barium	14	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.029	A01
Beryllium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.039	A01
Cadmium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Chromium	10	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Cobalt	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Copper	32	mg/kg	4.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.84	A01
Lead	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.11	A01
Mercury	ND	mg/kg	0.16		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.92	BOD1498	0.0057	
Molybdenum	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Nickel	3.8	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Selenium	1.7	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.14	A01
Silver	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
hallium	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.88	A01
Vanadium	14	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	ND	A01
Zinc	96	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 00:56	JCC	TJA61E	1.94	BOD1505	0.26	A01

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Chemical Analysis

BCL Sample ID: 0503842-04 | **Client Sample Name:** SOIL-WEST, 4/18/05 10:26:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
pH	4.96	pH Units	0.05		EPA-9040	04/25/05	04/25/05 09:40	JSM	B360	1	BOD1194		pH1:1

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BC Laboratories, Inc

Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-03 | **Client Sample Name:** SOIL-E, 4/18/05 10:12:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Antimony	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:02	JCC	TJA61E	0.96	BOD1505	0.31	A02
Arsenic	2.7	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Barium	51	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.014	
Beryllium	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.019	
Cadmium	2.7	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Chromium	20	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Cobalt	3.0	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Copper	30	mg/kg	2.0		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.42	
Lead	7.9	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.053	
Mercury	ND	mg/kg	0.14		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.89	BOD1498	0.0055	
Molybdenum	ND	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Nickel	11	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Selenium	0.53	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.067	
Silver	ND	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Thallium	ND	mg/kg	5.0		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.44	
Vanadium	38	mg/kg	0.50		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	ND	
Zinc	160	mg/kg	2.5		EPA-6010B	04/28/05	04/30/05 01:42	JCC	TJA61E	0.96	BOD1505	0.13	

BC Laboratories

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Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Chemical Analysis

Quality Control Report - Precision & Accuracy

									Control Limits		
nstituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals
pH	BOD1194	BOD1194-DUP1	Duplicate	7.4430	7.4680		pH Units	0.335		200		

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

BCL Sample ID: 0503842-04 | **Client Sample Name:** SOIL-WEST, 4/18/05 10:26:00AM, Jim Zaben

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
timony	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.64	A01, A02
Arsenic	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Barium	29	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.030	A01
Beryllium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.040	A01
Cadmium	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Chromium	6.0	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Cobalt	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Copper	18	mg/kg	4.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.86	A01
Lead	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.11	A01
Mercury	ND	mg/kg	0.13		EPA-7471A	04/28/05	05/01/05 11:30	DIW	TSP1	0.82	BOD1498	0.0051	
Molybdenum	ND	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Nickel	3.7	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Selenium	2.1	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.14	A01
Silver	ND	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Thallium	ND	mg/kg	10		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.90	A01
Vanadium	4.6	mg/kg	1.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	ND	A01
Zinc	120	mg/kg	5.0		EPA-6010B	04/28/05	05/03/05 01:28	JCC	TJA61E	1.98	BOD1505	0.27	A01

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Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

									Control Limits		
nstituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals
Molybdenum	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	87.353	98.039	mg/kg		89.1		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	87.157	98.039	mg/kg	0.225	88.9	20	75 - 125	
Nickel	BOD1505	BOD1505-DUP1	Duplicate	2.4951	2.9020		mg/kg	15.1		20		
		BOD1505-MS1	Matrix Spike	2.4951	97.157	98.039	mg/kg		96.6		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	2.4951	97.647	98.039	mg/kg	0.516	97.1	20	75 - 125	
Selenium	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	3.7451	4.9020	mg/kg		76.4		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	4.4167	4.9020	mg/kg	16.5	90.1	20	75 - 125	
Silver	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	9.0049	9.8039	mg/kg		91.9		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	9.0441	9.8039	mg/kg	0.434	92.3	20	75 - 125	
Thallium	BOD1505	BOD1505-DUP1	Duplicate	0.50980	0.61785		mg/kg	19.1		20		
		BOD1505-MS1	Matrix Spike	0.50980	95.343	98.039	mg/kg		96.7		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	0.50980	93.971	98.039	mg/kg	1.46	95.3	20	75 - 125	
Vanadium	BOD1505	BOD1505-DUP1	Duplicate	8.8137	9.5294		mg/kg	7.80		20		
		BOD1505-MS1	Matrix Spike	8.8137	103.87	98.039	mg/kg		97.0		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	8.8137	102.65	98.039	mg/kg	1.35	95.7	20	75 - 125	
Zinc	BOD1505	BOD1505-DUP1	Duplicate	26.137	26.564		mg/kg	1.62		20		
		BOD1505-MS1	Matrix Spike	26.137	134.31	98.039	mg/kg		110		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	26.137	121.18	98.039	mg/kg	12.7	98.9	20	75 - 125	

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

									Control Limits		
nstituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals
Mercury	BOD1498	BOD1498-DUP1	Duplicate	0.068647	0.068647		mg/kg	0.00		20		
		BOD1498-MS1	Matrix Spike	0.068647	0.71775	0.71429	mg/kg		90.9		85 - 115	
		BOD1498-MSD1	Matrix Spike Duplicate	0.068647	0.71775	0.71429	mg/kg	0.00	90.9	20	85 - 115	
Antimony	BOD1505	BOD1505-DUP2	Duplicate	0.51961	0.34314		mg/kg	40.9		20		A02
		BOD1505-MS2	Matrix Spike	0.51961	37.686	98.039	mg/kg		37.9		16 - 119	A02
		BOD1505-MSD2	Matrix Spike Duplicate	0.51961	36.505	98.039	mg/kg	3.22	36.7	20	16 - 119	A02
Arsenic	BOD1505	BOD1505-DUP1	Duplicate	2.8627	2.7059		mg/kg	5.63		20		
		BOD1505-MS1	Matrix Spike	2.8627	7.0490	4.9020	mg/kg		85.4		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	2.8627	7.2892	4.9020	mg/kg	5.58	90.3	20	75 - 125	
Barium	BOD1505	BOD1505-DUP1	Duplicate	61.863	64.069		mg/kg	3.50		20		
		BOD1505-MS1	Matrix Spike	61.863	161.18	98.039	mg/kg		101		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	61.863	157.06	98.039	mg/kg	3.94	97.1	20	75 - 125	
Beryllium	BOD1505	BOD1505-DUP1	Duplicate	0.38725	0.39706		mg/kg	2.50		20		
		BOD1505-MS1	Matrix Spike	0.38725	10.142	9.8039	mg/kg		99.5		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	0.38725	10.054	9.8039	mg/kg	0.909	98.6	20	75 - 125	
Cadmium	BOD1505	BOD1505-DUP1	Duplicate	ND	ND		mg/kg			20		
		BOD1505-MS1	Matrix Spike	ND	9.3039	9.8039	mg/kg		94.9		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	ND	9.3873	9.8039	mg/kg	0.944	95.8	20	75 - 125	
Chromium	BOD1505	BOD1505-DUP1	Duplicate	5.3578	6.0147		mg/kg	11.6		20		
		BOD1505-MS1	Matrix Spike	5.3578	101.47	98.039	mg/kg		98.0		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	5.3578	99.951	98.039	mg/kg	1.54	96.5	20	75 - 125	
Cobalt	BOD1505	BOD1505-DUP1	Duplicate	1.7059	1.8775		mg/kg	9.58		20		
		BOD1505-MS1	Matrix Spike	1.7059	98.324	98.039	mg/kg		96.5		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	1.7059	96.275	98.039	mg/kg	0.00	96.5	20	75 - 125	
Copper	BOD1505	BOD1505-DUP1	Duplicate	17.775	15.280		mg/kg	15.2		20		
		BOD1505-MS1	Matrix Spike	17.775	136.03	98.039	mg/kg		121		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	17.775	117.84	98.039	mg/kg	17.0	102	20	75 - 125	
Lead	BOD1505	BOD1505-DUP1	Duplicate	4.4412	4.2157		mg/kg	5.21		20		
		BOD1505-MS1	Matrix Spike	4.4412	96.422	98.039	mg/kg		93.6		75 - 125	
		BOD1505-MSD1	Matrix Spike Duplicate	4.4412	95.000	98.039	mg/kg	1.50	92.4	20	75 - 125	

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Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Instituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
Mercury	BOD1498	BOD1498-BS1	LCS	1.3037	1.5700	0.14	mg/kg	83.0		75 - 125		
Antimony	BOD1505	BOD1505-BS2	LCS	0.032200	0.033330	0.10	mg/kg	96.6		75 - 125		
Arsenic	BOD1505	BOD1505-BS1	LCS	0.19240	0.20900	0.010	mg/kg	92.1		75 - 125		
Barium	BOD1505	BOD1505-BS1	LCS	1.8650	1.8810	0.010	mg/kg	99.1		75 - 125		
Beryllium	BOD1505	BOD1505-BS1	LCS	0.11070	0.12100	0.010	mg/kg	91.5		75 - 125		
Cadmium	BOD1505	BOD1505-BS1	LCS	0.10960	0.11110	0.010	mg/kg	98.6		75 - 125		
Chromium	BOD1505	BOD1505-BS1	LCS	0.26820	0.27720	0.010	mg/kg	96.8		75 - 125		
Cobalt	BOD1505	BOD1505-BS1	LCS	0.18930	0.17930	0.050	mg/kg	106		75 - 125		
Copper	BOD1505	BOD1505-BS1	LCS	0.26640	0.28490	0.040	mg/kg	93.5		75 - 125		
Lead	BOD1505	BOD1505-BS1	LCS	0.21220	0.19470	0.050	mg/kg	109		75 - 125		
Molybdenum	BOD1505	BOD1505-BS1	LCS	0.11500	0.12100	0.050	mg/kg	95.0		75 - 125		
Nickel	BOD1505	BOD1505-BS1	LCS	0.22620	0.23210	0.010	mg/kg	97.5		75 - 125		
Selenium	BOD1505	BOD1505-BS1	LCS	0.099800	0.097020	0.010	mg/kg	103		75 - 125		
Silver	BOD1505	BOD1505-BS1	LCS	0.10340	0.10637	0.010	mg/kg	97.2		75 - 125		
allium	BOD1505	BOD1505-BS1	LCS	0.11940	0.10329	0.10	mg/kg	116		75 - 125		
Vanadium	BOD1505	BOD1505-BS1	LCS	0.59530	0.58630	0.010	mg/kg	102		75 - 125		
Zinc	BOD1505	BOD1505-BS1	LCS	0.74510	0.71170	0.050	mg/kg	105		75 - 125		

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BC Laboratories, Inc

Port Organic Prop
P.O. Box 5203
Bakersfield CA, 93358

Project: Soil samples
Project Number: Waste fish
Project Manager: Jim Zaben

Reported: 05/11/05 14:09

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Instituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
pH	BOD1194	BOD1194-BS1	LCS	6.9760	7.0000	0.05	pH Units	99.7		0 - 200		

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Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Notes and Definitions

Q01	Sample precision is not within the control limits.
pH1:1	pH result reported on a 1:1 dilution of sample
	Estimated value
A02	The difference between duplicate readings is less than the PQL.
A01	PQL's and MDL's are raised due to sample dilution.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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BC Laboratories, Inc

Port Organic Prop	Project: Soil samples	
P.O. Box 5203	Project Number: Waste fish	
Bakersfield CA, 93358	Project Manager: Jim Zaben	Reported: 05/11/05 14:09

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
rcury	BOD1498	BOD1498-BLK1	ND	mg/kg	0.010	0.0016	
Antimony	BOD1505	BOD1505-BLK2	0.0065000	mg/kg	0.10	0.0056	
Arsenic	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0042	
Barium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0010	
Beryllium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.00044	
Cadmium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0024	
Chromium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0013	
Cobalt	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.0012	
Copper	BOD1505	BOD1505-BLK1	ND	mg/kg	0.040	0.0098	
Lead	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.0015	
Molybdenum	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.022	
Nickel	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
Selenium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0064	
Silver	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
allium	BOD1505	BOD1505-BLK1	0.0091000	mg/kg	0.10	0.0074	
Vanadium	BOD1505	BOD1505-BLK1	ND	mg/kg	0.010	0.0012	
Zinc	BOD1505	BOD1505-BLK1	ND	mg/kg	0.050	0.024	

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BC Laboratories, Inc

Port Organic Prop
P.O Box 5203
Bakersfield, CA 93358
Attn: Jim Zaben

BC Lab #	Client ID	Date Sampled	Time Sampled
05-03842-01	Soil S	04-18-05	09:56
05-03842-02	Soil N	04-18-05	09:45
05-03842-03	Soil E	04-18-05	10:12
05-03842-04	Soil W	04-18-05	10:26

Attached are the results analyzed by Aquatic Testing Laboratories.

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LABORATORY REPORT

Aquatic Testing Laboratories
"Dedicated to providing quality aquatic toxicity testing"
4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650- 0546 FAX (805) 650-0756
CA DOHS ELAP Cert. No.: 1775

Date: April 26, 2005

Client: BC Laboratories, Inc.
4100 Atlas Court
Bakersfield, CA 93308
Attn: Shelley Taylor

Laboratory No.: A-05042108-001/004
Sample ID.: 0503842-01/04

Sample Control: The samples were received by ATL in a chilled state, with the chain of custody record attached.

Date Sampled: 04/18/05
Date Received: 04/21/05
Date Tested: 04/21/05 to 04/26/05

Sample Analysis: The following analyses were performed on your sample:

CCR Title 22 - Fathead Minnow Hazardous Waste Screen Bioassay (Polisini and Miller 1988).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Sample ID.	Results
0503842-01	PASSED (LC50 > 750 mg/l)
0503842-02	PASSED (LC50 > 750 mg/l)
0503842-03	PASSED (LC50 > 750 mg/l)
0503842-04	PASSED (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-001

Client/ID: BC 3842-1

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.6	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.5	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.4	7.9	7.4	0	20.6	8.2	7.4	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.6	7.3	20.5	6.1	7.0	0	20.4	6.5	7.0	0	20.4	7.2	7.2	0	20.6	7.8	7.1	0
400 mg/l B	20.4	8.5	7.3	20.4	6.3	7.0	0	20.4	6.6	7.0	0	20.4	7.0	7.2	0	20.5	7.3	7.1	0
750 mg/l A	20.4	8.3	7.2	20.4	7.1	7.1	0	20.4	7.0	7.1	0	20.3	7.2	7.1	0	20.5	8.0	7.2	0
750 mg/l B	20.3	8.5	7.2	20.3	7.2	7.1	0	20.3	7.2	7.1	0	20.4	7.1	7.2	0	20.4	7.5	7.1	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL				HIGH CONCENTRATION			
	Alkalinity		Hardness		Alkalinity		Hardness	
Initial	26	mg/l $CaCO_3$	46	mg/l $CaCO_3$	30	mg/l $CaCO_3$	70	mg/l $CaCO_3$
Final	27	mg/l $CaCO_3$	46	mg/l $CaCO_3$	37	mg/l $CaCO_3$	83	mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

Aquatic Testing Laboratories

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A05042108-002

Client/ID: BC 3842-2

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.6	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.8	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.4	7.9	7.4	0	20.4	8.2	7.4	0	20.6	8.7	7.4	0
400 mg/l A	20.5	8.6	7.3	20.5	7.3	7.0	0	20.4	6.2	7.1	0	20.5	6.4	7.2	0	20.6	8.1	7.3	0
400 mg/l B	20.4	8.5	7.3	20.4	5.2	6.9	0	20.4	6.2	7.1	0	20.5	6.4	7.1	0	20.5	7.0	7.2	0
750 mg/l A	20.4	8.6	7.2	20.4	5.6	7.0	0	20.4	6.6	7.0	0	20.4	6.8	7.2	0	20.5	7.9	7.3	0
750 mg/l B	20.3	8.6	7.2	20.3	6.8	7.1	0	20.3	7.1	7.1	0	20.4	7.0	7.1	0	20.4	7.6	7.3	0

Comments: Extraction method: Mechanical shaking X.
None (aqueous solution) —.

	CONTROL				HIGH CONCENTRATION			
	Alkalinity		Hardness		Alkalinity		Hardness	
Initial	26	mg/l $CaCO_3$	46	mg/l $CaCO_3$	31	mg/l $CaCO_3$	86	mg/l $CaCO_3$
Final	27	mg/l $CaCO_3$	46	mg/l $CaCO_3$	54	mg/l $CaCO_3$	101	mg/l $CaCO_3$

RESULTS

Total Number Dead	
Control	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A0504210 8-003

Client/ID: BC 3842-3

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.4	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.4	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.6	7.9	7.4	0	20.6	8.2	7.6	0	20.1	8.7	7.4	0
400 mg/l A	20.5	8.7	7.3	20.5	7.6	7.2	0	20.6	7.0	7.1	0	20.5	7.2	7.1	0	20.6	7.8	7.1	0
400 mg/l B	20.4	8.6	7.3	20.4	7.7	7.2	0	20.5	7.4	7.1	0	20.5	7.4	7.1	0	20.6	7.9	7.1	0
750 mg/l A	20.3	8.5	7.2	20.4	8.0	7.3	0	20.4	7.7	7.2	0	20.4	7.4	7.0	0	20.5	8.5	7.2	0
750 mg/l B	20.3	8.5	7.2	20.3	6.9	7.2	0	20.4	6.9	7.2	0	20.4	7.4	7.0	0	20.4	8.2	7.2	0

Comments: Extraction method: Mechanical shaking X
None (aqueous solution) —

	CONTROL				HIGH CONCENTRATION			
	Alkalinity		Hardness		Alkalinity		Hardness	
Initial	26	mg/l $CaCO_3$	46	mg/l $CaCO_3$	31	mg/l $CaCO_3$	71	mg/l $CaCO_3$
Final	27	mg/l $CaCO_3$	46	mg/l $CaCO_3$	38	mg/l $CaCO_3$	43	mg/l $CaCO_3$

RESULTS

Total Number Dead		
Control	0	/20
400 mg/l	0	/20
750 mg/l	0	/20

✓ (one)	Result	Description
✓	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Aquatic Testing Laboratories

Lab No.: A0504210 8-004

Client/ID: BC 3842-4

TEST SUMMARY

Species: *Pimephales promelas*.
Fish length (mm): av: 25.8; min: 23; max: 27.
Fish weight (gm): av: 0.26; min: 0.20; max: 0.29.
Test chamber volume: 10 liters.
Temperature: 20 +/- 2°C.
Aeration: Single bubble through narrow bore tube.
Number of replicates: 2.
Dilution water: Soft reconstituted water (40 - 48 mg/l $CaCO_3$).
QA/QC Batch No.: RT-050307.

Source: In-lab culture.
Regulations: CCR Title 22.
Test Protocol: California F&G/DHS 1988.
Endpoints: Survival at 96 hrs.
Test type: Static.
Feeding: None.
Number of fish per chamber: 10.
Photoperiod: 16/8 hrs light/dark.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
Date/Time:	4-22-05 1030			4-23-05 1030				4-24-05 1000				4-25-05 1030				4-26-05 1100			
Analyst:																			
	°C	DO	pH	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D	°C	DO	pH	# D
Control A	20.6	8.6	7.6	20.5	8.2	7.4	0	20.4	7.8	7.5	0	20.7	7.7	7.5	0	20.7	8.4	7.5	0
Control B	20.5	8.5	7.6	20.4	8.0	7.3	0	20.6	7.9	7.4	0	20.6	8.2	7.6	0	20.1	8.7	7.4	0
400 mg/l A	20.5	8.6	7.1	20.5	7.3	6.9	0	20.5	7.6	7.1	0	20.5	7.6	7.1	0	20.7	7.7	7.1	0
400 mg/l B	20.4	8.5	7.1	20.4	5.4	6.8	0	20.4	7.1	7.0	0	20.6	7.5	7.2	1	20.1	8.3	7.2	0
750 mg/l A	20.3	8.5	7.1	20.3	4.8	6.7	0	20.4	7.0	7.0	0	20.5	7.1	7.1	0	20.5	7.2	7.2	0
750 mg/l B	20.3	8.7	7.1	20.3	6.9	6.7	0	20.3	7.1	7.0	0	20.9	7.2	7.2	0	20.5	7.3	7.2	0

Comments: Extraction method: Mechanical shaking X
None (aqueous solution) —

	CONTROL				HIGH CONCENTRATION			
	Alkalinity		Hardness		Alkalinity		Hardness	
Initial	26	mg/l $CaCO_3$	46	mg/l $CaCO_3$	29	mg/l $CaCO_3$	70	mg/l $CaCO_3$
Final	27	mg/l $CaCO_3$	46	mg/l $CaCO_3$	45	mg/l $CaCO_3$	77	mg/l $CaCO_3$

RESULTS

Total Number Dead		
Control	0	/20
400 mg/l	1	/20
750 mg/l	0	/20

✓ (one)	Result	Description
X	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
—	FAILED	≥40% dead in 750 mg/l (definitive test recommended)
—	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)

AECOM Environment

Prepared for:
Hydrogen Energy California LLC
Long Beach, California

Prepared by:
AECOM
Camarillo, California
60163371
December 2010

Phase II Environmental Site Assessment Report

Proposed Hydrogen Energy California Project Site, Adohr and Dairy Roads, Kern County, California

Privileged & Confidential – Attorney Work Product/Attorney-Client Communication



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Prepared for:
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Long Beach, California

Prepared by:
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December 2010

Phase II Environmental Site Assessment Report

Proposed Hydrogen Energy California Project Site, Adohr and Dairy Roads, Kern County, California

Privileged & Confidential – Attorney Work Product/Attorney-Client Communication

This report was prepared consistent with currently and generally accepted environmental consulting principles and practices. The material and data in this report were prepared under the supervision and direction of the undersigned.

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STATE OF CALIFORNIA

For Harry Van Den Berg

Harry Van Den Berg, PE
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List of Abbreviations

°C	degrees Celsius
AOC	Area of Concern
bgs	below ground surface
BLI	BC Laboratories, Inc.
CHHSL	California Human Health Screening Level
CO_2	carbon dioxide
COC	chain-of-custody
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESL	Environmental Screening Level
GPS	Global Positioning System
HASP	Health and Safety Plan
HECA	Hydrogen Energy California LLC
JSA	Job Safety Analyses
mg/kg	milligrams per kilogram
MW	megawatt
OCP	organo-chlorine pesticide
OPP	organophosphorus pesticides
petcoke	petroleum coke
PID	photoionization detector
ppm	parts per million
RCRA	Resource Conservation & Recovery Act
REC	recognized environmental condition
RPD	relative percent difference
RSL	Regional Screening Level
TPH	total petroleum hydrocarbons
USA	Underground Service Alert
UST	underground storage tank
VOC	volatile organic compound

1.0 Introduction

This report documents the results of a Phase II Environmental Site Assessment (ESA) that was recently conducted by AECOM, on behalf of Hydrogen Energy California LLC (HECA), at the proposed project site located southwest of Buttonwillow, Kern County, California. The proposed project will gasify petroleum coke (petcoke) (or blends of petcoke and coal, as needed) to produce hydrogen to fuel a combustion turbine operating in combined cycle mode. The Gasification Block feeds a 390-gross-megawatt (MW) combined cycle plant. The net electrical generation output from the Project will provide California with approximately 250 MW of low carbon baseload power to the grid. The Gasification Block will also capture approximately 90 percent of the carbon from the raw syngas at steady-state operation, which will be transported to the Elk Hills Field for carbon dioxide (CO_2) Enhanced Oil Recovery, resulting in sequestration of the injected CO_2. In addition, approximately 100 MW of natural gas generated peaking power will be available from the proposed project.

This Phase II ESA was conducted to evaluate recognized environmental conditions (RECs) that were identified in April 2009 and August 2010 by URS during their Phase I ESAs of the proposed project site. RECs that were identified by URS included potential former underground storage tanks (USTs), unknown concrete structures, a farm equipment wash pad, a former fertilizing manufacturing facility (Port Organics Products Ltd.), outdoor and indoor tailings piles of raw materials used by Port Organics in the fertilizer manufacturing process, and a number of locations with stained surface soil.

The following sections summarize the site background, pre-field activities, field assessment methodology, laboratory analytical program, results of the assessment, conclusions, and recommendations of this Phase II ESA.

2.0 Site Background

2.1 Site Description

The proposed project site consists of approximately 1,100 acres of agricultural land that is generally located west of Tupman Road and Station Road, southwest of the intersection of Adohr and Tupman Roads, Kern County, California. Tule Elk State Park is located approximately ¼ mile east of the proposed project site and Interstate 5 is located approximately 2.5 miles east of the proposed project site. The approximate location of the proposed project site is illustrated on Figure 1.

The proposed project site currently consists of a residence, an active farming operations area (equipment storage and maintenance), a former fertilizer manufacturing plant, a crop duster airstrip, agricultural fields, and other nominal site features. The residence, farming operations area, and former fertilizer manufacturing plant occupy approximate 45 acres that are located in the northwest corner of the proposed project site. The remaining portions of the proposed project site are occupied by alfalfa and/or cotton fields, access roads, and irrigation ditches/canals. The general locations of the main site features are illustrated on Figure 2.

2.2 Site History

Historical research conducted by URS indicates that the proposed project site was developed for residential and agricultural uses in the 1940s. Farming operations appear to have been concentrated around the northern portion of the proposed project site which was developed with several equipment storage and maintenance buildings. In the 1950s a crop duster landing strip was constructed to the east of the farming operations area. By the early 1970s the proposed project site was developed into its current configuration.

Occupants of the proposed project site have included a residence located at 7345 Adohr Road, Palm Farms, Inc. (also identified as Palm Ranch) and Port Organic located at 7361 Adohr Road. From at least the late 1980s, Palm Farms manufactured fertilizer on site. Sometime in the 2000s Port Organics took over operation of the fertilizer manufacturing operations. According to URS, hazardous materials utilized by Port Organics included acids, bases, heavy metals, petroleum hydrocarbons, and organic fertilizer product including “Agrolizer” and “Fishilizer.” The materials were stored at various locations throughout the farming operations area, including in a former tank farm and associated concrete sumps that were located to the east of the Port Organics storage building.

2.3 Previous Environmental Site Assessments

In April 2009 and August 2010 URS conducted Phase I ESAs of the proposed project site. The Phase I ESAs identified six RECs. Several of these RECs consist of multiple environmental concerns that are located in different locations of the proposed project site. For purposes of clarity, AECOM has subdivided three of these RECs into their own individual RECs. A summary of the revised RECs as identified by URS is provided on the following page.

1. A review of a site-specific environmental database report indicates that five USTs were formerly located at the proposed project site. These USTs include two diesel fuel tanks, an unleaded gasoline tank, a regular gasoline tank, and a premium gasoline tank. At least three of these USTs were removed in 1984. The Phase I ESAs indicated that it is uncertain whether the other two USTs were actually located on the site and whether they may or may not have been removed.

2. A pipe that may be a UST fill or vent pipe was observed south of the large grain bins.

3. Two unknown large concrete covers were observed to the west of the south storage building. The site contact was aware of these structures, but does not know their nature or details on their former use.

4. Port Organics, a former fertilizer manufacturing plant, is located in the northwest portion of the farm operations area (see Figure 2). Manufacturing at this site included the use of hazardous materials and operation of a tank farm and associated concrete sumps. Unknown liquids are currently stored outdoors in drums and containers, and soil staining is present in the former Port Organics manufacturing area.

5. According to URS (as documented in the Phase I ESA) the east sump of the Port Organics facility previously discharged approximately 500 to 750 gallons per day of liquids to the drainage ditch located east of the Port Organics facility through an underground 2-inch flex line in 2009.

6. A farm equipment wash pad abuts the southeast side of the former horse stables building. The concrete, soil, and sediment in the adjacent irrigation ditch were observed to be visually stained.

7. One outdoor uncontained tailings pile, consisting of remnants of fishmeal and bird guano (raw materials used in the fertilizer manufacturing process), was found to the east of the former Port Organics aboveground tank farm. This pile was sampled in 2009 and was characterized as non-Resource Conservation & Recovery Act (RCRA) hazardous waste.

8. One indoor tailings pile, consisting of remnants of fishmeal and bird guano was observed inside the former Port Organics storage building. Like the outdoor tailings pile, this pile was also sampled in 2009 and was characterized as non-RCRA hazardous waste.

9. Stained soils were observed during the site visit in the farming operations area and agricultural production areas. The extent of any subsurface impacts from the staining was unknown.

In addition to addressing the RECs identified by URS, this Phase II ESA evaluated the following additional potential environmental concerns based on AECOM's conversation with Mr. Paul Ackerman on September 22, 2010, and AECOM's experience evaluating similar agricultural sites:

- According to Mr. Ackerman, a Chevron (former Unocal) pipeline runs along the north side of Adohr Road directly across the street from the proposed project site. Mr. Ackerman reported that in the past (exact date unknown) a section of pipeline near the intersection of Adohr and Dairy Roads ruptured, releasing crude oil onto Adohr Road and the immediate surrounding property including the northern edge of the proposed project site. Mr. Ackerman stated that

Unocal quickly repaired the pipeline and removed the impacted soil. This potential environmental concern is referred herein within this report as Area of Concern (AOC)-1.

- According to Mr. Ackerman, a UST was located adjacent to the former airplane hangar that abuts the crop duster air strip. Mr. Ackerman was not aware if the UST was still present on site. This potential environmental concern is referred herein within this report as AOC-2.
- According to Mr. Ackerman, a UST may have been located at the northeast end of the on-site crop duster airstrip, near the former chemical storage pad. Mr. Ackerman was not aware if the UST was still present on site. This potential environmental concern is referred herein within this report as AOC-3.
- It is has been AECOM's experience that residual concentrations of organo-chlorine pesticides (OCPs) are commonly present in the shallow soil of commercial agricultural sites throughout California. This potential environmental concern is referred herein within this report as AOC-4.

3.0 Pre-Field Activities

3.1 Health and Safety Plan

AECOM prepared a site-specific Health and Safety Plan (HASP) prior to the onset of field activities to address potential physical and chemical hazards associated with the work at the proposed project site and evaluate other health and safety considerations. Additionally, Job Safety Analyses (JSAs) were prepared to mitigate specifically identified hazards encountered within the scope of work. The HASP and JSAs were reviewed and approved by AECOM Health and Safety Management prior to commencement of field activities, and on a daily basis. Site assessment activities conducted by AECOM and subcontractors were performed in accordance and in compliance with the HASP and JSAs.

3.2 Permits

According to Kern County Environmental Health Department guidance, permits are not required for installation of soil borings.

3.3 Utility Clearance

On September 16, 2010, AECOM contacted Underground Service Alert (USA) of Northern California to notify them of the planned subsurface assessment as required by State law. USA issued ticket numbers 0279029, 0279041, and 0279044 for the planned Phase II ESA of the proposed project site.

3.4 Geophysical Survey

On September 23, 2010, AECOM oversaw a geophysical and utility clearance survey conducted by Subsurface Surveys of Carlsbad, California. Subsurface Surveys used ground-penetrating radar and a roller-mounted magnetometer to minimize the likelihood that utilities or other subsurface obstructions were present in the vicinity of the proposed boring locations. In addition, Subsurface Surveys evaluated the five suspect UST areas as well as the two unknown concrete structures.

No subsurface utilities or other subsurface obstructions were identified in the vicinity of the proposed borings. No USTs or other underground anomaly were identified in the vicinity of the presumed UST locations. In addition, no underground structures or potential anomalies were identified in the vicinity of the two unknown concrete structures. The approximate locations of the areas surveyed for suspect USTs and the two unknown concrete structures are illustrated on Figure 3. A copy of the geophysical survey report is included as Appendix A.

4.0 Field Assessment Methodology

The field assessment consisted of collection of 70 soil samples from 21 borings, 4 sediment samples, 3 surface soil sample, and 9 soil composite samples for laboratory analyses. The following sections describe the methods that were used to collect the samples.

4.1 Soil Borings

From September 21 through 23, 2010, AECOM advanced 21 soil borings (GP-1 through GP-21) at the proposed project site using a truck-mounted, hydraulically operated Geoprobe® sampling system operated by BC2 of Orange, California. The AOC that each boring was designed to evaluate, the targeted sampling depth of each boring, and analytical methodology used to analyze the soil samples is summarized in Table 1. The approximate locations of the borings are illustrated on Figure 4 and Figure 5.

Borings GP-1 through GP-21 were advanced to depths ranging between 4 and 25 feet below ground surface (bgs) depending on the area of concern being evaluated. The soil samples that were planned for volatile organic compound (VOC) analysis were preserved in the field in accordance with U.S. Environmental Protection Agency (EPA) Method 5035. This sample preservation method involves placing approximately 5 grams of soil in laboratory-supplied VOA vials containing sodium bi-sulfate or methanol as preservatives. In addition, soil samples were also placed in unpreserved laboratory-supplied jars for additional laboratory analysis.

The collected soil samples were then sealed, labeled, recorded on a chain-of-custody (COC) form, and placed in an ice chest chilled to approximately 4 degrees Celsius (ºC) pending delivery to BC Laboratories, Inc. (BLI) in Bakersfield, California. BLI is a certified hazardous waste testing laboratory under California certification number 1186.

Additional soil from each sample was collected and subsequently screened with a photoionization detector (PID) and observed for visual and olfactory evidence of contamination.

4.2 Surface Samples

AECOM used a manually operated hand auger to collect surface samples SS-1, SS-6, and SS-7 from areas of visually stained surface soil located within the former Port Organics tank farm. Each surface soil sample was collected using a stainless steel trowel. The collected surface samples were preserved in accordance with EPA Method 5035 (as described in Section 4.1), placed in laboratory-supplied VOAs and glass jars, sealed, labeled, recorded on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI. The approximate locations of the surface samples are illustrated on Figure 4.

4.3 Sediment Sampling

AECOM utilized a pole-mounted sampling device to collect sediment samples SS-2 through SS-5 from several irrigation ditches that are located throughout the proposed project site. The collected surface samples were placed in laboratory supplied VOAs and glass jars, sealed, labeled, recorded

on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI. The approximate locations of the sediment samples are illustrated on Figures 4 and 5.

4.4 Composite Soil Sampling

AECOM utilized a stainless steel hand trowel to collect 45 soil samples from nine representative areas (SC-1 through SC-9) located throughout the agricultural fields that comprise the proposed project site. Each square-shaped area measured approximately one acre. Five soil samples (A through E) were collected from each square-shaped area (four samples were collected near the corners and one sample from the middle) and placed in laboratory-supplied glass jars. The collected soil samples were then sealed, labeled, recorded on a COC form, and placed in an ice chest chilled to approximately 4ºC pending delivery to BLI for preparing the area composite samples and subsequent analysis. The approximate locations of the composite samples are illustrated on Figure 4.

4.5 Groundwater Sampling

AECOM planned to advance borings GP-1, GP-3, and GP-7 to a depth of 40 feet bgs in an attempt to collect groundwater hydropunch samples. However, drilling refusal was encountered in borings GP-1 and GP-3 at a depth of approximately 25 feet bgs. The success of advancing boring GP-7 to 40 feet bgs was considered low. Therefore, an attempt to advance boring GP-7 to a depth of 40 feet bgs was not made.

4.6 Sample Location Survey

With the exception of the soil samples collected from boring GP-14 which was advanced inside a building, each soil sample location was recorded using a Trimble GeoXT sub meter-level Global Positioning System (GPS) unit. Field GPS data was post processed in the office to differentially correct for common satellite and atmospheric errors. The predicted horizontal precision of the post-processed data ranged between 0.4 and 0.7 meters (between 1.3 and 2.3 feet). The sample locations are plotted in Figures 4 and 5.

4.7 Equipment Decontamination

Equipment that came into contact with, or that was used to collect the soil samples, was cleaned with distilled water and Alconox™ detergent, followed by two rinses of tap and distilled water to prevent cross contamination.

4.8 Boring Abandonment

Following the completion of the soil sampling activities, the soil borings were backfilled with hydrated bentonite chips and capped with native soil or concrete to match the surrounding surface.

4.9 Laboratory Analyses

A total of 70 soil samples including 3 surface, 9 composite, and 4 sediment samples were selected for laboratory analysis. Depending on the environmental concern being evaluated the samples were analyzed for one or more of the following parameters:

- VOCs by EPA Method 8260;
- Organophosphorus pesticides (OPPs) by EPA Method 8141;
- OCPs by EPA Method 8081;

- The full carbon range of total petroleum hydrocarbons (TPH) by EPA Method 8015 modified;
- One or more of the Title 22 metals by EPA Method 6010/7000 series;
- pH;
- Phosphorus by EPA Method 365.4;
- Sulfate and Nitrogen by EPA Method 300; and
- Potassium by EPA Method 200.7.

The samples were analyzed on an expedited 48-hour laboratory turnaround-time basis.

5.0 Results of Assessment

5.1 Site Geology

In general, soils encountered from depths of between 0 and 5 feet bgs during the subsurface assessment consisted primarily of fine-grained material (i.e. clay, silt, sandy silt, and occasional silty sand). Soils encountered from 5 feet bgs to a total depth explored of 25 feet bgs consisted primarily of light gray to reddish brown, fine to medium-grained sand with occasional silt and silt/clay mixtures. Soil from ground surface to 25 feet bgs was primarily dry with the exception of soil borings GP-8 and GP-9 advanced in the former Port Organics concrete-lined sumps, which were moist to wet at a depth of approximately 4 feet bgs. Logs of borings GP-1 through GP-21 are included as Appendix B.

5.2 Groundwater

AECOM attempted to advance to borings (GP-1 and GP-3) to a depth of 40 feet bgs to collect a hydropunch groundwater sample. As described in Section 4.5, drilling refusal was encountered at a depth of 25 feet bgs in both borings. In January 2009 URS conducted a geotechnical field exploration of the proposed project site. This drilling program involved the advancement of 13 borings throughout the proposed project site at depths ranging from between 60 and 101.5 feet bgs. Groundwater was not encountered in the 13 borings advanced by URS in January 2009.

5.3 Field Observations

An ammonia-like odor was observed in the soil samples collected from the outdoor tailings pile and the concrete-lined sumps located within the former aboveground tank farm. A petroleum hydrocarbon odor and dark stained soil were observed in the soil samples collected from beneath the equipment washing area. With the exception of the soil sample collected from boring GP-8 at a depth of 4 feet bgs (138 parts per million (ppm) by volume), no significant PID readings were measured (above 50 pm) during this assessment.

5.4 Geophysical Survey

No subsurface utilities or other subsurface obstructions were identified in the vicinity of the proposed borings. No USTs or other underground anomalies were identified in the vicinity of the presumed UST locations. In addition, no underground structures or anomalies were identified in the vicinity of the two unknown concrete structures.

5.5 Analytical Results

The analytical result of the soil and sediment samples collected during the Phase II ESA are summarized in Tables 2 through 5. Table 2 summarizes the analytical results that exceed one or more of the following regulatory guidance values:

- California Human Health Screening Levels (CHHSLs) for industrial properties dated January 2005;
- EPA Region 9 Regional Screening Levels (RSLs) for industrial soil dated May 2010; and

- San Francisco Regional Water Quality Control Board Environmental Screening Levels (ESLs) for commercial/industrial property dated May 2008.

Table 3, 4, and 5 also compares the analytical results against regulatory guidance values, but provides a more comprehensive summary of the results that exceeded a laboratory detection limit. Table 3 provides a summary of the VOC and TPH analytical results; Table 4 provides a summary of the pH, potassium, anion, OPP, and OCP analytical results; and Table 5 presents a summary of metal analytical results. The following sections provide a discussion of the analytical results by the area of concern being evaluated. Copies of the certified laboratory analytical reports and COC documentation are included in Appendix C.

5.5.1 REC 1 – Five Former USTs

Borings GP-1 through GP-4 were advanced to evaluate the presumed locations of the three former USTs that were removed and the two USTs that may or may not have been removed. VOCs or TPH were not detected above the laboratory detection limit in the 12 soil samples collected from these two areas. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from borings GP-3 and GP-4. With the exception of total arsenic, none of the metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.2 REC 2 – Vent Pipe/Suspect UST

Boring GP-6 was advanced adjacent to the suspect vent pipe located to the south of the former grain storage silo. No VOCs, TPH, OCPs, or OPPs were detected in the three soil samples collected from boring GP-6. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-6. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.3 REC 3 – Two Large Concrete Covers

Boring GP-5 was advanced adjacent to the two large concrete covers that were observed to the west of the south farm storage building. No VOCs, TPH, OCPs, or OPPS were detected in the three soil samples collected from boring GP-5. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-5. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.4 REC 4 – Port Organics

Soil samples from borings GP-8, GP-9, GP-10, and GP-19 and surface samples SS-1, SS-5, and SS-6 were collected in the former Port Organics tank farm to evaluate the historical tank farm operations. No OPPs were detected in the 11 soil samples collected from the former tank farm. Low concentrations of VOCs, OCPs, and TPH were detected in one or more of the soil samples collected from the former tank farm. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the soil samples collected from the former tank farm. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from the former tank farm. pH in the soil samples collected ranged from 3.85 (GP-10-5) to 7.87 to (GP-8-4). With the exception of total

arsenic and the OCP endosulfane (detected in the duplicate soil samples), none of the compounds detected in the historical tank farm area exceeded the CHHSLs, RSLs, or ESLs.

5.5.5 REC 5 – Port Organics East Sump

Sediment sample SS-3 was collected adjacent to an underground 2-inch flex line that was observed to be protruding from a drainage ditch located to the east of the Port Organics tank farm. TPH, OCPs, and OPPs were not detected in the sediment sample SS-3. Low to moderate concentrations of VOCs, potassium, nitrate, sulfate, and phosphate were detected in the sediment sample SS-3. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, vanadium, and zinc were detected sediment sample SS-3. With the exception of total arsenic, none of the compounds detected in the former tank farm exceeded the CHHSLs, RSLs, or ESLs.

5.5.6 REC 6 – Farm Equipment Wash Pad

Borings GP-18 and GP-20 and sediment sample SS-2 were collected adjacent to the farm equipment wash pad. Low concentrations of VOCs and low to elevated concentrations of TPH in the mineral oil range were detected in the six soil samples collected from borings GP-18 and GP-20 as well as sediment sample SS-2. In addition, low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, vanadium, and zinc were detected in sediment sample SS-2. However, no OCPs or OPPs were detected in the six soil samples collected from borings GP-18 and GP-20 as well as sediment sample SS-2. With the exception of TPH in the mineral range and total arsenic, none of the compounds detected in the soil and sediment samples collected near the farm equipment wash pad exceeded the CHHSLs, RSLs, or ESLs.

5.5.7 REC 7 – Outdoor Tailings Pile

Borings GP-11, GP-12, and GP-13 were advanced adjacent to the outdoor tailings pile to evaluate the lateral extent of the pile. Low concentrations of VOCs were detected in the seven soil samples collected from borings GP-11, GP-12, and GP-13. No TPH, OCPs, or OPPS were detected in the soil samples collected from borings GP-11, GP-12, and GP-13. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from borings GP-11, GP-12, and GP-13. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.8 REC 8 – Indoor Tailings Pile

Boring GP-14 was advanced inside the former Port Organics storage building to evaluate if the tailings pile has impacted the underlying subsurface. Low concentrations of VOCs were detected in the two soil samples collected from boring GP-14. No TPH, OCPs, or OPPs were detected in the soil samples collected from boring GP-14. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-14. With the exception of total arsenic, none of the total metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.9 REC 9 – Stained Surface Soils

Borings GP-15 and GP-16 and sediment sample SS-7 were collected to evaluate visually stained soil that was observed in several areas of the proposed project site. Boring GP-15 was advanced near the northwest end of the crop duster airstrip to evaluate visually stained soil that was observed in this location as well as to evaluate potential pesticides/herbicides releases associated with the crop dusters. Boring GP-16 and sediment sample SS-7 were advanced in the southeast corner of the proposed project site to evaluate an area of stained yellowish soil and to assess if the stained soil had impacted the adjacent irrigation canal.

No VOCs or TPH were detected in the two soil samples collected from boring GP-15. Low concentrations of several OCPs and total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-15. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

No VOCs were detected in the soil samples collected from boring GP-16 and sediment sample SS-7 TPH was not detected in the two soil samples collected from boring GP-16; however low concentrations of TPH in the mineral oil range were detected in sediment sample SS-7. Several OCPs were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the sediment sample SS-7. With the exception of total arsenic, none of the compounds detected in boring GP-16 and sediment sample SS-7 exceeded the CHHSLs, RSLs, or ESLs.

5.5.10 AOC 1 – Historical Pipeline Release

Boring GP-21 was advanced on the south side of Adohr Road to evaluate a historical petroleum pipeline release as reported by Mr. Ackerman. No VOCs or TPH were detected in the two soil samples collected from boring GP-21. A low concentration of the OCP Dichlorodiphenyltrichloroethane was detected in one of the soil samples collected from boring GP-21. This concentration was well below the CHHSLs, RSLs, and ESLs.

5.5.11 AOC 2 – Airport Hangar Soil Staining

Boring GP-17 was advanced adjacent to the former airplane hangar that abuts the crop duster air strip to evaluate stained soil that was present in this location. Low concentrations of VOCs and elevated concentrations of TPH in the mineral oil range were detected in the two soil samples collected from boring GP-17. The OPP tokuthion and the OCPs endrin, Dichlorodiphenyldichloroethane, Dichlorodiphenyldichloroethylene, and Dichlorodiphenyltrichloroethane were detected in one or more of the soil samples collected from boring GP-17. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-17. With the exception of total arsenic, the OCP endrin, and TPH in the mineral oil range, none of the compounds detected exceeded the CHHSLs, RSLs, or ESLs.

5.5.12 AOC 3 – Suspect UST, Chemical Storage Pad, and Surface Staining

Boring GP-10 and sediment sample SS-4 were collected at the south end the crop duster airstrip adjacent to the former chemical storage pad. This boring and sediment sample location was selected to evaluate stained soil and the potential presence of a suspect UST as reported by Mr. Ackerman. No VOCs were detected in the three soil samples collected from boring GP-10. However, the VOC benzene was detected in sediment sample SS-4 at a concentration of 0.0021 milligrams per kilogram (mg/kg). TPH and OPPs were not detected in the soil samples collected from boring GP-10 and sediment sample SS-4. Low concentrations of several OCPs were detected in sediment sample SS-4, but no OCPs were detected in the soil samples collected from boring GP-10. Low to moderate concentrations of potassium, nitrate, sulfate, and phosphate were detected in the soil samples collected from boring GP-10 and sediment sample SS-4. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-10 and sediment sample SS-4. With the exception of total arsenic, none of the compounds detected exceeded the CHHSLs, RSLs, and ESLs.

5.5.13 AOC 4 – Historical Pesticide and Herbicide Use

OPPs were not detected in the composite samples SC-1 through SC-9. However, low concentrations of OCPs were detected in the composite samples SC-1 through SC-9. Of the compounds detected, the concentration of dieldrin in SC-1, SC-5, and SC-9 and the concentrations of endrin in SC-2, SC-5, SC-7, and SC-9 exceeded the ESLs, but not the RSL or CHHSLs. Low concentrations of total arsenic, barium, beryllium, cadmium, cobalt, lead, mercury, nickel, selenium, vanadium, and zinc were detected in one or more of the soil samples collected from boring GP-16 and sediment sample SS-7. With the exception of total arsenic, none of the metals detected exceeded the CHHSLs, RSLs, or ESLs.

5.6 Quality Assurance/Quality Control

To demonstrate that quality data has been collected during the field program, field and laboratory quality control samples were analyzed and their data used in support of the primary data. Field quality control samples that were collected for this project consisted of the following:

1. Six field duplicate samples were used to determine relative percent difference (RPD) between duplicates,

2. Sample equipment was decontaminated and equipment blanks were collected to demonstrate its effectiveness, and

3. Trip blank controls were sent with each shipment to evaluate potential cross contamination of VOCs.

Laboratory quality controls included:

1. Method blank samples,

2. Lab control spikes and duplicates, and

3. Matrix spikes and duplicates.

Data for all quality control samples was included with laboratory data packages. Field duplicate RPDs were within criteria for 80 out of 104 analytes for which a valid comparison (measured value in both samples that is greater than 2 times the practical quantitation limit) could be determined. The 24 samples which exceeded criteria are attributed to detections that are close to practical quantitation limits and the variability of the soil at this location. No analytes were detected in trip blank samples. Chloroform was detected in an equipment blank sample, but was not detected in any primary sample. All laboratory quality controls were within laboratory and method-specified criteria.

Overall, based on the analysis of quality control samples collected at the proposed project site, the data are of sufficient quality to be used in the due diligence evaluation of this site.

6.0 Conclusions

Based on the results of this Phase II ESA, AECOM provides the following conclusions:

- REC-1 – The geophysical survey did not reveal the presence of USTs in the areas where they had presumably been located based on anecdotal information. This indicates that the USTs have either been removed or were located elsewhere. The analytical results of the soil samples collected from borings GP-1 and GP-2 appear to indicate that the three former USTs have not impacted the proposed project site. In addition, the analytical results of the soil samples collected from borings GP-3 and GP-4 appear to indicate the UST suspected to be present to the west of the horse stable has not impacted the proposed project site.
- REC 2 – A reconnaissance by AECOM of the area around the suspect vent pipe appears to indicate that this suspect vent pipe is more likely a water-related pipe rather than a fuel-related vent pipe. Equipment in the immediate vicinity of the water pipe is labeled as a "vaporizer" and appears to be related to a former propane above ground storage tank that appears to have been located in this area. Based on this information, AECOM concludes that this suspect vent pipe is not related to a potential UST or other environmental concern. However, to be conservative and rule out this potential environmental concern, AECOM advanced boring GP-6 and collected three soil samples from this location for laboratory analysis. The analytical results from these soil samples further demonstrate that REC-2 no longer presents a significant environmental concern to the proposed project site.
- REC 3 –The analytical results of the soil samples collected from borings GP-5 indicate that the soil in the vicinity of the two unknown large concrete covers is not impacted. This information combined with the geophysical survey which did not identify a subsurface anomaly, allow AECOM to conclude that REC-3 no longer presents a significant environmental concern to the proposed project site.
- REC 4 – The analytical results of soil samples collected from the former Port Organics tank farm appears to indicate that soil in this area has not been significantly impacted by the historical fertilizer plant operations. Based on this information, AECOM concludes that REC-4 no longer presents a significant environmental concern to the proposed project site.
- REC 5 – The analytical results of sediment sample SS-4 indicate that the former discharge to the 2-inch flex line that is protruding from a drainage ditch located to the east of the Port Organics tank farm has not significantly impacted the sediment in this location. Based on this information, AECOM concludes that REC-5 no longer presents a significant environmental concern to the proposed project site.
- REC 6 – The analytical results from the soil samples collected from borings GP-18 and GP-20 and sediment sample SS-2 indicate current and historical washing of farm equipment in this location has impacted the shallow soil and sediment with petroleum hydrocarbons at concentrations that exceed the ESLs. The vertical extent of this impact appears to be limited to the upper 5 feet; however the lateral extent of this contamination has not been defined. Based on this information, AECOM concludes that the former farm equipment wash pad continues to present a potentially significant environmental concern to the proposed project site.

- REC 7 – The analytical results from the soil samples collected from borings GP-11 through GP-13 appear to indicate that the potential contaminants associated with the outdoor tailing pile are confined to the immediate area of the pile. No additional lateral characterization of the soil beneath the tailing pile appears to be required.
- REC 8 – The analytical results from the soil samples collected from boring GP-14 appear to indicate that the potential contaminants associated with the indoor tailing pile are largely confined to the immediate area of the pile and have not impacted the shallow soil beneath the concrete floor. No additional characterization of the soil beneath the tailing pile appears to be required.
- REC 9 – The analytical results from the soil samples collected from boring GP-15 and GP-16 and sediment sample SS-7 appear to indicate that the stained soil that is present near the northwest end of the crop duster runway, the potential historical pesticides/herbicides releases (if any) that may have occurred at the end of the airstrip, and the yellow stained soil that is present in the southeast corner of the site do not present a significant environmental concern to the proposed project site.
- AOC 1 – The analytical results from the soil samples collected from boring GP-21 appear to indicate that the historic petroleum pipeline rupture was successfully remediated and has not significantly impacted the proposed project site. Based on this information, AECOM concludes that AOC-1 no longer presents a significant environmental concern to the proposed project site.
- AOC 2 – A UST was not identified during the geophysical survey of the area surrounding the former airplane hangar. However, elevated concentrations of endrin and TPH in the mineral oil range were detected in the 0.5 foot soil samples collected from boring GP-17 at concentrations that exceed regulatory guidance values. The soil in this area was visually stained. Additional lateral and vertical subsurface soil sampling will likely be required to characterize the TPH and endrin impacts in this area.
- AOC 3 – The results of the geophysical survey and analytical results of the soil samples collected from boring GP-10 indicate that the soil in this area has not been significantly impacted by a suspect UST (if any) or former chemical storage. In addition, the analytical results of sediment sample SS-4 collected from the adjacent irrigation cannel indicate that the surface staining that is visible in this area has not significantly impacted the nearby sediment. Based on these results, the surface staining in this location appears to be localized and does not appear to present a significant environmental concern to the proposed project site.
- AOC-4 – The OCPs endrin, endosulfan, and dieldrin are present in composite samples SC-1, SC-4, and SC-8 at concentrations that exceed the ESLs, but did not exceed the CHHSL or RSL. These results are consistent with the historical use of the proposed project site as an active agricultural operation. No consistent spatial pattern of OCPs above ESLs was observed and therefore no areas of the proposed project site are anticipated to have any greater risk associated with exposure to these constituents. The low frequency (less than 10 percent) and relatively low concentrations at which these three OCPs were detected in site soils indicate that they do not represent a significant environmental risk and a more rigorous risk analysis is not warranted.

- Total arsenic was detected throughout the proposed project site at concentrations ranging from 1.6 to 35 mg/kg. These concentrations exceed the CHHSLs for arsenic of 0.24 mg/kg, and exceed and/or equal the RSLs of 1.6 mg/kg. However, a mean concentration and variability (9.2 ± 6.9 mg/kg) was observed throughout the proposed project site which are consistent with regional background arsenic levels (Bradford et al. 1996), rather than the result of historical on-site agricultural operations. It is therefore AECOM's opinion that the concentrations of arsenic detected at the proposed project site are representative of regional background concentrations, and therefore do not present a significant environmental concern to the proposed project site.
- Data collected during this assessment indicate that pesticides in surface soil and sediment are at sufficiently low concentrations that they are unlikely to pose a risk to aquatic biota from surface runoff.
- Groundwater was not encountered during this assessment. In addition, groundwater was not encountered at depths of up to 101 feet bgs by URS in January 2009. The analytical results of soil samples collected in the vicinity of the RECs and AOCs indicate that soil impacts are generally confined to the upper 5 feet. Based on this information, AECOM's concludes that groundwater beneath the proposed project site is unlikely to have been impacted by historical agricultural operations.

7.0 Recommendations

Based on the results of this Phase II ESA, AECOM provides the following conclusions:

- No additional assessment is recommended to address RECs 1, 2, 3, 4, 5, 7, 8, and 9 as well as AOCs 1, 3, and 4.
- The lateral and vertical extent of the TPH-impacted soil and sediment associated with REC-6 (farm equipment wash pad) should be defined.
- The lateral and vertical extent of the TPH-impacted soil associated with AOC-2 (airplane hangar) should be defined.
- The indoor and outdoor tailing piles (RECs 7 and 8) should be removed and transported to a permitted disposal facility prior to site redevelopment.
- The stained surface soil that is present in the vicinity of RECs 9 (two areas), REC-10, AOC-2, and AOC-3 should be removed and transported to a permitted facility for disposal prior to site redevelopment.
- The tailing pile removal and impacted soil removal should be conducted under environmental oversight to ensure that these activities are properly documented.

8.0 Limitations

This Phase II ESA report has been prepared for the proposed HECA project site located near the intersection of Dairy and Adohr Roads, Kern County, California. In performing our professional services, we have applied present engineering and scientific judgment and used a level of effort consistent with the standard of practice measured on the date the work was performed in the locale of the project site for similar type studies. AECOM makes no warranty, express or implied. AECOM is not responsible for potential inaccuracies in data reported by others.

The analyses and interpretations in this report have been developed solely based on the field observations and the results from laboratory analyses in the soil and material samples collected at the proposed project site. It should be recognized that on any limited subsurface or material assessment, site conditions can vary laterally and with depth below a given site and that potential contaminant sources can go undetected.

9.0 References

The following references were consulted in the preparation of this report:

Ackerman, Paul. Personal communication between Paul Ackerman, property owner, and Jim Fickerson, AECOM, on September 22, 2010.

Background Concentrations of Trace and Major Elements in California Soils, Kearney Foundation of Soil Sciences, Division of Agriculture and Natural Resources University of California, Bradford, March 1996.

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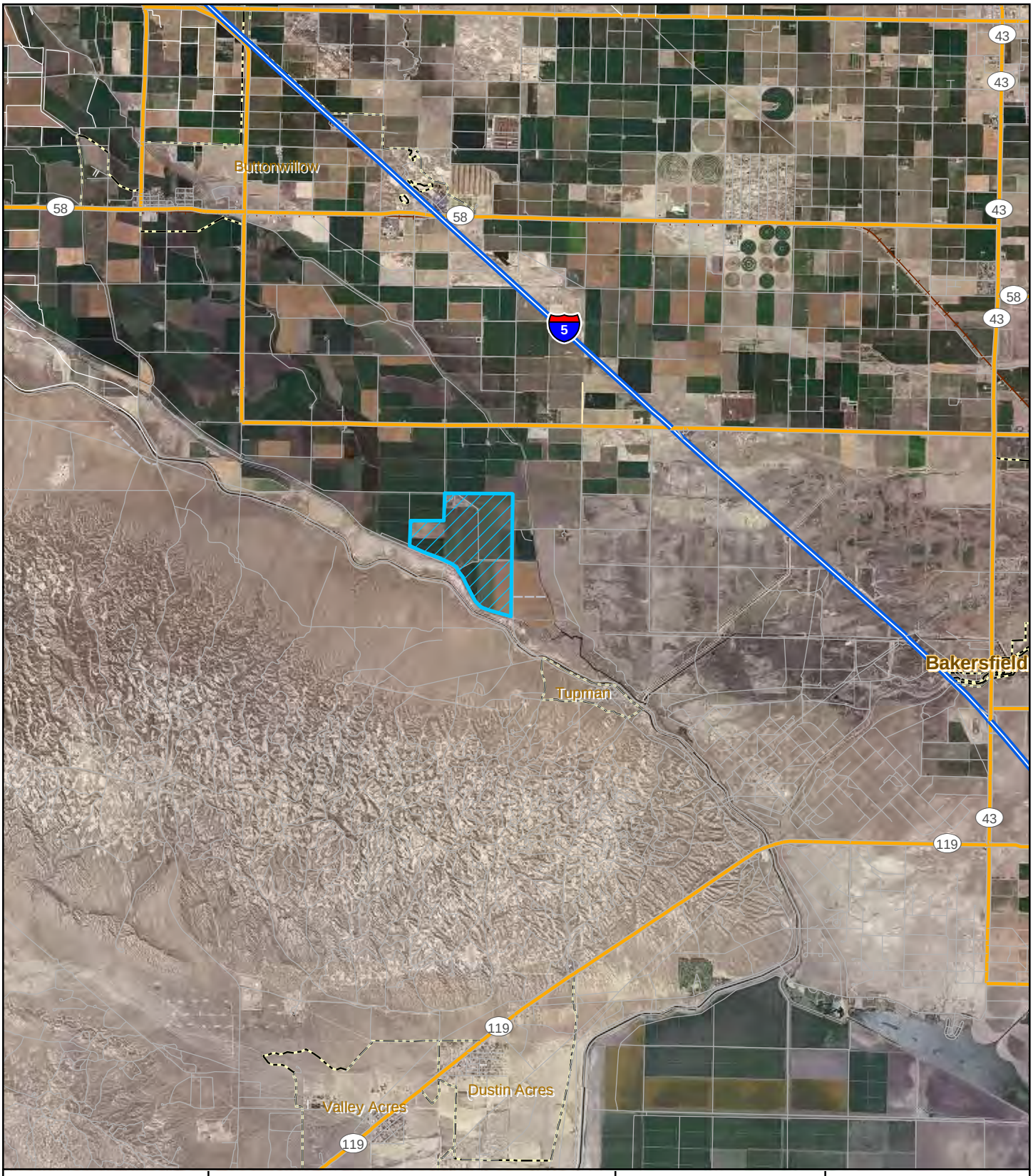
Phase I Environmental Site Assessment, HECA Project Site, Kern County, California, August 24, 2010.

Report Preliminary Geotechnical Investigation Proposed Hydrogen Energy California Project Kern County, California, prepared by URS, dated April 14, 2009.

San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels for commercial/industrial property dated May 2008.

Figures

CONFIDENTIAL



Map Location



Legend

Proposed HECA Project Site

1 in = 2 miles

0 2 4 Miles

N W E S

Hydrogen Energy California

Figure 1
Site Location Map

AECOM

Project: 60163371
Date: October 2010

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FIGURE NUMBER:	SHEET NUMBER:
2	X

SITE PLAN

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

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DESIGNED BY:	REVISIONS:			
S. Bilodeau	NO:	DESCRIPTION:	DATE:	BY:
DRAWN BY:				
M. Scop				
CHECKED BY:				
J. Fickerson				
APPROVED BY:				
H. Vandenberg				

Dairy Ro

Adohr Road

HECA Entrance - Adohr Road

Cellular tower & equipment building

Debris pile

Farm Operations Area

Domestic well - pressure tank, former storage tank

Dilapidated house

Trailer home

Farm maintenance & storage

Dilapidated house -

30,000 gallon diesel AST

Hazmat storage trailer

Residence

Domestic well

Fertilizer pile - inside building

Former Port Organics storage building

North farm storage - seed barn equipment

Chicken coop

Former hangar

Former Port Organics tank farm

Concrete covers

Stable

Diesel AST

South farm storage

Drums & 275-gallon totes

Tailings pile

Equipment washing area

Waste bin

Scrap pile

Soil staining

CROP DUSTER AIRSTRIP

N

1:2,400

200 100 0 200

Feet

Legend

Approximate Location of Areas Surveyed for Suspect USTs and Unknown Concrete Structures on September 21, 2010

REVISIONS:			
NO:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	S. Bilodeau
DRAWN BY:	M. Scop
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GEOPHYSICAL SURVEY MAP

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

3

SHEET NUMBER:

X

REVISIONS:			
NO:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
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SAMPLING MAP A

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

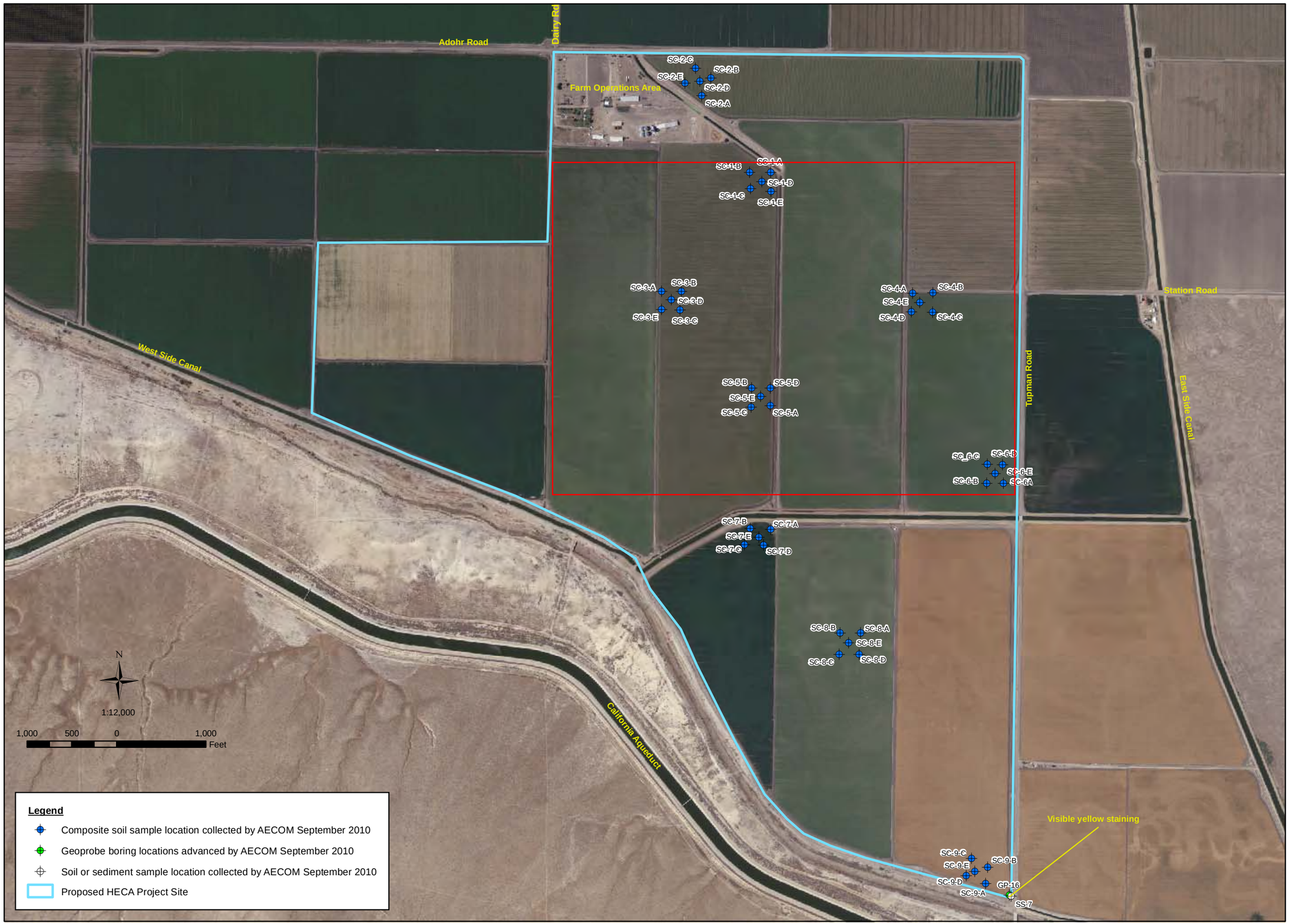
SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

4

SHEET NUMBER:

X



REVISIONS:			
NO:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
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SAMPLING MAP B

Hydrogen Energy California
Adohr Road and Dairy Road
Kern County, California

SCALE:	DATE:	PROJECT NUMBER:
X	10/1/2010	60163371

FIGURE NUMBER:

5

SHEET NUMBER:

X

Tables

CONFIDENTIAL

Table 1
Sampling Plan
Proposed Hydrogen Energy California Site
Kern County, California

REC	Area of Focus	Sample Location	Boring Number	Media	Sample Number	Sample Depth (feet bgs)	Analytical Methodology									
							VOC (8260B)	OPPs 8141	OCPs 8081	TPH-FF (8015M)	Lead (6010)	Title 22 Metals (6010)	pH	Phosphorous (365.4)	Sulfate and Nitrogen (300)	Potassium (200.7)
1	Three former USTs	West of the North Farm Storage Building	GP-1	Soil	GP-1-5	5	NA	Analyze	Analyze	NA	NA	NA	NA	NA	NA	NA
					GP-1-10	10	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
					GP-1-15	15	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
1	Three former USTs	West of the North Farm Storage Building	GP-2	Soil	GP-2-5	5	NA	Analyze	Analyze	NA	NA	NA	NA	NA	NA	NA
					GP-2-10	10	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
					GP-2-15	15	Analyze	NA	NA	Analyze	Analyze	NA	NA	NA	NA	NA
1	Suspect UST	West of the Horse Stable	GP-3	Soil	GP-3-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-3-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-3-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
1	Suspect UST	West of the Horse Stable	GP-4	Soil	GP-4-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-4-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-4-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
3	Suspect underground structure with concrete cover	West of Farm Storage Building	GP-5	Soil	GP-5-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-5-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-5-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
2	Fill Pipe by Grain Bin Suspect UST	South of Grain Storage Bins	GP-6	Soil	GP-6-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-6-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-6-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Port Organics	Tank Farm	GP-7	Soil	GP-7-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-1	5	Analyze	Analyze	Analyze	Analyze		Analyze	NA	NA	NA	NA
					GP-7-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-7-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Port Organics	Tank Farm	GP-8	Soil	GP-8-4	4	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
4	Port Organics	Tank Farm	GP-9	Soil	GP-9-4	4	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
4	Port Organics stained soil	Tank Farm	Surface	Soil	SS-1	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
				Soil	Dup-2	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
3	Farm Equipment Wash Pad	Drainage ditch that abuts the southern portion of the wash pad	Sediment	Sediment	SS-2	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
5	Port Organics Tank Farm	Irrigation Ditch located to the Northeast of the Tank Farm	Sediment	Sediment	SS-3	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
8	Chemical Storage Area, Suspect UST, and stained surface soil	Southeast end of Airstrip	GP-10	Soil	GP-10-5	5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
					GP-10-10	10	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
					GP-10-15	15	Analyze	Analyze	Analyze	Analyze	NA	Analyze	Analyze	Analyze	Analyze	Analyze
8	Stained surface soil near irrigation ditch	Southeast end of Airstrip	NA	Sediment	SS-4	NA	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
7	Outdoor Tailing Pile	East of Tank Farm	GP-11	Soil	GP-11-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-3	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-11-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
7	Outdoor Tailing Pile	East of Tank Farm	GP-12	Soil	GP-12-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-12-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
7	Outdoor Tailing Pile	East of Tank Farm	GP-13	Soil	GP-13-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-13-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
8	Indoor Tailing Pile	Inside Port Organics Storage Building	GP-14	Soil	GP-14-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-14-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
5	Tank Farm	Tank Farm	Surface	Soil	SS-5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
5	Tank Farm	Tank Farm	Surface	Soil	SS-6	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Stained Surface Soil - Suspect Pesticide Release Area	North end of Airstrip	GP-15	Soil	GP-15-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-15-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Stained Surface Soil	Southeast corner of the proposed project site	GP-16	Soil	GP-16-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-16-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
9	Former Airplane Hanger Stained Surface Soil - Suspect UST	South side of former airplane hanger	GP-17	Soil	GP-17-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-17-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA

Table 1
Sampling Plan
Proposed Hydrogen Energy California Site
Kern County, California

REC	Area of Focus	Sample Location	Boring Number	Media	Sample Number	Sample Depth (feet bgs)	Analytical Methodology									
							VOC (8260B)	OPPs 8141	OCPs 8081	TPH-FF (8015M)	Lead (6010)	Title 22 Metals (6010)	pH	Phosphorous (365.4)	Sulfate and Nitrogen (300)	Potassium (200.7)
6	Farm Equipment Wash Area	Southeast Horse Stables	GP-18	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-18-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-4	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
4	Former Tank Farm	Tank Farm	GP-19	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					Dup-5		Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
6	Farm Equipment Wash Area	Southeast of Horse Stables	GP-20	Soil	GP-18-0.5	0.5	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
					GP-18-2	2	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	NA	NA	NA
AOC-1	Historic Pipeline Release	~ 200 feet E of intersection of Adohr and Dairy Rds	GP-21	Soil	GP-21-0.5	0.5	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
					GP-21-2	2	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
					GP-21-5	5	Analyze	NA	NA	Analyze	NA	NA	NA	NA	NA	NA
9	Stained surface soil	SE corner of the proposed project site.	Sediment	Sediment	SS-7	NA	Analyze	Analyze	Analyze	Analyze	NA	Analyze	NA	Analyze	Analyze	Analyze
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-1A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-2A	0.5	NA		Composite B-E & Analyze	NA	NA	Analyze A & Composite for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	Dup-6	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-3A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-4A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-5A	0.5	NA	NA	Composite A-E & Analyze	NA	NA	Composite A-E & Analyze	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-6A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-7A	0.5	NA		Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-8A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA
AOC-4	Historical Pesticide Applications	Agricultural Fields	NA	Soil composite	SC-9A	0.5	NA	NA	Composite B-E & Analyze	NA	NA	Analyze A for Arsenic	NA	NA	NA	NA

Notes:

REC: Recognized environmental condition.

AOC - Area of concern.

NA - Not applicable/not analyzed.

bgs - Below ground surface.

VOCs - Volatile organic compounds.

OPPs - Organophosphorus pesticides

OCPs - Organo-chlorine pesticides.

TPH-FF: The full carbon range of total petroleum hydrocarbons.

Table 2
Summary of Analytical Results - Exceedences Only
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	TPH 8015 FF			Organochlorine Pesticides 8081			Metals 6010
				TPH-Diesel	TPH-Motor Oil	TPH-Mineral Oil	Dieldrin	Endo-sulfan II	Endrin	As
GP-3	GP-3-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**5.1**
	GP-3-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**4**
	GP-3-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**2.9**
GP-4	GP-4-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**12**
	GP-4-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**2.3**
	GP-4-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**5.1**
GP-5	GP-5-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	**29**
	GP-5-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	**7**
	GP-5-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	**1.6**
GP-6	GP-6-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**3**
	GP-6-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**9.6**
	GP-6-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**4.4**
GP-7	GP-7-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**8.6**
	Dup-1	5	9/22/2010	ND	ND	ND	ND	ND	ND	**22**
	GP-7-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**13**
	GP-7-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**25**
GP-8	GP-8-4	4	9/22/2010	ND	ND	**22**	ND	ND	ND	**6.5**
GP-9	GP-9-4	4	9/22/2010	ND	ND	**68**	ND	ND	ND	**4.9**
GP-10	GP-10-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	**4.3**
	GP-10-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	**15**
	GP-10-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	**8.2**
GP-11	GP-11-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**16**
	Dup-3	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**8**
	GP-11-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**19**
GP-12	GP-12-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**6.7**
	GP-12-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**6.4**
GP-13	GP-13-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	**11**
	GP-13-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**6.30**
GP-14	GP-14-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**7.3**
	GP-14-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**5.4**
GP-15	GP-15-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**35**
	GP-15-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**21**
GP-16	GP-16-0.5	0.5	9/23/2010	ND	ND	ND	**0.0014**	ND	**0.00031**	**7.7**
	GP-16-2	2	9/23/2010	ND	ND	ND	**0.00034**	ND	ND	**7.9**
GP-17	GP-17-0.5	0.5	9/22/2010	ND	ND	**4300**	ND	ND	**0.014**	**27**
	GP-17-2	2	9/22/2010	ND	ND	**320**	ND	ND	**0.0070**	**8.2**
	GP-17-5	5	9/22/2010	**23**	ND	ND	NA	NA	NA	NA
GP-18	GP-18-0.5	0.5	9/23/2010	ND	ND	**25000**	ND	ND	ND	**7.5**
	GP-18-2	2	9/23/2010	ND	ND	**2000**	ND	ND	ND	**5.5**

Table 2
Summary of Analytical Results - Exceedences Only
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	TPH 8015 FF			Organochlorine Pesticides 8081			Metals 6010
				TPH-Diesel	TPH-Motor Oil	TPH-Mineral Oil	Dieldrin	Endo-sulfan II	Endrin	As
	Dup-4	2	9/23/2010	ND	ND	**2700**	ND	ND	ND	**4.9**
	GP-18-5	5	9/23/2010	ND	ND	**290**	ND	ND	ND	**4.5**
GP-19	GP-19-0.5	0.5	9/21/2010	ND	ND	**45**	**0.0028**	ND	**0.0019**	**4.8**
	Dup-5		9/21/2010	ND	ND	**120**	ND	**0.0048**	**0.0032**	**4.8**
	GP-19-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	**7.2**
GP-20	GP-20-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**16**
	GP-20-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**6.7**
GP-21	GP-21-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	**21**
	GP-21-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	**19**
NA	SS-1	0.5	9/23/2010	ND	ND	**140**	ND	ND	ND	**6.1**
NA	Dup-2	0.5	9/23/2010	ND	**20000**	ND	ND	ND	ND	**5.1**
NA	SS-2	0.5	9/23/2010	ND	ND	**93000**	ND	ND	ND	**5.5**
NA	SS-3	0.5	9/22/2010	ND	ND	ND	ND	ND	ND	**5**
NA	SS-4	0.5	9/22/2010	ND	ND	ND	**0.00071**	ND	ND	**5.9**
NA	SS-5	0.5	9/23/2010	ND	ND	**1200**	ND	ND	ND	**5.4**
NA	SS-6	0.5	9/23/2010	ND	ND	**26**	ND	ND	ND	**3.3**
NA	SS-7	0.5	9/23/2010	ND	ND	**49**	ND	ND	ND	**5.5**
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.0033**	ND	ND	**7.9**
NA	SC-2A	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	**5.4**
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	NA	NA	ND	ND	**0.00051**	**5.6**
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.00065**	ND	**0.0015**	**4.9**
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.00085**	ND	ND	**8.2**
NA	SC-4A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**8.3**
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	**0.0027**	ND	**0.0014**	**7.7**
NA	SC-6A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**6.5**
NA	SC-7A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**14**
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	**0.0013**	ND	**0.0027**	NA
NA	SC-8A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**6.4**
NA	SC-9A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	**7.8**
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	**0.0036**	ND	**0.0022**	NA
Regulatory/Guidance Values										
California Human Heath Screening Levels				NS	NS	NS	0.13	NS	230	0.24
US EPA Region 9 Regional Screening Levels				NS	NS	310,000	0.11	26,000	180	1.6
SFBRWQCB ESLs				83	1,000	1,000	0.0023	0.0046	0.00065	5.5

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed/not applicable.
NS = No standard established.
Highlight = Analyte detected in exceedence of screening level

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

				VOCs 8260														TPH FF 8015		
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Benzene	sec-Butyl-benzene	Ethyl-benzene	p-Isopropyl-toluene	Methyl t-butyl ether	n-Propyl-benzene	Toluene	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Total Xylenes	p- & m-Xylenes	o-Xylene	Diesel	TPH-Motor Oil	TPH-Mineral Oil
GP-1	GP-1-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-1-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-2	GP-2-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**95**
	GP-2-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	GP-3-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	GP-4-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	GP-5-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-10	10	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-15	15	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	GP-6-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	GP-7-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-1	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	GP-8-4	4	9/22/2010	**0.0019**	ND	**0.0035**	ND	ND	ND	**0.01**	ND	ND	ND	ND	ND	ND	**51**	ND	**22**
GP-9	GP-9-4	4	9/22/2010	**0.0026**	ND	ND	ND	ND	ND	**0.0025**	ND	ND	ND	ND	ND	ND	**50**	ND	**68**
GP-10	GP-10-5	5	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-10	10	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-15	15	9/22/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	GP-11-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-3	0.5	9/21/2010	**0.0013**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-11-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	GP-12-0.5	0.5	9/21/2010	**0.0012**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-12-2	2	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-13	GP-13-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-13-2	2	9/21/2010	**0.0015**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-14	GP-14-0.5	0.5	9/23/2010	**0.0048**	ND	ND	ND	ND	ND	**0.0027**	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

				VOCs 8260														TPH FF 8015		
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Benzene	sec-Butyl-benzene	Ethyl-benzene	p-Isopropyl-toluene	Methyl t-butyl ether	n-Propyl-benzene	Toluene	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Total Xylenes	p- & m-Xylenes	o-Xylene	Diesel	TPH-Motor Oil	TPH-Mineral Oil
	GP-14-2	2	9/23/2010	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-15	GP-15-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-15-2	2	9/23/2010	0.0027	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	GP-16-0.5	0.5	9/23/2010	0.0028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-16-2	2	9/23/2010	0.0038	ND	ND	ND	ND	ND	0.0018	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-17	GP-17-0.5	0.5	9/22/2010	0.0031	ND	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	ND	ND	ND	ND	4300
	GP-17-2	2	9/22/2010	0.0019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	320
GP-18	GP-18-0.5	0.5	9/23/2010	ND	0.086	0.054	0.13	ND	0.1	0.25	ND	1.2	0.46	0.55	0.3	0.25	ND	ND	25000
	GP-18-2	2	9/23/2010	ND	0.033	0.039	0.058	ND	0.043	0.058	ND	0.36	0.15	0.18	0.083	0.093	ND	ND	2000
	Dup-4	2	9/23/2010	ND	0.056	0.04	0.092	ND	0.069	0.066	ND	0.72	0.25	0.24	0.12	0.13	ND	ND	2700
	GP-18-5	5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290
GP-19	GP-19-0.5	0.5	9/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45
	Dup-5	2	9/21/2010	0.0031	ND	ND	ND	ND	ND	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	120
	GP-19-2	2	9/21/2010	0.0034	ND	ND	ND	ND	ND	0.0014	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-20	GP-20-0.5	0.5	9/23/2010	0.0019	ND	ND	ND	0.00053	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-20-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-21	GP-21-0.5	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-21-2	2	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-1	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140
NA	Dup-2	0.5	9/23/2010	0.0014	ND	0.0018	0.017	ND	ND	0.046	ND	0.013	0.0054	0.0088	0.0057	0.0031	ND	20000	ND
NA	SS-2	0.5	9/23/2010	0.0018	ND	0.0018	0.025	ND	ND	0.048	0.0019	0.021	0.0077	0.015	0.01	0.0047	ND	ND	93000
NA	SS-3	0.5	9/22/2010	ND	ND	0.0020	0.0060	ND	ND	0.0061	ND	0.0014	ND	ND	ND	0.0014	ND	ND	ND
NA	SS-4	0.5	9/22/2010	0.0021	ND	ND	ND	ND	ND	0.0027	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-5	0.5	9/23/2010	0.0017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1200
NA	SS-6	0.5	9/23/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26
NA	SS-7	0.5	9/23/2010	0.0021	ND	ND	ND	ND	ND	0.0013	ND	ND	ND	ND	ND	ND	ND	ND	49
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2A	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3
Summary of Detected Analytes
VOCs & TPH in Soil
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	VOCs 8260													TPH FF 8015		
				Benzene	sec-Butyl-benzene	Ethyl-benzene	p-Isopropyl-toluene	Methyl t-butyl ether	n-Propyl-benzene	Toluene	Trichloro-ethene	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Total Xylenes	p- & m-Xylenes	o-Xylene	Diesel	TPH-Motor Oil	TPH-Mineral Oil
NA	SC-6-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9A	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory/Guidance Values																			
California Human Heath Screening Levels				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
US EPA Region 9 Regional Screening Levels				5.4	NS	27	NS	220	21,000	4,500	14	260	10,000	2,700	17,000	17,000	NS	NS	310,000
SFBRWQCB ESLs				0.044	NS	3.3	NS	0.023	NS	2.9	0.46	NS	NS	2.3	NS	NS	100	1,000	1,000

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of screening level.

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	pH	Potassium	Nitrate	Sulfate	Phosphate	Tokuthion	Chlorpyrifos	Beta BHC	Delta BHC	Gamma BHC (Lindane)	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Meth-oxychlor	Hepta-chlor
GP-1	GP-1-5	5	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-1-10	10	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-15	15	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	GP-2-5	5	9/23/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.00035**	ND	ND	ND	ND	**0.00055**	**0.001**	**0.0039**	**0.005**	ND	ND
	GP-2-10	10	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-15	15	9/23/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	GP-3-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0039**	ND	ND
	GP-3-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	GP-4-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-4-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	GP-5-5	5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-10	10	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5-15	15	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	GP-6-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-6-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	GP-7-5	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-1	5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-10	10	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-7-15	15	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	GP-8-4	4	9/22/2010	**7.87**	**6600**	**210**	**9100**	**7000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	GP-9-4	4	9/22/2010	**6.33**	**6300**	**4**	**32000**	**6800**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.037**	ND	ND	ND
GP-10	GP-10-5	5	9/22/2010	**3.85**	**2300**	**99**	**210**	**290**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-10	10	9/22/2010	**6.34**	**1600**	**2**	**71**	**200**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-10-15	15	9/22/2010	**6.83**	**630**	**0.59**	**37**	**150**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	GP-11-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.0029**	ND	ND
	Dup-3	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	**0.00034**	ND	**0.0005**	ND	ND	ND	ND	ND	ND	ND
	GP-11-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.00055**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	GP-12-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.014**	ND	ND	ND	ND	ND	ND	**0.14**	**0.023**	ND	ND
	GP-12-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.068**	ND	ND	ND	ND	ND	**0.016**	ND	ND	ND	ND
GP-13	GP-13-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-13-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	**0.00062**	ND	ND	ND	ND	ND	**0.00062**	**0.0016**	**0.00049**	ND	ND
GP-14	GP-14-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-14-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	pH	Potassium	Nitrate	Sulfate	Phosphate	Tokuthion	Chlorpyrifos	Beta BHC	Delta BHC	Gamma BHC (Lindane)	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Meth-oxychlor	Hepta-chlor
GP-15	GP-15-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	0.00033	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-15-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	GP-16-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.00069	ND	0.0014	ND	ND	0.00031	0.001	0.016	0.00096	ND	ND
	GP-16-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	0.00034	ND	ND	ND	ND	0.0044	ND	ND	ND
GP-17	GP-17-0.5	0.5	9/22/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.014	0.014	0.046	0.038	ND	ND
	GP-17-2	2	9/22/2010	NM	NA	NA	NA	NA	0.064	ND	ND	ND	ND	ND	ND	ND	0.0070	0.0092	0.0270	0.0360	ND	ND
GP-18	GP-18-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND
	GP-18-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dup-4	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-18-5	5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.00022	ND	ND	ND	ND	ND	ND	0.00065	ND	ND	ND
GP-19	GP-19-0.5	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	0.00091	0.0093	0.00099	0.0028	ND	ND	0.0019	0.0057	0.07	0.0081	ND	0.0003
	Dup-5		9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.016	ND	ND	ND	0.0048	0.0032	0.0093	0.16	0.013	ND	ND
	GP-19-2	2	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-20	GP-20-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-20-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-21	GP-21-0.5	0.5	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND
	GP-21-2	2	9/23/2010	NM	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-1	0.5	9/23/2010	NM	8500	3600	26000	9200	ND	ND	ND	0.0078	ND	ND	ND	ND	ND	0.0062	0.02	0.0011	ND	ND
NA	Dup-2	0.5	9/23/2010	NM	3400	0.41	96	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-2	0.5	9/23/2010	NM	3500	0.44	140	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SS-3	0.5	9/22/2010	NM	1600	0.4	390	2200	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0019	0.0030	ND	ND	ND
NA	SS-4	0.5	9/22/2010	NM	2200	0.38	200	800	ND	ND	ND	ND	ND	0.00071	ND	ND	ND	0.0071	0.0077	0.0027	ND	ND
NA	SS-5	0.5	9/23/2010	NM	3200	4500	6200	4600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0083	ND	ND
NA	SS-6	0.5	9/23/2010	NM	3000	5400	9700	2300	ND	ND	ND	0.002	ND	ND	ND	ND	ND	0.00082	ND	ND	ND	ND
NA	SS-7	0.5	9/23/2010	NM	3000	0.79	210	510	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0039	ND	0.0033	ND	ND	ND	0.0026	0.039	0.011	ND	ND
NA	SC-2A	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0054	ND	ND	ND	ND	0.00051	0.00083	0.022	0.0046	ND	ND
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	0.0037	ND	0.0056	ND	0.00065	ND	ND	0.0015	0.0015	0.028	0.0061	ND	ND
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	ND	ND	ND	0.0026	ND	0.00085	ND	ND	ND	ND	0.0086	0.00098	ND	ND
NA	SC-4A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0045	ND	ND	ND	ND	0.00055	ND	0.017	0.0025	ND	ND
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.004	ND	0.0027	ND	ND	0.0014	0.0017	0.024	0.0078	ND	ND
NA	SC-6A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0029	ND	ND	ND	ND	ND	ND	0.0088	0.0016	ND	ND
NA	SC-7A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	0.0048	ND	0.0013	ND	ND	0.0027	0.002	0.05	0.012	ND	ND

Table 4
Summary of Detected Analytes
pH, Potassium, Anions, OPPs, and OCPs in Soil
Hydrogen Energy California Site
Kern County, California

						Anions			OPPs 8141		OCPs 8081											
Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	pH	Potassium	Nitrate	Sulfate	Phosphate	Tokuthion	Chlorpyrifos	Beta BHC	Delta BHC	Gamma BHC (Lindane)	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endrin	4,4'-DDD	4,4'-DDE	4,4'-DDT	Meth-oxychlor	Hepta-chlor
NA	SC-8A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.0037**	ND	ND	ND	ND	ND	ND	**0.01**	**0.0014**	ND	ND
NA	SC-9A	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NM	NA	NA	NA	NA	NA	NA	ND	**0.0049**	ND	**0.0036**	ND	ND	**0.0022**	**0.001**	**0.044**	**0.0071**	ND	ND
Regulatory/Guidance Values																						
California Human Heath Screening Levels				NS	NS	NS	NS	NS	NS	NS	NS	NS	2	0.13	NS	NS	230	9	6.3	6.3	3800	0.52
US EPA Region 9 Regional Screening Levels				NS	NS	1,600,000	NS	NS	NS	1,800	NS	NS	NS	0.11	26000	26000	180	7.2	5.1	7	3100	0.38
SFBRWQCB ESLs				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.0023	0.0046	0.0046	0.00065	9	4	4	19	0.014

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of sceening level.

Table 5
Summary of Detected Analytes
Metals in Soil
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Metals 6010																
				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
GP-1	GP-1-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	0.88	NA	NA	NA	NA	NA	NA	NA	NA
	GP-1-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	0.69	NA	NA	NA	NA	NA	NA	NA	NA
GP-2	GP-2-5	5	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-10	10	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA	NA	NA	NA	NA
	GP-2-15	15	9/23/2010	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	NA	NA	NA	NA	NA	NA	NA
GP-3	GP-3-5	5	9/22/2010	ND	5.1	170	0.56	0.097	12	6.7	16	15	ND	1.2	10	ND	0.13	ND	42	45
	GP-3-10	10	9/22/2010	ND	4	79	0.57	0.094	12	6.1	12	3.8	ND	2.2	7.1	ND	ND	ND	49	46
	GP-3-15	15	9/22/2010	ND	2.9	33	0.3	ND	4.3	2.3	2.9	0.77	ND	1	1.8	ND	ND	ND	45	23
GP-4	GP-4-5	5	9/22/2010	ND	12	120	0.64	0.098	35	7.8	21	32	0.014	5.2	16	0.85	ND	ND	49	51
	GP-4-10	10	9/22/2010	ND	2.3	48	0.22	ND	5.4	3.4	5.3	1.8	ND	1.1	3	ND	ND	ND	26	35
	GP-4-15	15	9/22/2010	ND	5.1	28	0.29	ND	4.8	1.9	2.8	1.1	ND	1.7	1.5	ND	ND	ND	35	21
GP-5	GP-5-5	5	9/23/2010	ND	29	140	0.58	ND	11	6.6	10	3.1	0.021	3	7.7	ND	ND	ND	45	41
	GP-5-10	10	9/23/2010	ND	7	140	0.55	0.077	13	5.8	13	4.2	0.013	0.87	9.3	0.55	ND	ND	40	43
	GP-5-15	15	9/23/2010	ND	1.6	21	0.19	ND	4.5	2	2.8	1.3	ND	0.32	1.6	ND	ND	ND	22	17
GP-6	GP-6-5	5	9/22/2010	ND	3	89	0.74	0.13	19	6.6	15	5.3	ND	3.5	12	ND	ND	ND	40	62
	GP-6-10	10	9/22/2010	ND	9.6	270	0.38	0.05	8.3	5.1	8.7	2.5	0.012	3.1	4.7	0.71	ND	ND	30	35
	GP-6-15	15	9/22/2010	0.85	4.4	57	0.15	0.051	4.8	2.7	3.4	1	ND	1.2	2.6	0.71	ND	ND	15	24
GP-7	GP-7-5	5	9/22/2010	ND	8.6	150	1	0.47	23	7.6	25	7.4	0.02	1.4	18	ND	0.1	ND	76	67
	Dup-1	5	9/22/2010	ND	22	100	0.52	0.31	10	5.3	12	3.2	ND	1.6	7.2	ND	0.16	ND	50	49
	GP-7-10	10	9/22/2010	ND	13	120	0.67	0.11	15	7.2	16	4	ND	0.86	9.5	ND	ND	ND	47	59
	GP-7-15	15	9/22/2010	ND	25	230	0.64	0.14	16	7.8	15	5	0.012	2.9	9.1	0.55	ND	ND	40	51
GP-8	GP-8-4	4	9/22/2010	ND	6.5	100	0.55	2.6	24	4.8	27	7.9	0.013	2.5	15	ND	ND	ND	50	250
GP-9	GP-9-4	4	9/22/2010	ND	4.9	58	0.38	3	49	2.9	22	5.3	0.032	3.6	21	0.58	0.17	ND	45	150
GP-10	GP-10-5	5	9/22/2010	ND	4.3	110	0.44	0.16	12	5.5	11	3.1	ND	4.1	7.8	0.57	ND	ND	33	44
	GP-10-10	10	9/22/2010	ND	15	53	0.19	0.092	7.1	3.1	5.5	1.4	0.016	16	4.6	ND	ND	ND	18	28
	GP-10-15	15	9/22/2010	ND	8.2	25	0.06	ND	2.4	0.84	2.1	0.75	ND	4.6	1.3	ND	ND	ND	7.7	9.1
GP-11	GP-11-0.5	0.5	9/21/2010	ND	16	130	0.75	0.69	19	6	26	14	0.064	13	14	1.1	ND	ND	54	97
	Dup-3	0.5	9/21/2010	ND	8	140	0.66	1.1	18	5.9	32	26	0.058	2.5	13	0.65	ND	ND	44	330
	GP-11-2	2	9/21/2010	ND	19	140	0.83	0.38	18	6	22	6.5	0.094	31	16	ND	ND	ND	65	59
GP-12	GP-12-0.5	0.5	9/21/2010	ND	6.7	140	0.64	1.5	18	5.6	39	23	0.056	2.5	14	0.53	ND	ND	45	480
	GP-12-2	2	9/21/2010	ND	6.4	130	0.62	0.25	15	5.2	13	4.8	0.037	2.5	10	0.72	ND	ND	38	65
GP-13	GP-13-0.5	0.5	9/21/2010	0.82	11	150	0.77	0.57	18	6.4	20	7.6	0.031	11	17	0.79	ND	ND	49	61
	GP-13-2	2	9/21/2010	ND	6.30	150	0.77	0.42	18	6.8	19	6.60	0.02	6.10	16	1.30	ND	ND	42	62
GP-14	GP-14-0.5	0.5	9/23/2010	ND	7.3	170	0.92	0.33	19	7.5	20	8.1	0.03	4.4	14	ND	ND	ND	47	67
	GP-14-2	2	9/23/2010	ND	5.4	210	0.99	0.39	23	8.7	25	8.7	0.028	2	18	0.69	ND	0.73	60	73
GP-15	GP-15-0.5	0.5	9/23/2010	ND	35	190	0.92	0.25	22	8	26	11	0.28	9.8	13	ND	ND	ND	71	78
	GP-15-2	2	9/23/2010	ND	21	69	0.45	0.19	14	3.9	14	3.6	0.028	18	8	ND	ND	ND	44	46
GP-16	GP-16-0.5	0.5	9/23/2010	ND	7.7	150	0.77	0.55	21	7.2	19	9.1	0.032	1.5	18	ND	ND	ND	45	76
	GP-16-2	2	9/23/2010	ND	7.9	140	0.88	0.55	25	7.9	22	10	0.037	1.6	21	0.86	ND	ND	50	71
GP-17	GP-17-0.5	0.5	9/22/2010	ND	27	140	0.72	1.10	18	6.3	26	27	0.038	3.7	14.0	0.7	ND	ND	50	160
	GP-17-2	2	9/22/2010	ND	8.2	140	0.74	0.29	16	6.5	20	7.1	ND	2.7	14	0.64	ND	ND	51	67
GP-18	GP-18-0.5	0.5	9/23/2010	1.30	7.5	120	0.4	1.3	18	5.3	63	17	0.028	12	15	ND	0.079	ND	36	290
	GP-18-2	2	9/23/2010	ND	5.5	110	0.51	0.63	21	5.3	27	12	0.018	1.7	12	ND	ND	ND	34	110
	Dup-4	2	9/23/2010	ND	4.9	150	0.53	0.64	14	5.1	20	13	0.021	1.3	9.9	ND	ND	ND	35	110
	GP-18-5	5	9/23/2010	ND	4.5	150	0.62	0.14	14	6.5	16	4.5	0.022	0.91	12	ND	0.073	ND	42	50
GP-19	GP-19-0.5	0.5	9/21/2010	ND	4.8	95	0.52	1.7	19	4.5	33	8.9	0.039	2.1	13	0.6	ND	ND	41	180
	Dup-5		9/21/2010	ND	4.8	120	0.58	0.58	17	5.5	26	12	0.048	2.2	14	ND	ND	ND	39	140
	GP-19-2	2	9/21/2010	ND	7.2	160	0.91	0.39	19	7.5	24	7.9	0.031	1.5	15	ND	ND	ND	60	77
GP-20	GP-20-0.5	0.5	9/23/2010	ND	16	190	1.1	0.28	23	8.3	25	10	0.022	1.7	18	1	ND	ND	66	70
	GP-20-2	2	9/23/2010	ND	6.7	150	0.94	0.18	22	8	16	6.9	0.023	1.4	15	ND	ND	ND	49	56
GP-21	GP-21-0.5	0.5	9/23/2010	ND	21	160	0.82	0.4	20	7.1	20	9.6	0.056	5.7	15	ND	ND	ND	58	78

Table 5
Summary of Detected Analytes
Metals in Soil
Proposed Hydrogen Energy California Site
Kern County, California

Boring Number	Sample Number	Sample Depth (feet bgs)	Sample Date	Metals 6010																
				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Th	V	Zn
	GP-21-2	2	9/23/2010	ND	**19**	**140**	**0.71**	**0.42**	**20**	**6.2**	**20**	**15**	**0.059**	**11**	**14**	ND	ND	ND	**60**	**66**
NA	SS-1	0.5	9/23/2010	ND	**6.1**	**63**	**0.55**	**7.4**	**31**	**3.2**	**46**	**9**	**0.027**	**2.7**	**19**	ND	ND	ND	**56**	**230**
NA	Dup-2	0.5	9/23/2010	1.90	**5.1**	**150**	**0.45**	**1.6**	**17**	**4.6**	**51**	**17**	**0.049**	**14**	**13**	ND	ND	ND	**33**	**290**
NA	SS-2	0.5	9/23/2010	1.60	**5.5**	**140**	**0.45**	**1.7**	**17**	**4.9**	**63**	**22**	**0.053**	**12**	**14**	ND	ND	ND	**33**	**290**
NA	SS-3	0.5	9/22/2010	ND	**5**	**120**	**0.54**	**9.3**	**39**	**3.7**	**76**	**5.8**	**0.018**	**4.2**	**21**	ND	ND	ND	**60**	**310**
NA	SS-4	0.5	9/22/2010	ND	**5.9**	**87**	**0.5**	**4.5**	**22**	**3.4**	**37**	**4.7**	**0.024**	**3.2**	**8.5**	ND	ND	ND	**43**	**200**
NA	SS-5	0.5	9/23/2010	ND	**5.4**	**76**	**0.41**	**1.1**	**19**	**3.8**	**17**	**5.5**	**0.024**	**1.9**	**13**	ND	ND	ND	**34**	**83**
NA	SS-6	0.5	9/23/2010	ND	**3.3**	**44**	**0.27**	**0.96**	**11**	**2.5**	**8.6**	**3.6**	**0.012**	**1.1**	**11**	ND	ND	ND	**22**	**84**
NA	SS-7	0.5	9/23/2010	ND	**5.5**	**86**	**0.5**	**0.35**	**15**	**4.9**	**14**	**5.1**	**0.019**	**0.88**	**13**	ND	0.05	ND	**30**	**62**
NA	SC-1-A,B,C,D,E	0.5	9/21/2010	NA	**7.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2A	0.5	9/21/2010	NA	**5.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-2-B,C,D,E	0.5	9/21/2010	NA	**5.6**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	Dup-6-A,B,C,D,E	0.5	9/21/2010	NA	**4.9**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-3-A,B,C,D,E	0.5	9/21/2010	NA	**8.2**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4A	0.5	9/22/2010	NA	**8.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-4-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-5-A,B,C,D,E	0.5	9/21/2010	NA	**7.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6A	0.5	9/22/2010	NA	**6.5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-6-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7A	0.5	9/22/2010	NA	**14**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-7-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8A	0.5	9/22/2010	NA	**6.4**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-8-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9A	0.5	9/22/2010	NA	**7.8**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	SC-9-B,C,D,E	0.5	9/22/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regulatory/Guidance Values																				
California Human Heath Screening Levels				380	0.24	63,000	1,700	7.5	100,000	3,200	38,000	3,500	180	4,800	16,000	4,800	4,800	63	6,700	10,000
US EPA Region 9 Regional Screening Levels				410	1.6	190,000	2,000	800	1,500,000	300	41,000	800	34	5,100	20,000	390	5,100	NS	5,200	310,000
SFBRWQCB ESLs				40	1.6	1,500	8	7.4	58	10	230	750	10	40	150	10	40	16	200	600

Notes

Detected analytes are displayed in **bold**
ND = Not detected above the laboratory detection limit.
NA = Not analyzed.
NM - Not measured.
NS = No standard established.
Highlight = Analyte detected in exceedence of screen level.

Appendix A
Geophysical Survey Report

CONFIDENTIAL

SubSurface Surveys
& Associates, Inc.
An Applied Geophysical Company

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September 29, 2010

Project/Invoice No. 10-435

AECOM
1220 Avenida Acaso
Camarillo, California 93012

Attn: Jim Fickerson

Re: Geophysical Investigation Report, HECA Site, Buttonwillow, California.

This report is to present the results of our geophysical survey carried out over areas within and adjacent to the future Hydrogen Energy California (HECA) site southeast of the intersection of Dairy Road and Adohr Road near Buttonwillow, California (Figure 1). The survey was performed on September 21, 2010, and its purpose was to detect and delineate, insofar as possible, all pipes, conduits, utilities, and other underground obstructions within the immediate vicinity of sixteen (16) proposed boreholes. A secondary objective of the survey was to detect and delineate, insofar as possible, any existing underground storage tanks (UST) or backfilled excavations resulting from former USTs having been removed. This was performed over five (5) areas.

A combination of electromagnetic induction (EM), magnetometry, and ground penetrating radar (GPR) were applied to the search. A utility locator with line tracing capabilities was also brought to the field and used where risers exist onto which a signal could be impressed and traced.

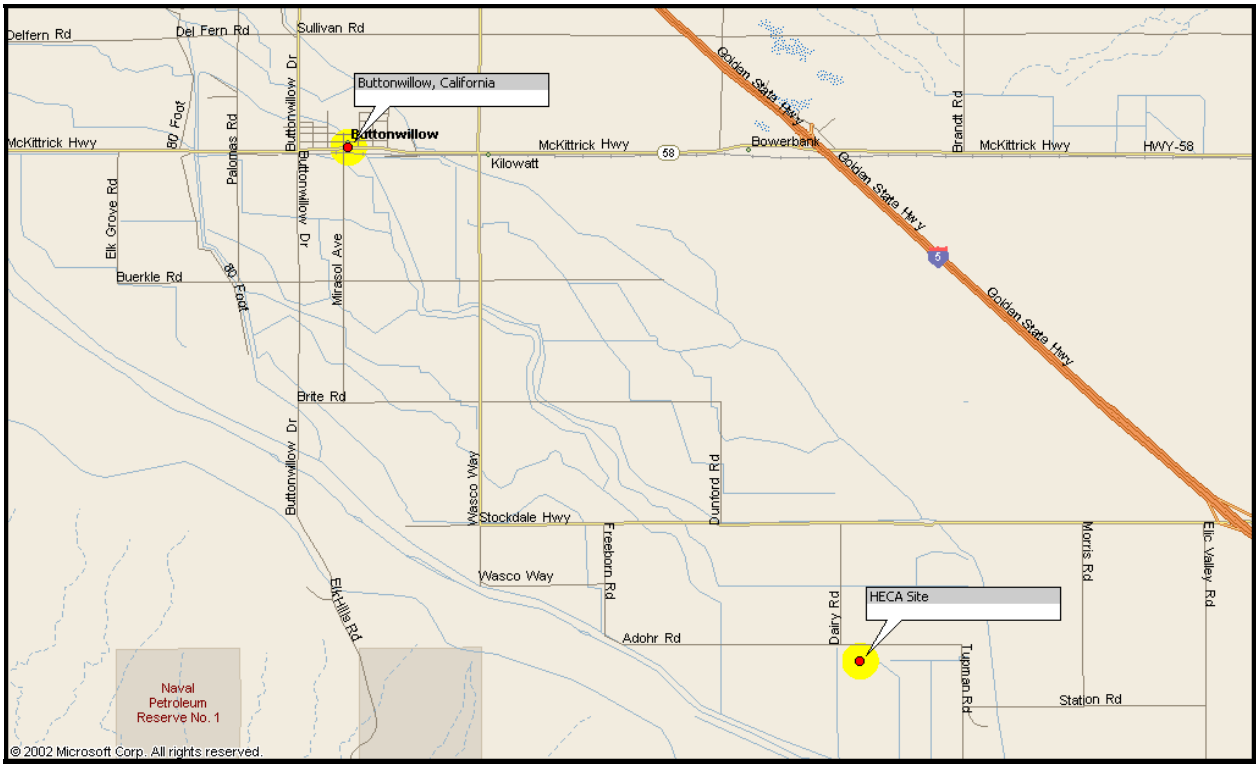


FIGURE 1. Site location map.

Survey Design – For both the borehole clearances and the UST/backfilled excavation detection the survey design was the same. In site situations and survey objectives such as this, the best use of time is achieved by systematically free-traversing with the instruments while monitoring them continuously to determine which responses are significant and due to true subsurface targets, and which are due to other non-target or above-ground features and must be ignored (an example being nearby chain-link fencing and uneven ground surfaces in some areas). Where applicable, the GPR, multiple EM devices, and magnetic gradiometer was traversed systematically over the various survey areas along many closely-spaced profiles and in multiple, organized directions. Other traverses were taken for detailing and confirmation where anomalous conditions were found.

In addition, the line tracers were used to impress signals onto pipes, generally through accessible risers and tracer wires when present, to delineate the lines' locations and orientations. The instruments were also used in passive mode, configured to detect 60 Hz electrical signals and other common radio-frequency signals found in active electrical and communication lines.

Hard copy of the EM data was not acquired, that is, discrete readings on the nodes of a grid were not recorded that could be put into a contoured map format. Rather, the instruments' meters were read continuously, and in real-time, during each traverse. This free-traversing method allowed for immediate detection of anomalous objects and facilitated the opportunity to investigate them further, without the need to first download and process data in the office. The lack of hard copy for EM data sets does not degrade the quality of the survey in any way. Hard copy merely provides a basis for report documentation of these geophysical fields, if such documentation is needed.

A Geonic's model EM61, and a Fischer M-Scope, was used for the EM sampling. A Sensors & Software Noggin Ground Penetrating Radar unit with a 500 MHz antenna produced the radar images. The magnetic gradiometer was a Schonstedt GA-52, and a Metrotech 9890 and RIGID SR-60 SeekTech utility locator rounded out the tools applied.

Brief Description of the Geophysical Methods Applied – The EM61 instrument is a high resolution, time-domain device for detecting buried conductive objects. It consists of a powerful transmitter that generates a pulsed primary magnetic field when its coils are energized, which induces eddy currents in nearby conductive objects. The decay of the eddy currents, following the input pulse, is measured by the coils, which in turn serve as receiver coils. The decay rate is measured for two coils, mounted concentrically, one above the other. By making the measurements at a relatively long time interval (measured in milliseconds) after termination of the primary pulse, the response is nearly independent of the electrical conductivity of the ground. Thus, the instrument is a super-sensitive metal detector. Due to its unique coil arrangement, the response curve is a single well-defined positive peak directly over a buried conductive object. This facilitates quick and accurate location of targets.

The M-Scope device energizes the ground by producing an alternating primary magnetic field with AC current in a transmitting coil. If conducting materials are within the area of influence of the primary field, AC eddy currents are induced to flow in the conductors. A receiving coil senses the secondary magnetic field produced by these eddy currents, and outputs the response as anomalous conditions. The strength of the secondary field is a function of the conductivity of the object, say a pipe, tank or cluster of drums, its size, and its depth and position relative to the instrument's two coils. Conductive objects, to a depth of approximately 7 feet below ground surface (bgs) for the M-Scope are sensed. The device is also somewhat focused; that is, it is more sensitive to conductors below the instrument than they are to

conductors off to the side.

The magnetic gradiometer has two flux gate magnetic fixed sensors that are passed closely to and over the ground. When not in close proximity to a magnetic object, that is, only in the earth's field, the instrument emits a sound signal at a low frequency. When the instrument passes over a buried iron or steel object, so that locally there is a high magnetic gradient, the frequency of the emitted sound increases. The frequency is a function of the gradient between the two sensors.

The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground electrical conductivity and dielectric constant.

Interpretation and Conclusions - The interpretation took place in real time as the survey progressed, and accordingly, the results of our investigation were marked out on the site's ground cover with spray chalk, reported to the client, and further documented with a proposed borehole location map (Figure 2) and site photographs showing both the boreholes (Figures 3-16) and the significant UST/backfilled excavation findings (Figures 17-18). Note that the borehole location map also shows the areas where UST/backfilled excavation surveys were conducted along with abbreviated conclusions regarding those areas. Lastly, the numbers adjacent to map symbols correspond to the figure number of the photograph depicting that area.

Items detected on site were not marked out in the typical industry standard colors, but rather florescent pink and orange in order to increase visibility on the dirt and gravel ground cover throughout most of the area.

All proposed boreholes were either clear as where original positioned by the client, or were moved slightly, if necessary, in order to provide adequate clearance from detected obstructions. In their final locations, they were marked with the client's original wooden stake and a green pin flag labeled "SSS" to indicate that each had been checked by company personnel. No proposed borehole required a relocation of more that 3 feet.

Two vertically-oriented cylindrical-shaped concrete structures were visible at the surface in the location shown in Figure 17. The covers were not removable thus the purpose of the structures could not be positively confirmed, however they somewhat resembled water cisterns or septic tanks. The structures do not appear to get wider below ground and the only other anomalous object in the area was a pipe-like

anomaly whose location and orientation is shown in Figure 17. This possible pipe, however, appears broken in places and possibly corroded to the point of being barely detectable.

A very subtle but distinct backfilled excavation was detected in the area shown in Figure 18. The size, depth, and nature of this anomaly is suggestive of this being the location of a large buried object that has since been removed. No other foreign object was detected within the backfilled excavation or in the vicinity.

No other USTs or backfilled excavations were detected in any other area surveyed for such. Please note that the near-surface geologic environment of the site is not conducive for GPR penetration and it is believed that our ability to positively detect backfilled excavations was somewhat degraded. In this case, our claim that a backfilled excavation was not detected in certain areas DOES NOT mean that a backfilled excavation does not exist there. This does not pertain to USTs as they still would have been easily detected by instruments that are not affected by the local soil conditions.

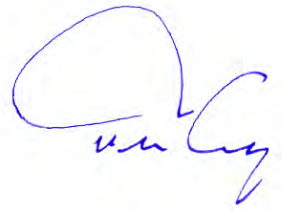
Limitations and Further Recommendations - It should be understood that limitations inherent in geophysical instruments and/or surveying techniques exist at all sites, and nearly all sites exhibit conditions under which such might not perform optimally. Consequently, the detection of buried objects in all circumstances **cannot be guaranteed**. Such limitations are numerous and include, but are not limited to, rebar-reinforced ground cover, abrupt changes in ground cover type, above-ground obstacles preventing full traverses or traverses in one direction only, above-ground conductive objects interfering with instrument signal, nearby powerlines or EM transmitters, highly conductive background soil conditions, limited GPR penetration, non-metallic targets, shallower or larger objects shielding deeper or smaller targets, tracing signal jumping from one line to another, and inaccessible risers, cleanouts, valve boxes, and manholes. If one or more geophysical instrument is rendered ineffective and cannot be utilized, the quality of the survey can be somewhat degraded.

For the above reasons, and in the interest of maximum safety, we encourage our clients to take advantage of Underground Service Alert (USA), Dig Alert, or other similar services, when possible. Furthermore, we recommend hand-auguring and the use of a drilling method known as air knifing or vacuum extraction, when feasible or if applicable to this project. These methods may significantly limit damage to underground pipes, conduits, and utilities that might not have been detectable during the course of this survey. Please bear in mind, that geophysical surveying is only one of several levels of protection that is available to our clients.

SubSurface Surveys may include maps in some reports. While they are an accurate general representation of the site and our findings, they are not of engineering quality (i.e., measured and mapped by a licensed land surveyor).

SubSurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy of the findings and interpretations present. And, in no event will SubSurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations and opinions presented herewith.

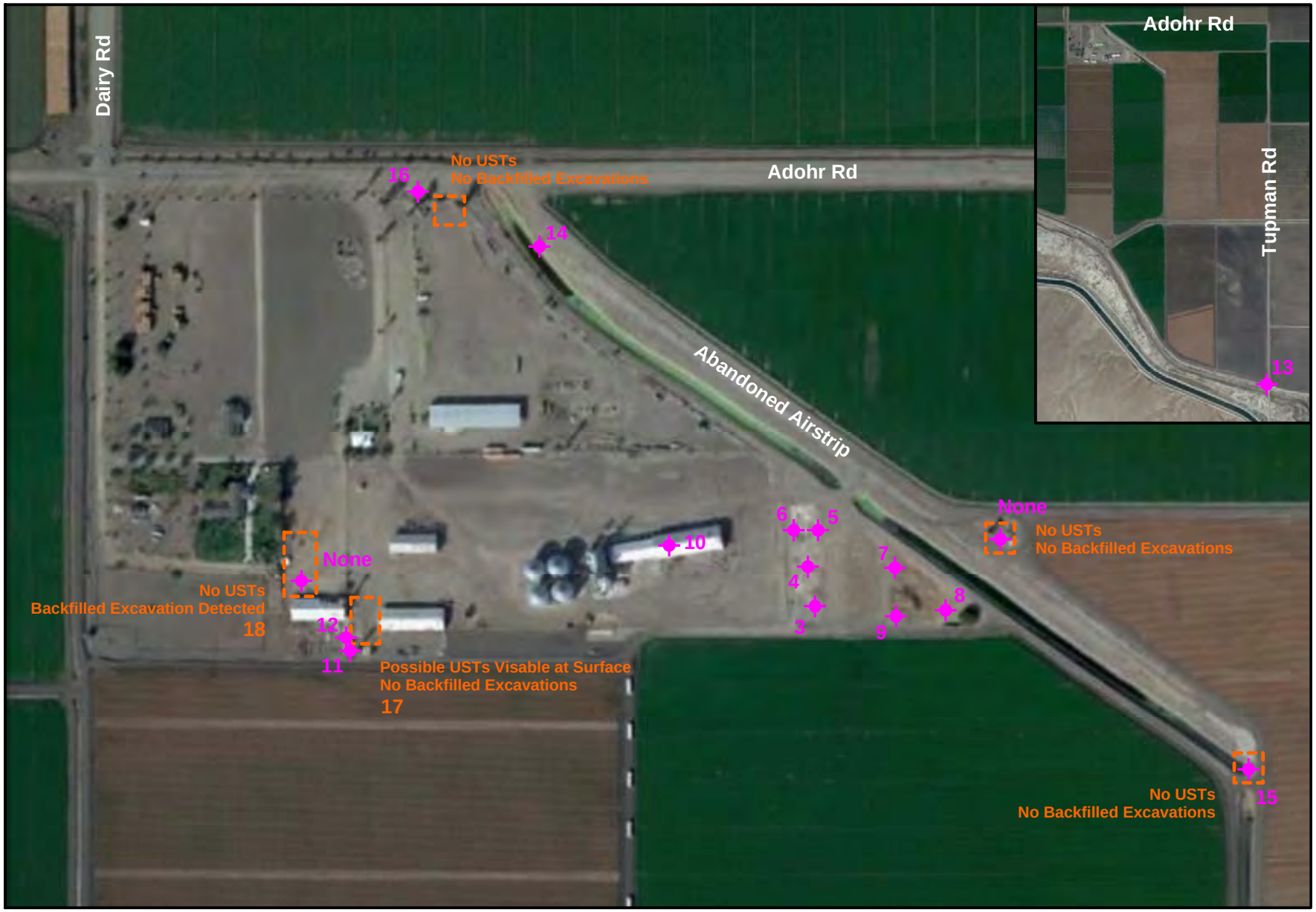
All data generated on this project are in confidential file in this office, and are available for review by authorized persons at any time. The opportunity to participate in this investigation is very much appreciated. Please call, if there are questions.



Travis Crosby
California State Geophysics Registration GP1044
Senior Geophysicist, SubSurface Surveys

BOREHOLE LOCATION MAP

Hydrogen Energy California (HECA) Site
Buttonwillow, California



SCALE
0 316ft

Proposed borehole (number corresponds to photo figure number)

Survey area for USTs and backfilled excavations (number corresponds to photo figure number)

FIGURE 2

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California



FIGURE 3

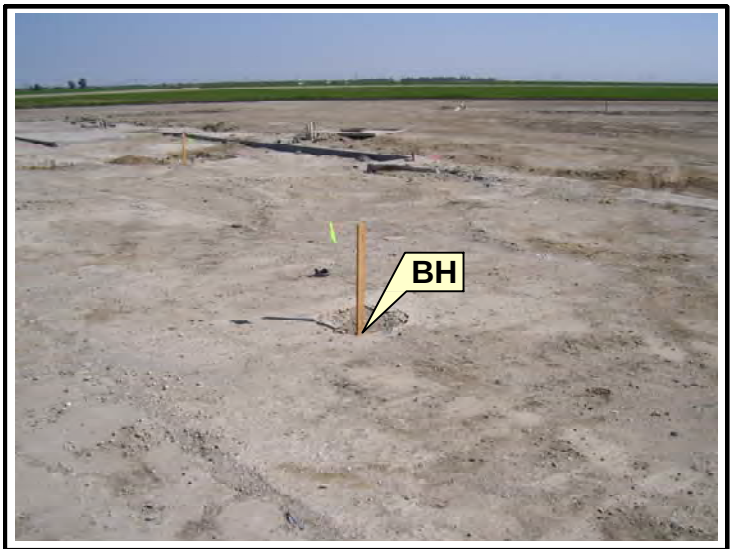


FIGURE 4

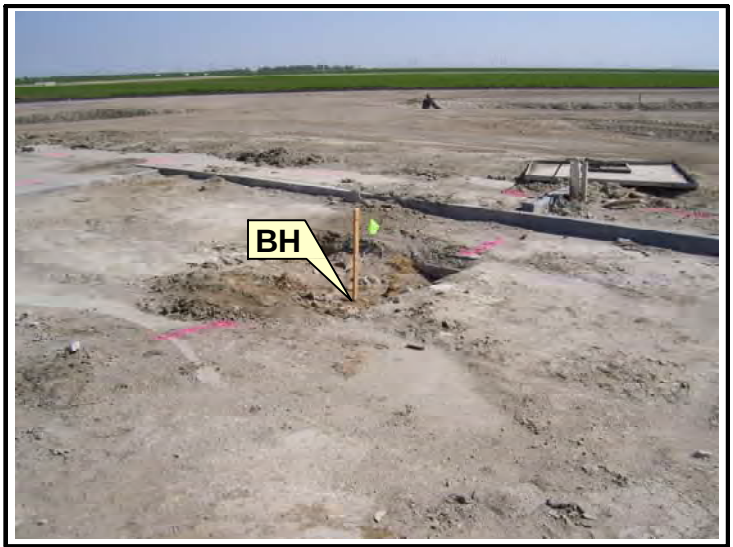


FIGURE 5



FIGURE 6



FIGURE 7



FIGURE 8

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California



FIGURE 9



FIGURE 10



FIGURE 11

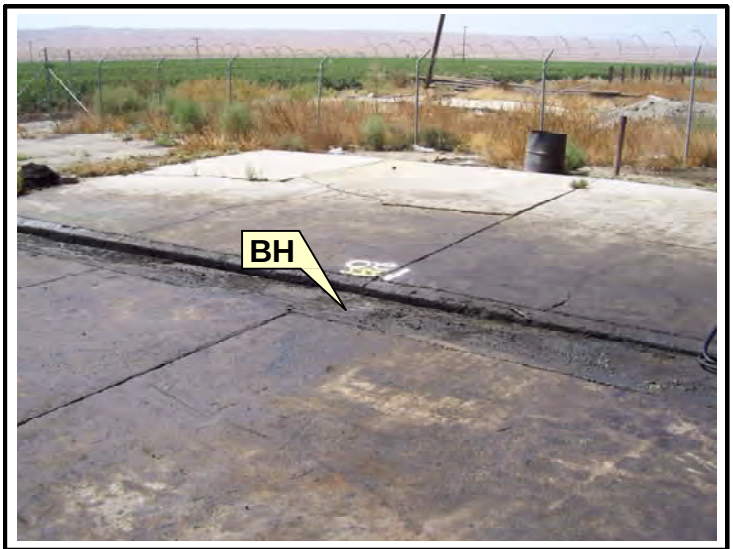


FIGURE 12



FIGURE 13



FIGURE 14

SITE PHOTOGRAPHS

Hydrogen Energy California (HECA) Site
Buttonwillow, California



FIGURE 15



FIGURE 16

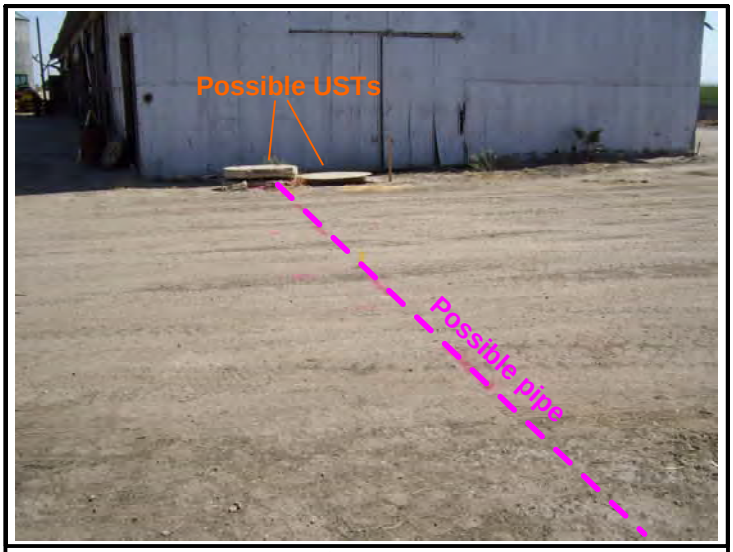


FIGURE 17



FIGURE 18

Appendix B
Borings Logs GP-1 through GP-21

CONFIDENTIAL

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California	**Boring No. GP-1**
	Project Number: 60163371-0002	
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2312229.9 N 6146338 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*	*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 10:55	*Depth of Boring:* 25 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 11:45	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-1-5	☒		1.5	0.0	SM		SILTY SAND, light brown, 60% very fine grained sand, 40% non-plastic fines, dense, dry, no odor or staining
10	GP-1-10	☒		1.5	0.0	SP		SAND, reddish brown, 100% fine grained sand, loose, dry, red stain, no odor
15	GP-1-15	☒		1.5	0.0			
20								
25	GP-1-25	☒		1.5	0.0			-light gray, no odor or staining at 25'

Total Depth = 25 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-2**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312231.8 N 6146360.8 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook	*Date/Time Started:* 09-23-10 / 10:05	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-23-10 / 10:30	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-2-5			1.5	0.0	ML		SANDY SILT, light brown, 25% very fine grained sand, 75% non-plastic fines, dense, dry, no odor or staining
10	GP-2-10			1.5	0.0	SP		SAND, light reddish brown, 100% very fine to fine grained sand, loose, dry, no odor, light red staining
15	GP-2-15			1.5	0.0			-reddish brown, red stain at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-3**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312107.7 N 6146200.4 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 15:07	*Depth of Boring:* 24 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 15:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-3-5	5		1.5	0.0	SM		SILTY SAND, light gray, 60% very fine to fine grained sand, 40% non-plastic fines, medium dense, dry, no odor or staining
10	GP-3-10	10		1.5	0.1	ML		SILT TO SANDY SILT, light brown, 15% very fine sand, 85% non-plastic fines, dense, dry, no odor or staining
15	GP-3-15	15		1.5	0.0	SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
20								Refusal at 24 feet. Boring Terminated

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California	**Boring No. GP-4**
	Project Number: 60163371-0002	
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
	Coordinates: 2312116.1 N 6146200 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*	*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 16:05	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10 / 16:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-4-5			1.5	0.0	ML		SILT TO SANDY SILT, light brown, 10% very fine sand, 90% non-plastic fines, dense, dry, no odor or staining
10	GP-4-10			1.5	0.0	SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
15	GP-4-15			1.5	0.0			-light brown at 15'
								Total Depth = 15 feet. Boring Terminated Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-5**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312069.8 N 6146394.3 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook	*Date/Time Started:* 09-23-10 / 08:40	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-23-10 / 08:58	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-5-5			1.5	0.0	SM		SILTY SAND, light brown, 65% very fine to fine grained sand, 35% non-plastic fines, loose, dry, no odor, slight red stain
10	GP-5-10			1.5	0.0	SP		SAND, reddish brown, 100% fine grained sand, loose, dry, no odor, red stain
15	GP-5-15			1.5	0.0			-light brown, no odor or staining at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-6**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2312047.2 N 6146926.2 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 17:11	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 17:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-6-5	X		1.5	0.1	CL		, dark brown, 100% low to medium plastic fines, stiff, dry, no odor or staining
10	GP-6-10	X		1.5	0.0	SP-SM		SAND TO SILTY SAND, reddish brown, 90% fine to medium grained sand, 10% non-plastic fines, dense, dry, no odor or staining
15	GP-6-15	X		1.5	0.0	SC-CL		CLAYEY SAND TO SANDY CLAY, dark brown, 50% fined grained sand, 50% medium plastic fines, dense, dry, no odor or staining

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-7**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312207.7 N 6147357.7 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 08:45	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10 / 09:00	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-7-5	X		1.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, slight odor, no staining
10	GP-7-10	X		1.5	0.1	SP-SM		SAND TO SILTY SAND, reddish brown, 90% very fine to fine grained sand, 10% non-plastic fines, dense, dry, no odor or staining
15	GP-7-15	X		1.5	0.1			Total Depth = 15 feet. Boring Terminated Target depth achieved

Notes:

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-8**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312250 N 6147373.5 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 09:40	*Depth of Boring:* 4 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-8-4	X		1.5	15.3	SP		GRAVELLY SAND, black, 30% gravel, 70% fine to medium grained sand, subrounded, medium dense, moist to wet, black staining, strong rotten egg odor
								Refusal at 4 feet. Boring Terminated

Notes:

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California	**Boring No. GP-9**
Project Number: 60163371-0002	
Site Description/Location: Dairy Road & Adohr Road, Kern County, California	*Ambient PID Reading:* NM
Coordinates: 2312253.3 N 6147330 E *Elevation:* *Datum:*	*Sheet:* 1 *of* 1
Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*	*Monitoring Well Installed:* No
Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files *Logged By:* D. Files *Date/Time Started:* 09-22-10 / 10:17	*Depth of Boring:* 4 FT BGS
Drilling Contractor: BC2 *Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-9-4	X		1.5	138	SP		GRAVELLY SAND, black, 25% gravel, 75% fine to medium grained sand, subrounded, dense, moist to wet, strong ammonia odor, black staining
								Refusal at 4 feet. Boring Terminated

Notes:

AECOM 1220 Avenida Acaso Camarillo, CA 93012 (805)388-3775	*Client:* Hydrogen Energy of California		**Boring No. GP-10**
	Project Number: 60163371-0002		
	Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
	Coordinates: 2311710.2 N 6148342.3 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
	Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
	Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files	*Date/Time Started:* 09-22-10 / 11:51	*Depth of Boring:* 15 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite	*Date/Time Finished:* 09-22-10 / 12:34	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
5	GP-10-5	X		1.5	0.0	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
10	GP-10-10	X		1.5	0.0	SP		SAND, light gray, 100% very fine to fine grained sand, dense, dry, no odor or staining
15	GP-10-15	X		1.5	0.1			-fine to medium grained sand at 15'

Total Depth = 15 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-11**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312061.7 N 6147540.6 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-21-10 / 13:07	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-21-10 / 13:28	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-11-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-11-2			0.5	0.1	SP		SAND, light gray, 100% very fine to fine grained sand, loose, dry, no odor or staining
5	GP-11-5			0.5	0.1			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-12**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312069.6 N 6147674.5 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-21-10 / 13:49	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-21-10 / 14:11	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-12-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-12-2			0.5	0.1	SP		SAND, light gray, 100% very fine to fine grained sand, subrounded, loose, dry, no odor or staining
5	GP-12-5			0.5	0.2			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-13**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312164.1 N 6147578.9 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-21-10 / 12:23	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-21-10 / 12:52	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-13-0.5			1	0.1	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-13-2			1	0.2			
						SP		SAND, light gray, 100% very fine to fine grained sand, loose, dry, no odor or staining
5	GP-13-5			1	0.2			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM
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Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-14**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: Not Surveyed	*Elevation:* *Datum:*	*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger	*Weather:*	*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars	*Boring Diameter:* 2 IN.	*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook / *Date/Time Started:* 09-23-10 / 15:55	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite / *Date/Time Finished:* 09-23-10 / 16:10	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-14-0.5			0.5		CL		, very dark brown, 100% low to medium plastic fines, stiff, moist, no odor or staining
	GP-14-2			0.5				
5	GP-14-5			0.5				

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-15**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312885.7 N 6146772.2 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 13:05	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 13:25	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-15-0.5			0.5	0.0	CL		, dark brown, 100% low to medium plastic fines, stiff, moist, no odor or staining
	GP-15-2			0.5	0.0			
5	GP-15-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-16**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2303583.5 N 6150873 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 14:20	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 14:40	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-16-0.5			0.5	0.0	CL		CLAY, dark brown, 5% very fine grained sand, 95% medium plastic fines, stiff, dry, no odor or staining
	GP-16-2			0.5	0.0	CL		CLAY, dark brown, 100% medium plastic fines, stiff, dry, no odor or staining
5	GP-16-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-17**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312228.8 N 6147772.1 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-22-10 / 13:50	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-22-10 / 13:57	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-17-0.5			0.5	0.2	CL		, dark brown, 100% low to medium plastic fines, soft, dry, no odor or staining
	GP-17-2			0.5	0.0			
5	GP-17-5			0.5	0.3			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-18**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312016.6 N 6146341.4 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 09:13	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 09:40	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-18-0.5			0.5	10.8	CL		CLAY, black, 100% medium plastic fines, stiff, wet, oil odor
	GP-18-2			0.5	7.4			
5	GP-18-5			0.5	3.2			-gray at 5'

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-19**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312105.4 N 6147368.5 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
Drilling Equipment/Method: Geoprobe/Direct Push *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Sleeve *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* D. Files *Date/Time Started:* 09-21-10 / 14:59	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-21-10 / 15:06	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-19-0.5			0.5	0.2	CL		SANDY CLAY, dark brown, 30% fine grained sand, 70% medium plastic fines, firm, dry, no odor or staining
	GP-19-2			0.5	0.2			
						CL		CLAY, dark brown, 100% medium plastic fines, soft, dry, no odor or staining
5	GP-19-5			0.5	0.3			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

ENSR BLOG HECABORINGLOGS.GPJ ENSR CA.GDT 10/6/10

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-20**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312037.3 N 6146337.1 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 15:10	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 15:20	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-20-0.5			0.5	1.3	CL		CLAY, very dark brown, 5% sand, 95% medium plastic fines, soft, wet, oil odor
	GP-20-2			0.5	0.5			-moist, no odor or staining at 2'
						SC		CLAYEY SAND, greenish gray, 60% very fine to fine grained sand, 40% medium plastic fines, loose, moist, no odor or staining
5	GP-20-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

AECOM
1220 Avenida Acaso
Camarillo, CA 93012
(805)388-3775

Client: Hydrogen Energy of California		**Boring No. GP-21**
Project Number: 60163371-0002		
Site Description/Location: Dairy Road & Adohr Road, Kern County, California		*Ambient PID Reading:* NM
Coordinates: 2312999.5 N 6146469.8 E *Elevation:* *Datum:*		*Sheet:* 1 *of* 1
*Drilling Equipment/Method/*Hand Auger *Weather:*		*Monitoring Well Installed:* No
Sample Type(s): 5035/Jars *Boring Diameter:* 2 IN.		*Screened Interval:* FT BGS
Approved By: D. Files	*Logged By:* T. Shook *Date/Time Started:* 09-23-10 / 12:30	*Depth of Boring:* 5 FT BGS
Drilling Contractor: BC2	*Backfill:* Hydrated bentonite *Date/Time Finished:* 09-23-10 / 12:55	*Water Level:* Not Encountered

DEPTH (ft)	Sample ID	Sample Depth (ft)	Blows per 6"/RQD	Recovery (ft)	Headspace (ppm)	USCS	Graphic Log	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.
	GP-21-0.5			0.5	0.0	CL		SANDY CLAY, brown, 10% fine-grained sand, 90% medium plastic fines, stiff, dry, no odor or staining
	GP-21-2			0.5	0.0	SP		SAND, light brown, 100% fine grained sand, loose, dry, no odor or staining
5	GP-21-5			0.5	0.0			

Total Depth = 5 feet.
Boring Terminated
Target depth achieved

Notes:

Appendix C
Certified Laboratory Reports & Chain-of-Custody Documentation

CONFIDENTIAL

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 09/24/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013212
Invoice ID: B087421

Enclosed are the results of analyses for samples received by the laboratory on 9/21/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013212 Page 1 of 5

Chain of Custody & Sample Information Record

Pg. 1 of 2

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests: Include QC Data Package: ☐ Yes ☐ No; FAX Results: ☐ Yes ☐ No; Email Results: ■ Yes ☐ No; State EDT: ☐ Yes ☐ No (Include Source Number in Notes)

Sampler Information: Name: Dana Files; Employer: AECOM; Signature: Dana Files

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-13-0.5	9-21-10	1223	X				X						X	5	X	X	X		X					S	
GP-13-2	9-21-10	1228	X				X						X	5	X	X	X		X					S	
GP-13-5	9-21-10	1252	X				X						X	5	■				HOLD					HOLD S	
GP-11-0.5	9-21-10	1307	X				X						X	5	X	X	X		X					S	
GP-11-2	9-21-10	1323	X				X						X	5	X	X	X		X					S	
GP-11-5	9-21-10	1328	X				X						X	5	■				HOLD					S	
GP-12-0.5	9-21-10	1349	X				X						X	5	X	X	X		X					S	
GP-12-2	9-21-10	1406	X				X						X	5	X	X	X		X					S	
GP-12-5	9-21-10	1411	X				X						X	5	X	X	X		HOLD					S	
DUP-3	9-21-10	—	X				X						X	5	X	X	X		X					S	

CHK BY: [illegible] DISTRIBUTION: WORK ASSIGNED TURN-OUT

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Dana Files / AECOM	9-21-10 / 1551	[signature]	BC Labs 9-21-10 1715
[signature]	[illegible]	[illegible]		

Lab No. 10-13212

Page 1 of 2

(For Lab Use Only) Sample Integrity Upon Receipt: Sample(s) Submitted on Ice? Yes No; Temperature °C; Custody Seal(s) Intact? Yes No N/A; Sample(s) Intact? Yes No; ☐ Cooler Blank

Lab Notes

Chain of Custody and Cooler Receipt Form for 1013212 Page 2 of 5

Chain of Custody & Sample Information Record

Pg. 2 of 2

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests: Include QC Data Package: ☐ Yes ☐ No; FAX Results: ☐ Yes ☐ No; Email Results: ■ Yes ☐ No; State EDT: ☐ Yes ☐ No (Include Source Number in Notes)

Sampler Information: Name: Dana Files; Employer: AECOM; Signature:

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar (15 or 32 oz); H2SO4; HCl; HNO3; Na2S2O3; NaOH; NaOH/ZnAcetate; NH4Cl; MCAA; MeOH; Unpreserved Vial (Moisture); Total # of Containers	Analysis Requested: 8260 Volatile Organics; 8141 OP Pesticides; 8081 OC Pesticides; 8015 FF; 6010 Metals; 504M/524SIM Fumigants; 365 Phosphorous; 300 Anions (nitrate, sulfate); 200.7 Potassium	Matrix (DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous)	Notes
GP-19-0.5	9-21-10	1459	1	5	S	
GP-19-2	9-21-10	1510	3	5	S	
GP-19-5	9-21-10	1506	1	5	S	HOLD
Dup-5	9-21-10	—	1	5	S	
RCTB-1	9-21-10	1200	1	1	W	
RCTB-2	9-21-10	1200	1	1	W	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Dana Files AECOM	9-21-10/1551	Dana Lee	BC Labs 9-21-10 1715

Lab No. 10-13212

Page 2 of 2

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No

Custody Seal(s) Intact? Yes No N/A

Sample(s) Intact? Yes No

Temperature °C

☐ Cooler Blank

Lab Notes

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Chain of Custody and Cooler Receipt Form for 1013212 Page 3 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 1 of 3

Submission #: 10-13212

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: IR3 Date/Time 9-21-10 1720

Temperature: A 3.5 °C / C 3.5 °C Analyst Init JLW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AH	AH	AH	AH	AH				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/9080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B	B	B	B	B	B				
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: WW Date/Time: 9/21/10 1755

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013212 Page 4 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 3

Submission #: 10-13212

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 1183

Temperature: A 11.0.1 °C / C 11.0.1 °C

Date/Time 9-21-10 1720

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AM	AM	AM	AM	( )	( )	AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:_____

Sample Numbering Completed By: JDW Date/Time: 9/21/10 1755

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013212 Page 5 of 5

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 Of 3

Submission #: 1013212

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☒ None ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: Soil Sleeve Thermometer ID: IR3 Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-21-10 1724 Analyst Init JRD

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK					A1	A1				
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	✓ ( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR							B	B	B	B
SOIL SLEEVE	B	B	B	B						
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JRD Date/Time: 9/21/10 1755

A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-01	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:23
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-02	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:28
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-03	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:52
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-13-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-04	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:07
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-0.5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-05	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:23
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-06	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:28
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-11-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-07	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:49
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-08	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-09	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:11
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-12-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-10	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-3	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-11	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:59
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-12	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:03
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013212-13	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-19-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013212-14	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013212-15	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-1	**Sample Matrix:**	Water
	Sampled By:	---		
1013212-16	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-2	**Sample Matrix:**	Water
	Sampled By:	---		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	25.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	37.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 11:47	VH1	GC-1	0.997	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 06:24	cc1	GC-7	0.997	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-01	**Client Sample Name:**	HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 00:19	ADC	MS-V2	0.910	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	65.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 13:20	MWB	GC-2	0.990	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-01 | **Client Sample Name:** HECA, GP-13-0.5, 9/21/2010 12:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**0.82**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**11**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.031**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**17**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.79**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**61**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 15:56	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:13	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00062**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.00062**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0016**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.00049**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**J**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	26.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 16:13	VH1	GC-1	0.987	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	56.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 06:46	cc1	GC-7	0.997	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0015**	**mg/kg**	**0.0045**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0045	0.00083	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0045	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0045	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0045	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0045	0.00089	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0045	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0045	0.00090	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0045	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0045	0.00073	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0045	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0045	0.00073	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0045	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0090	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0045	0.00045	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0045	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0045	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0045	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0045	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0045	0.00099	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0045	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0045	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0090	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0045	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0045	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-02	**Client Sample Name:**	HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 00:45	ADC	MS-V2	0.900	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	72.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 13:43	MWB	GC-2	0.990	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-02 | **Client Sample Name:** HECA, GP-13-2, 9/21/2010 12:28:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**19**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.017**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**6.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.3**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:06	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:24	MEV	CETAC1	1.008	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-03 | **Client Sample Name:** HECA, GP-13-5, 9/21/2010 12:52:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00089**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	41.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	58.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 12:24	VH1	GC-1	0.997	BTI1413

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	**0.0029**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 12:42	VH1	GC-1	0.987	BTI1413

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	50.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 07:32	cc1	GC-7	0.984	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-04	**Client Sample Name:**	HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 01:37	ADC	MS-V2	0.890	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**190**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**Z1**	1
Tetracosane (Surrogate)	104	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 18:40	MWB	GC-2	0.997	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-04 | **Client Sample Name:** HECA, GP-11-0.5, 9/21/2010 1:07:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**16**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**130**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.75**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.69**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**14**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.064**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**13**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.1**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**54**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**97**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:15	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:26	MEV	CETAC1	0.992	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00055**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00062**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	31.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.2	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 13:00	VH1	GC-1	0.990	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 07:54	cc1	GC-7	0.990	BTI1411

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.4	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-05	**Client Sample Name:**	HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 02:02	ADC	MS-V2	0.890	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	69.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 14:29	MWB	GC-2	0.997	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-05 | **Client Sample Name:** HECA, GP-11-2, 9/21/2010 1:23:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**19**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.83**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.094**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**31**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**65**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**59**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:44	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:28	MEV	CETAC1	1.008	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.14**	**mg/kg**	**0.050**	**0.0076**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.14**	**mg/kg**	**0.050**	**0.0045**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.023**	**mg/kg**	**0.0050**	**0.00031**	**EPA-8081**	**ND**	**A01**	3
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	**0.12**	**mg/kg**	**0.050**	**0.013**	**EPA-8081**	**ND**	**A01**	2
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	120	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	45.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	67.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	118	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	0	%	26 - 151 (LCL - UCL)		EPA-8081		A01,A17	2
Dibutyl chlorendate (Surrogate)	116	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 14:13	VH1	GC-1	1	BTI1413
2	EPA-8081	09/21/10	09/23/10 16:31	VH1	GC-1	100	BTI1413
3	EPA-8081	09/21/10	09/24/10 13:24	VH1	GC-1	10	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	37.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 09:47	cc1	GC-7	0.984	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0012**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0048	0.00088	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0048	0.00081	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0048	0.00061	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0048	0.00095	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0048	0.00096	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0048	0.00082	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0096	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0048	0.00048	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0048	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0048	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0048	0.00074	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0096	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0048	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	90.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	88.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.017**	**mg/kg**			**EPA-8260**			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Heptane, 2,4-dimethyl-	**0.0070**	**mg/kg**			**EPA-8260**			1
TIC: Hexane	**0.0082**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 09:47	ADC	MS-V2	0.961	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	1000	460	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	1000	140	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	1000	120	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	2000	280	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	2000	650	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	1000	500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**8500**	**mg/kg**	**5000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 19:26	MWB	GC-2	98.361	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-07 | **Client Sample Name:** HECA, GP-12-0.5, 9/21/2010 1:49:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.5**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**39**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**23**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.056**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.53**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**480**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:18	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:34	MEV	CETAC1	0.962	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0014**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	29.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 14:31	VH1	GC-1	0.997	BTI1413

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	68.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 10:10	cc1	GC-7	0.997	BTI1411

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00078	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00092	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0093	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0093	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-08	**Client Sample Name:**	HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 10:12	ADC	MS-V2	0.934	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	74.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 14:51	MWB	GC-2	0.997	BTI1417

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-08 | **Client Sample Name:** HECA, GP-12-2, 9/21/2010 2:06:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**130**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.62**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.25**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**13**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.037**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**10**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.72**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**65**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:19	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:37	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.011**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	**0.00034**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**	**J**	1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.016**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.068**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	**0.00050**	**mg/kg**	**0.00050**	**0.000086**	**EPA-8081**	**ND**		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	38.0	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	44.5	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	71.1	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	52.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	0	%	26 - 151 (LCL - UCL)		EPA-8081		A01,A17	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:07	VH1	GC-1	0.993	BTI1413
2	EPA-8081	09/21/10	09/23/10 16:49	VH1	GC-1	4.967	BTI1413
3	EPA-8081	09/21/10	09/23/10 17:07	VH1	GC-1	49.669	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 10:56	cc1	GC-7	0.993	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0013**	**mg/kg**	**0.0043**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 04:12	ADC	MS-V2	0.860	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**36**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	73.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 18:17	MWB	GC-2	0.990	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-10 | **Client Sample Name:** HECA, Dup-3, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**8.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.66**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**32**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**26**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.058**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.65**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**330**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:21	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:39	MEV	CETAC1	0.962	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	**0.00091**	**mg/kg**	**0.00050**	**0.00038**	**EPA-8081**	**ND**		1
delta-BHC	**0.0093**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	**0.00099**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0057**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.070**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	**0.0081**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	2
Dieldrin	**0.0028**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0019**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**	**V11**	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	**0.00030**	**mg/kg**	**0.00050**	**0.00026**	**EPA-8081**	**ND**	**J**	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	41.8	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	58.2	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	79.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	54.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	54.8	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:26	VH1	GC-1	0.990	BTI1413
2	EPA-8081	09/21/10	09/23/10 17:25	VH1	GC-1	4.950	BTI1413
3	EPA-8081	09/21/10	09/23/10 17:44	VH1	GC-1	49.505	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	61.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 11:19	cc1	GC-7	0.990	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00091	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00083	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00098	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0099	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0099	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 11:29	ADC	MS-V2	0.994	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**45**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	73.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 17:55	MWB	GC-2	0.984	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-11 | **Client Sample Name:** HECA, GP-19-0.5, 9/21/2010 2:59:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**95**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.52**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**33**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.039**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.60**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**41**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**180**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:46	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:41	MEV	CETAC1	0.992	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	24.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	44.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 15:44	VH1	GC-1	0.984	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	53.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 11:41	cc1	GC-7	0.993	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0034**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00093	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00079	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0093	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	**0.0014**	**mg/kg**	**0.0046**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0093	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013212-12	**Client Sample Name:**	HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 07:38	ADC	MS-V2	0.930	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	73.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 16:01	MWB	GC-2	0.997	BTI1417

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-12 | **Client Sample Name:** HECA, GP-19-2, 9/21/2010 3:03:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.91**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**24**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.031**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**77**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:47	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:43	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.016**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A01**	2
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0093**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDE	**0.16**	**mg/kg**	**0.050**	**0.0045**	**EPA-8081**	**ND**	**A01**	3
4,4'-DDT	**0.013**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	2
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	**0.0048**	**mg/kg**	**0.00050**	**0.000066**	**EPA-8081**	**ND**		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0032**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**	**V11**	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	40.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	55.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	87.1	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	57.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	58.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/22/10 16:20	VH1	GC-1	0.987	BTI1413
2	EPA-8081	09/21/10	09/23/10 18:02	VH1	GC-1	4.934	BTI1413
3	EPA-8081	09/21/10	09/23/10 18:20	VH1	GC-1	98.684	BTI1413

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	47.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 12:26	cc1	GC-7	0.984	BTI1411

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0031**	**mg/kg**	**0.0047**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00087	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00060	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00095	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00077	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00077	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0095	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	**0.0011**	**mg/kg**	**0.0047**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00073	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0095	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/21/10	09/22/10 11:04	ADC	MS-V2	0.946	BTI1169

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**120**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	76.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/21/10	09/23/10 19:03	MWB	GC-2	0.984	BTI1417

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013212-14 | **Client Sample Name:** HECA, Dup-5, 9/21/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.048**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**140**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:26	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:45	MEV	CETAC1	0.919	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-15 | **Client Sample Name:** HECA, QCTB-1, 9/21/2010 12:00:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 15:18	MGC	MS-V5	1	BTI1371

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.5	%	86 - 115 (LCL - UCL)		EPA-8260			1

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013212-16 | **Client Sample Name:** HECA, QCTB-2, 9/21/2010 12:00:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 15:47	MGC	MS-V5	1	BTI1371

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1220 Avenida Acaso
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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1413						
Aldrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1413-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1413-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1413-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1413-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1413-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1413-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1413-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1413-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1413-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1413-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1413-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1413-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1413-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1413-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1413-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1413-BLK1	67.6	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1413-BLK1	108	%	26 - 151 (LCL - UCL)		

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1220 Avenida Acaso
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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1413										
Aldrin	BTI1413-BS1	LCS	0.0049718	0.0049834	mg/kg	99.8		60 - 124		
gamma-BHC (Lindane)	BTI1413-BS1	LCS	0.0049150	0.0049834	mg/kg	98.6		46 - 107		
4,4'-DDT	BTI1413-BS1	LCS	0.0052070	0.0049834	mg/kg	104		40 - 148		
Dieldrin	BTI1413-BS1	LCS	0.0051877	0.0049834	mg/kg	104		56 - 130		
Endrin	BTI1413-BS1	LCS	0.0055179	0.0049834	mg/kg	111		61 - 131		
Heptachlor	BTI1413-BS1	LCS	0.0048615	0.0049834	mg/kg	97.6		58 - 130		
TCMX (Surrogate)	BTI1413-BS1	LCS	0.0066312	0.0099668	mg/kg	66.5		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1413-BS1	LCS	0.024854	0.024917	mg/kg	99.7		26 - 151		

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1413	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
Aldrin	MS	1013212-03	ND	0.0038330	0.0050000	mg/kg		76.7		63 - 119	
	MSD	1013212-03	ND	0.0038449	0.0049505	mg/kg	1.3	77.7	20	63 - 119	
gamma-BHC (Lindane)	MS	1013212-03	ND	0.0043233	0.0050000	mg/kg		86.5		47 - 102	
	MSD	1013212-03	ND	0.0043927	0.0049505	mg/kg	2.6	88.7	30	47 - 102	
4,4'-DDT	MS	1013212-03	ND	0.0036707	0.0050000	mg/kg		73.4		32 - 158	
	MSD	1013212-03	ND	0.0038347	0.0049505	mg/kg	5.4	77.5	30	32 - 158	
Dieldrin	MS	1013212-03	ND	0.0042330	0.0050000	mg/kg		84.7		57 - 125	
	MSD	1013212-03	ND	0.0043142	0.0049505	mg/kg	2.9	87.1	20	57 - 125	
Endrin	MS	1013212-03	ND	0.0041837	0.0050000	mg/kg		83.7		61 - 130	
	MSD	1013212-03	ND	0.0047059	0.0049505	mg/kg	12.7	95.1	27	61 - 130	
Heptachlor	MS	1013212-03	ND	0.0038280	0.0050000	mg/kg		76.6		52 - 139	
	MSD	1013212-03	ND	0.0039142	0.0049505	mg/kg	3.2	79.1	30	52 - 139	
TCMX (Surrogate)	MS	1013212-03	ND	0.0056543	0.010000	mg/kg		56.5		12 - 168	
	MSD	1013212-03	ND	0.0055782	0.0099010	mg/kg		56.3		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013212-03	ND	0.020107	0.025000	mg/kg		80.4		26 - 151	
	MSD	1013212-03	ND	0.019425	0.024752	mg/kg		78.5		26 - 151	

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Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1411						
Azinphos methyl	BTI1411-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1411-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1411-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1411-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1411-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1411-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1411-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1411-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1411-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1411-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1411-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1411-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1411-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1411-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1411-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1411-BLK1	104	%	9 - 105 (LCL - UCL)		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1411										
Bolstar	BTI1411-BS1	LCS	0.032616	0.026490	mg/kg	123		9 - 146		
Chlorpyrifos	BTI1411-BS1	LCS	0.023344	0.026490	mg/kg	88.1		68 - 151		
Diazinon	BTI1411-BS1	LCS	0.022020	0.026490	mg/kg	83.1		38 - 105		
Methyl parathion	BTI1411-BS1	LCS	0.024834	0.026490	mg/kg	93.7		70 - 130		
Mevinphos	BTI1411-BS1	LCS	0.017550	0.026490	mg/kg	66.2		48 - 135		
Ronnel (Fenchlorphos)	BTI1411-BS1	LCS	0.022848	0.026490	mg/kg	86.2		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1411-BS1	LCS	0.021026	0.026490	mg/kg	79.4		66 - 164		
Triphenylphosphate (Surrogate)	BTI1411-BS1	LCS	0.084934	0.082781	mg/kg	103		9 - 105		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1411	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
Bolstar	MS	1013212-03	ND	0.028239	0.026578	mg/kg		106		1 - 167	
	MSD	1013212-03	ND	0.026656	0.026490	mg/kg	5.4	101	30	1 - 167	
Chlorpyrifos	MS	1013212-03	ND	0.019767	0.026578	mg/kg		74.4		41 - 167	
	MSD	1013212-03	ND	0.018212	0.026490	mg/kg	7.9	68.7	20	41 - 167	
Diazinon	MS	1013212-03	ND	0.021429	0.026578	mg/kg		80.6		31 - 97	
	MSD	1013212-03	ND	0.019702	0.026490	mg/kg	8.1	74.4	30	31 - 97	
Methyl parathion	MS	1013212-03	ND	0.020598	0.026578	mg/kg		77.5		41 - 159	
	MSD	1013212-03	ND	0.021026	0.026490	mg/kg	2.4	79.4	20	41 - 159	
Mevinphos	MS	1013212-03	ND	0.020930	0.026578	mg/kg		78.7		35 - 136	
	MSD	1013212-03	ND	0.020530	0.026490	mg/kg	1.6	77.5	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013212-03	ND	0.018605	0.026578	mg/kg		70.0		34 - 143	
	MSD	1013212-03	ND	0.018543	0.026490	mg/kg	0.0	70.0	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013212-03	ND	0.021096	0.026578	mg/kg		79.4		7 - 209	
	MSD	1013212-03	ND	0.020861	0.026490	mg/kg	0.8	78.8	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013212-03	ND	0.077741	0.083056	mg/kg		93.6		9 - 105	
	MSD	1013212-03	ND	0.080132	0.082781	mg/kg		96.8		9 - 105	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1371						
Benzene	BTI1371-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1371-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1371-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1371-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1371-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1371-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1371-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1371-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1371-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.14	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1371						
trans-1,3-Dichloropropene	BTI1371-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1371-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1371-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1371-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1371-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1371-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1371-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1371-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1371-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1371-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1371-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1371-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1371-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1371-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1371-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1371-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1371-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1371-BLK1	107	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1371-BLK1	100	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1371-BLK1	96.0	%	86 - 115 (LCL - UCL)		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1371										
Benzene	BTI1371-BS1	LCS	23.990	25.000	ug/L	96.0		70 - 130		
Bromodichloromethane	BTI1371-BS1	LCS	26.600	25.000	ug/L	106		70 - 130		
Chlorobenzene	BTI1371-BS1	LCS	24.920	25.000	ug/L	99.7		70 - 130		
Chloroethane	BTI1371-BS1	LCS	25.270	25.000	ug/L	101		70 - 130		
1,4-Dichlorobenzene	BTI1371-BS1	LCS	26.870	25.000	ug/L	107		70 - 130		
1,1-Dichloroethane	BTI1371-BS1	LCS	24.990	25.000	ug/L	100		70 - 130		
1,1-Dichloroethene	BTI1371-BS1	LCS	25.550	25.000	ug/L	102		70 - 130		
Toluene	BTI1371-BS1	LCS	25.310	25.000	ug/L	101		70 - 130		
Trichloroethene	BTI1371-BS1	LCS	27.410	25.000	ug/L	110		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1371-BS1	LCS	9.8700	10.000	ug/L	98.7		76 - 114		
Toluene-d8 (Surrogate)	BTI1371-BS1	LCS	9.7900	10.000	ug/L	97.9		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1371-BS1	LCS	9.5200	10.000	ug/L	95.2		86 - 115		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1371	Used client sample: N										
Benzene	MS	1013101-01	ND	23.750	25.000	ug/L		95.0		70 - 130	
	MSD	1013101-01	ND	24.190	25.000	ug/L	1.8	96.8	20	70 - 130	
Bromodichloromethane	MS	1013101-01	ND	27.400	25.000	ug/L		110		70 - 130	
	MSD	1013101-01	ND	27.650	25.000	ug/L	0.9	111	20	70 - 130	
Chlorobenzene	MS	1013101-01	ND	27.540	25.000	ug/L		110		70 - 130	
	MSD	1013101-01	ND	26.490	25.000	ug/L	3.9	106	20	70 - 130	
Chloroethane	MS	1013101-01	ND	24.120	25.000	ug/L		96.5		70 - 130	
	MSD	1013101-01	ND	24.970	25.000	ug/L	3.5	99.9	20	70 - 130	
1,4-Dichlorobenzene	MS	1013101-01	ND	29.810	25.000	ug/L		119		70 - 130	
	MSD	1013101-01	ND	28.570	25.000	ug/L	4.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1013101-01	ND	24.810	25.000	ug/L		99.2		70 - 130	
	MSD	1013101-01	ND	25.260	25.000	ug/L	1.8	101	20	70 - 130	
1,1-Dichloroethene	MS	1013101-01	ND	25.110	25.000	ug/L		100		70 - 130	
	MSD	1013101-01	ND	25.470	25.000	ug/L	1.4	102	20	70 - 130	
Toluene	MS	1013101-01	ND	25.820	25.000	ug/L		103		70 - 130	
	MSD	1013101-01	ND	25.490	25.000	ug/L	1.3	102	20	70 - 130	
Trichloroethene	MS	1013101-01	ND	26.440	25.000	ug/L		106		70 - 130	
	MSD	1013101-01	ND	26.330	25.000	ug/L	0.4	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013101-01	ND	10.020	10.000	ug/L		100		76 - 114	
	MSD	1013101-01	ND	10.070	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	MS	1013101-01	ND	9.8300	10.000	ug/L		98.3		88 - 110	
	MSD	1013101-01	ND	9.8900	10.000	ug/L		98.9		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013101-01	ND	10.480	10.000	ug/L		105		86 - 115	
	MSD	1013101-01	ND	10.070	10.000	ug/L		101		86 - 115	

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
Benzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1169-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
trans-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1169-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1169-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1169-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1169-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1169-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1169-BLK1	93.9	%	74 - 121 (LCL - UCL)		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1169										
Benzene	BTI1169-BS1	LCS	0.14203	0.12500	mg/kg	114		70 - 130		
Bromodichloromethane	BTI1169-BS1	LCS	0.13725	0.12500	mg/kg	110		70 - 130		
Chlorobenzene	BTI1169-BS1	LCS	0.14710	0.12500	mg/kg	118		70 - 130		
Chloroethane	BTI1169-BS1	LCS	0.13854	0.12500	mg/kg	111		70 - 130		
1,4-Dichlorobenzene	BTI1169-BS1	LCS	0.15338	0.12500	mg/kg	123		70 - 130		
1,1-Dichloroethane	BTI1169-BS1	LCS	0.13780	0.12500	mg/kg	110		70 - 130		
1,1-Dichloroethene	BTI1169-BS1	LCS	0.13756	0.12500	mg/kg	110		70 - 130		
Toluene	BTI1169-BS1	LCS	0.14072	0.12500	mg/kg	113		70 - 130		
Trichloroethene	BTI1169-BS1	LCS	0.14587	0.12500	mg/kg	117		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BS1	LCS	0.048797	0.050000	mg/kg	97.6		70 - 121		
Toluene-d8 (Surrogate)	BTI1169-BS1	LCS	0.049922	0.050000	mg/kg	99.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1169-BS1	LCS	0.050451	0.050000	mg/kg	101		74 - 121		

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1169	Used client sample: N										
Benzene	MS	1011454-82	ND	0.14460	0.12500	mg/kg		116		70 - 130	
	MSD	1011454-82	ND	0.13682	0.12500	mg/kg	5.5	109	20	70 - 130	
Bromodichloromethane	MS	1011454-82	ND	0.13951	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13585	0.12500	mg/kg	2.7	109	20	70 - 130	
Chlorobenzene	MS	1011454-82	ND	0.14044	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.14015	0.12500	mg/kg	0.2	112	20	70 - 130	
Chloroethane	MS	1011454-82	ND	0.14011	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13496	0.12500	mg/kg	3.7	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-82	ND	0.14943	0.12500	mg/kg		120		70 - 130	
	MSD	1011454-82	ND	0.14604	0.12500	mg/kg	2.3	117	20	70 - 130	
1,1-Dichloroethane	MS	1011454-82	ND	0.14196	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13656	0.12500	mg/kg	3.9	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-82	ND	0.14217	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13518	0.12500	mg/kg	5.0	108	20	70 - 130	
Toluene	MS	1011454-82	ND	0.14173	0.12500	mg/kg		113		70 - 130	
	MSD	1011454-82	ND	0.14008	0.12500	mg/kg	1.2	112	20	70 - 130	
Trichloroethene	MS	1011454-82	ND	0.14875	0.12500	mg/kg		119		70 - 130	
	MSD	1011454-82	ND	0.14228	0.12500	mg/kg	4.4	114	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-82	ND	0.051334	0.050000	mg/kg		103		70 - 121	
	MSD	1011454-82	ND	0.050523	0.050000	mg/kg		101		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-82	ND	0.050309	0.050000	mg/kg		101		81 - 117	
	MSD	1011454-82	ND	0.049980	0.050000	mg/kg		100		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-82	ND	0.051623	0.050000	mg/kg		103		74 - 121	
	MSD	1011454-82	ND	0.049722	0.050000	mg/kg		99.4		74 - 121	

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Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1417						
TPH - Light Naptha	BTI1417-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1417-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1417-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1417-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1417-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1417-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1417-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1417-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1417-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1417-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1417-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1417-BLK1	72.8	%	20 - 145 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1417										
TPH - Diesel (FFP)	BTI1417-BS1	LCS	78.660	82.508	mg/kg	95.3		64 - 124		
Tetracosane (Surrogate)	BTI1417-BS1	LCS	2.6483	3.3003	mg/kg	80.2		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1417	Used client sample: Y - Description: GP-13-5, 09/21/2010 12:52										
TPH - Diesel (FFP)	MS	1013212-03	ND	74.681	82.237	mg/kg		90.8		52 - 131	
	MSD	1013212-03	ND	73.166	82.237	mg/kg	2.0	89.0	30	52 - 131	
Tetracosane (Surrogate)	MS	1013212-03	ND	2.5079	3.2895	mg/kg		76.2		20 - 145	
	MSD	1013212-03	ND	2.3423	3.2895	mg/kg		71.2		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1379						
Mercury	BTI1379-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1412						
Antimony	BTI1412-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1412-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1412-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1412-BLK1	0.079046	mg/kg	0.50	0.050	J
Chromium	BTI1412-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1412-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1412-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1412-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1412-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1412-BLK1	0.95934	mg/kg	2.5	0.25	J

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1379										
Mercury	BTI1379-BS1	LCS	1.3420	1.5000	mg/kg	89.5		75 - 125		
QC Batch ID: BTI1412										
Antimony	BTI1412-BS1	LCS	94.237	100.00	mg/kg	94.2		75 - 125		
Arsenic	BTI1412-BS1	LCS	9.5229	10.000	mg/kg	95.2		75 - 125		
Barium	BTI1412-BS1	LCS	98.941	100.00	mg/kg	98.9		75 - 125		
Beryllium	BTI1412-BS1	LCS	10.378	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1412-BS1	LCS	9.7953	10.000	mg/kg	98.0		75 - 125		
Chromium	BTI1412-BS1	LCS	99.075	100.00	mg/kg	99.1		75 - 125		
Cobalt	BTI1412-BS1	LCS	99.548	100.00	mg/kg	99.5		75 - 125		
Copper	BTI1412-BS1	LCS	101.34	100.00	mg/kg	101		75 - 125		
Lead	BTI1412-BS1	LCS	102.21	100.00	mg/kg	102		75 - 125		
Molybdenum	BTI1412-BS1	LCS	98.538	100.00	mg/kg	98.5		75 - 125		
Nickel	BTI1412-BS1	LCS	99.866	100.00	mg/kg	99.9		75 - 125		
Selenium	BTI1412-BS1	LCS	9.4134	10.000	mg/kg	94.1		75 - 125		
Silver	BTI1412-BS1	LCS	9.2611	10.000	mg/kg	92.6		75 - 125		
Thallium	BTI1412-BS1	LCS	104.12	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1412-BS1	LCS	105.07	100.00	mg/kg	105		75 - 125		
Zinc	BTI1412-BS1	LCS	99.186	100.00	mg/kg	99.2		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1379	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Mercury	DUP	1013212-01	0.031094	0.031250		mg/kg	0.5		20		J
	MS	1013212-01	0.031094	0.72703	0.78125	mg/kg		89.1		85 - 115	
	MSD	1013212-01	0.031094	0.72125	0.78125	mg/kg	0.8	88.3	20	85 - 115	
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Antimony	DUP	1013212-01	0.81676	ND		mg/kg			20		
	MS	1013212-01	0.81676	29.001	100.00	mg/kg		28.2		16 - 119	
	MSD	1013212-01	0.81676	28.957	100.00	mg/kg	0.2	28.1	20	16 - 119	
Arsenic	DUP	1013212-01	11.200	11.134		mg/kg	0.6		20		
	MS	1013212-01	11.200	19.657	10.000	mg/kg		84.6		75 - 125	
	MSD	1013212-01	11.200	20.323	10.000	mg/kg	7.6	91.2	20	75 - 125	
Barium	DUP	1013212-01	146.87	147.61		mg/kg	0.5		20		
	MS	1013212-01	146.87	239.21	100.00	mg/kg		92.3		75 - 125	
	MSD	1013212-01	146.87	244.88	100.00	mg/kg	6.0	98.0	20	75 - 125	
Beryllium	DUP	1013212-01	0.77486	0.79216		mg/kg	2.2		20		
	MS	1013212-01	0.77486	10.078	10.000	mg/kg		93.0		75 - 125	
	MSD	1013212-01	0.77486	10.290	10.000	mg/kg	2.3	95.2	20	75 - 125	
Cadmium	DUP	1013212-01	0.56673	0.54612		mg/kg	3.7		20		
	MS	1013212-01	0.56673	9.4837	10.000	mg/kg		89.2		75 - 125	
	MSD	1013212-01	0.56673	9.6619	10.000	mg/kg	2.0	91.0	20	75 - 125	
Chromium	DUP	1013212-01	17.680	17.233		mg/kg	2.6		20		
	MS	1013212-01	17.680	106.51	100.00	mg/kg		88.8		75 - 125	
	MSD	1013212-01	17.680	109.10	100.00	mg/kg	2.9	91.4	20	75 - 125	
Cobalt	DUP	1013212-01	6.4146	6.3434		mg/kg	1.1		20		
	MS	1013212-01	6.4146	93.334	100.00	mg/kg		86.9		75 - 125	
	MSD	1013212-01	6.4146	95.258	100.00	mg/kg	2.2	88.8	20	75 - 125	
Copper	DUP	1013212-01	20.070	20.145		mg/kg	0.4		20		
	MS	1013212-01	20.070	110.52	100.00	mg/kg		90.5		75 - 125	
	MSD	1013212-01	20.070	113.37	100.00	mg/kg	3.1	93.3	20	75 - 125	
Lead	DUP	1013212-01	7.6494	7.7199		mg/kg	0.9		20		
	MS	1013212-01	7.6494	94.476	100.00	mg/kg		86.8		75 - 125	
	MSD	1013212-01	7.6494	96.831	100.00	mg/kg	2.7	89.2	20	75 - 125	
Molybdenum	DUP	1013212-01	10.637	10.275		mg/kg	3.5		20		
	MS	1013212-01	10.637	89.423	100.00	mg/kg		78.8		75 - 125	
	MSD	1013212-01	10.637	91.182	100.00	mg/kg	2.2	80.5	20	75 - 125	
Nickel	DUP	1013212-01	16.698	16.297		mg/kg	2.4		20		
	MS	1013212-01	16.698	103.79	100.00	mg/kg		87.1		75 - 125	
	MSD	1013212-01	16.698	105.71	100.00	mg/kg	2.2	89.0	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Selenium	DUP	1013212-01	0.79020	0.76520		mg/kg	3.2		20		J
	MS	1013212-01	0.79020	8.7312	10.000	mg/kg		79.4		75 - 125	
	MSD	1013212-01	0.79020	9.8354	10.000	mg/kg	13.0	90.5	20	75 - 125	
Silver	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	8.3152	10.000	mg/kg		83.2		75 - 125	
	MSD	1013212-01	ND	8.5502	10.000	mg/kg	2.8	85.5	20	75 - 125	
Thallium	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	87.016	100.00	mg/kg		87.0		75 - 125	
	MSD	1013212-01	ND	89.474	100.00	mg/kg	2.8	89.5	20	75 - 125	
Vanadium	DUP	1013212-01	49.149	49.770		mg/kg	1.3		20		
	MS	1013212-01	49.149	145.36	100.00	mg/kg		96.2		75 - 125	
	MSD	1013212-01	49.149	148.62	100.00	mg/kg	3.3	99.5	20	75 - 125	
Zinc	DUP	1013212-01	61.480	62.481		mg/kg	1.6		20		
	MS	1013212-01	61.480	149.56	100.00	mg/kg		88.1		75 - 125	
	MSD	1013212-01	61.480	151.92	100.00	mg/kg	2.6	90.4	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/24/2010 15:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A17	Surrogate not reportable due to sample dilution.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Chromatogram not typical of mineral oil.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 11/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013213
Invoice ID: B087410

Enclosed are the results of analyses for samples received by the laboratory on 9/21/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013213 Page 1 of 4

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Tom Shank
Employer: AECOM
Signature: Tom Shank

Sample ID	Date	Time	Unpreserved Jar (16 or 32 oz)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SC-1-A	9-21-10	12:20	1											1		X	X		X					S	Composite Sample
SC-1-B	9-21-10	12:22	1											1		X	X		X					S	SC-1 A to E
SC-1-C	9-21-10	12:24	1											1		X	X		X					S	prior to comp
SC-1-D	9-21-10	12:28	1											1		X	X		X					S	
SC-1-E	9-21-10	12:30	1											1		X	X		X					S	
SC-5-A	9-21-10	12:58	1											1		X	X		X					S	Composite Sample
SC-5-B	9-21-10	13:00	1											1		X	X		X					S	SC-5 A to E
SC-5-C	9-21-10	13:02	1											1		X	X		X					S	prior to comp
SC-5-D	9-21-10	13:04	1											1		X	X		X					S	
SC-5-E	9-21-10	13:06	1											1		X	X		X					S	

CHK BY DISTRIBUTION
SUB-OUT ☐

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Tom Shank	Tom Shank/AECOM	9-21-10 17:15	Dan Keller	BC Labs 9-21-10 1715

Lab No. 10-13213

Page 1 of 3

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No
Custody Seal(s) Intact? Yes No N/A
Sample(s) Intact? Yes No
Temperature °C
☐ Cooler Blank

Lab Notes

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Chain of Custody and Cooler Receipt Form for 1013213 Page 2 of 4

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour Rush *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
Slate EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Tom Shaw
Employer: AECOM
Signature: Tom Shaw

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix: DW = Drinking Water, WW = Wastewater, GW = Groundwater, S = Soil, SG = Sludge, L = Liquid, M = Miscellaneous	Notes
SC-2-A	9-21-10	14:36	1											1	X	X								S	Composite Sample
SC-2-B	9-21-10	14:38	1											1		X	X							S	SC-2 A to E
SC-2-C	9-21-10	14:40	1											1		X	X							S	Prior To analysis
SC-2-D	9-21-10	14:42	1											1		X	X							S	SC-2-A - do not composite analyze for Arsenic only
SC-2-E	9-21-10	14:44	1											1		X	X							S	
DUPE-6-A	9-21-10		1											1		X	X							S	Composite SC-2-B through 2E
Dupe-6-B	9-21-10		1											1		X	X							S	
Dupe-6-C	9-21-10		1											1		X	X							S	
Dupe-6-D	9-21-10		1											1		X	X							S	
Dupe-6-E	9-21-10		1											1		X	X							S	See Tina for Questions

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)
Tom Shaw	Tom Shaw / AECOM	9-21-10 / 17:15	DMa Dhillon BC Lab

Lab No. ID-13213

Page 2 of 3

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No
Custody Seal(s) Intact? Yes No N/A
Sample(s) Intact? Yes No
Temperature °C
☐ Cooler Blank

Lab Notes

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Chain of Custody and Cooler Receipt Form for 1013213 Page 3 of 4

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Sampler Information

Name: Tom Shook

Employer: AECOM

Signature: Tom Shook

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar [16-or-33-oz.]	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Biotoxin)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix: DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous	Notes
SC-3-A	9-21-10	15:00	1											1	X	X	X							S	*SC-3 Composite
SC-3-B	9-21-10	15:02	1											1	X	X	X							S	Sample Aliquot
SC-3-C	9-21-10	15:04	1											1	X	X	X							S	Prior to analysis
SC-3-D	9-21-10	15:06	1											1	X	X	X							S	Composite Sample
SC-3-E	9-21-10	15:08	1											1	X	X	X							S	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Tom Shook	Tom Shook / AECOM	9-21-10 17:15	Dina Bueno	BC Labs 9-21-10 1715

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No | Temperature °C

Custody Seal(s) Intact? Yes No N/A

Sample(s) Intact? Yes No | ☐ Cooler Blank

Lab Notes

Lab No. 10-13213

Page 3 of 3

Additional Reporting Requests

Include QC Data Package: ☐ Yes ☐ No

FAX Results: ☐ Yes ☐ No

Email Results: ■ Yes ☐ No

State EDT: ☐ Yes ☐ No

(Include Source Number in Notes)

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Chain of Custody and Cooler Receipt Form for 1013213 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 1

Submission #: 10-1321.3

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☒ Other ☐ (Specify)_____
JDW 9-21-10

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☒ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: STYLV Thermometer ID: 1183

Temperature: A 25.3 °C / C 25.3 °C

Date/Time 9-21-10 1726

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS										
5 ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR			A	ABCD	ABCDE	ABCDE				
~~32 OZ.~~ JAR 402	ABCDE	ABCDE								
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:_____
Sample Numbering Completed By: JDW Date/Time: 9-21-10 1802
A = Actual / C = Corrected

[H:\DOCS\WP60\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013213-01	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 12:30
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-1-A ,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-02	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 13:06
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-5-A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-03	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:36
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-2-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-04	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 14:44
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-2-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-05	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of DupE-6 A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013213-06	**COC Number:**	---	**Receive Date:**	09/21/2010 17:15
	Project Number:	---	**Sampling Date:**	09/21/2010 15:08
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-3-A,B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-01 | **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0039**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0026**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.039**	**mg/kg**	**0.025**	**0.0022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.011**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01**	3
Dieldrin	**0.0033**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	32.8	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
TCMX (Surrogate)	23.3	%	12 - 168 (LCL - UCL)		EPA-8081		A01	3
Dibutyl chlorendate (Surrogate)	62.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	39.0	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	41.9	%	26 - 151 (LCL - UCL)		EPA-8081		A01	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 19:32	VH1	GC-1	0.993	BTI1414
2	EPA-8081	09/21/10	09/23/10 20:09	VH1	GC-1	49.669	BTI1414
3	EPA-8081	09/21/10	09/23/10 19:51	VH1	GC-1	4.967	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-01 | **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	74.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 01:26	cc1	GC-7	0.993	BTI1410

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-01 | **Client Sample Name:** HECA, Composite of SC-1-A ,B,C,D,E, 9/21/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.94**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.13**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.74**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**85**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:49	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:47	MEV	CETAC1	0.977	BTI1379

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0040**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0017**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.024**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0078**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A01**	2
Dieldrin	**0.0027**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0014**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	33.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	37.5	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	94.9	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	64.2	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 20:27	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 20:45	VH1	GC-1	19.934	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 01:48	cc1	GC-7	0.997	BTI1410

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-02 | **Client Sample Name:** HECA, Composite of SC-5-A,B,C,D,E, 9/21/2010 1:06:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**180**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.99**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.36**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.041**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.81**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**59**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**86**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 17:03	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 11:49	MEV	CETAC1	1.008	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-03 | **Client Sample Name:** HECA, SC-2-A, 9/21/2010 2:36:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:52	JRG	PE-OP2	1	BTI1412

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0054**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.00083**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.022**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0046**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00051**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	45.6	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	66.8	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	51.5	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 21:03	VH1	GC-1	0.993	BTI1414
2	EPA-8081	09/21/10	09/23/10 21:21	VH1	GC-1	9.934	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**37**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**160**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 16:33	LD1	IC2	1	BTK0311

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**200**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**120**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:19	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0447

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Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-04 | **Client Sample Name:** HECA, Composite of SC-2-B,C,D,E, 9/21/2010 2:44:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**5.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:46	JRG	PE-OP2	1	BTI1468

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Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0056**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0015**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.028**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0061**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A01**	2
Dieldrin	**0.00065**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0015**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	39.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	49.1	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	88.6	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	60.6	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 21:40	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 21:58	VH1	GC-1	19.934	BTI1414

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	**0.0037**	**mg/kg**	**0.010**	**0.00080**	**EPA-8141**	**ND**	**J**	1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 02:57	cc1	GC-7	0.997	BTI1410

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-05 | **Client Sample Name:** HECA, Composite of DupE-6 A,B,C,D,E, 9/21/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.84**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.32**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.026**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**53**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**85**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:54	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 12:00	MEV	CETAC1	1.008	BTI1379

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0026**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.0086**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.00098**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	**0.00085**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	19.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	22.7	%	12 - 168 (LCL - UCL)		EPA-8081		A01	2
Dibutyl chlorendate (Surrogate)	51.9	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.3	%	26 - 151 (LCL - UCL)		EPA-8081		A01	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/21/10	09/23/10 22:16	VH1	GC-1	0.997	BTI1414
2	EPA-8081	09/21/10	09/23/10 22:34	VH1	GC-1	4.983	BTI1414

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	64.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/21/10	09/22/10 03:19	cc1	GC-7	0.997	BTI1410

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013213-06 | **Client Sample Name:** HECA, Composite of SC-3-A,B,C,D,E, 9/21/2010 3:08:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**1.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**0.079**	**J**	1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.036**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**61**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**81**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.96**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/22/10	09/22/10 16:55	JRG	PE-OP2	1	BTI1412
2	EPA-7471A	09/22/10	09/23/10 12:02	MEV	CETAC1	1.008	BTI1379

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1414						
Aldrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1414-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1414-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1414-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1414-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1414-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1414-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1414-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1414-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1414-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1414-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1414-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1414-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1414-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1414-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1414-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1414-BLK1	71.4	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1414-BLK1	99.0	%	26 - 151 (LCL - UCL)		

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1414										
Aldrin	BTI1414-BS1	LCS	0.0054706	0.0049505	mg/kg	111		60 - 124		
gamma-BHC (Lindane)	BTI1414-BS1	LCS	0.0057323	0.0049505	mg/kg	116		46 - 107		L01
4,4'-DDT	BTI1414-BS1	LCS	0.0033779	0.0049505	mg/kg	68.2		40 - 148		
Dieldrin	BTI1414-BS1	LCS	0.0053673	0.0049505	mg/kg	108		56 - 130		
Endrin	BTI1414-BS1	LCS	0.0057673	0.0049505	mg/kg	116		61 - 131		
Heptachlor	BTI1414-BS1	LCS	0.0051304	0.0049505	mg/kg	104		58 - 130		
TCMX (Surrogate)	BTI1414-BS1	LCS	0.0073234	0.0099010	mg/kg	74.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1414-BS1	LCS	0.025835	0.024752	mg/kg	104		26 - 151		

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1414	Used client sample: N										
Aldrin	MS	1011454-51	ND	0.0052155	0.0049342	mg/kg		106		63 - 119	
	MSD	1011454-51	ND	0.0055103	0.0050000	mg/kg	4.2	110	20	63 - 119	
gamma-BHC (Lindane)	MS	1011454-51	ND	0.0053914	0.0049342	mg/kg		109		47 - 102	Q03
	MSD	1011454-51	ND	0.0056427	0.0050000	mg/kg	3.2	113	30	47 - 102	Q03
4,4'-DDT	MS	1011454-51	ND	0.0033612	0.0049342	mg/kg		68.1		32 - 158	
	MSD	1011454-51	ND	0.0035337	0.0050000	mg/kg	3.7	70.7	30	32 - 158	
Dieldrin	MS	1011454-51	ND	0.0052395	0.0049342	mg/kg		106		57 - 125	
	MSD	1011454-51	ND	0.0055557	0.0050000	mg/kg	4.5	111	20	57 - 125	
Endrin	MS	1011454-51	ND	0.0055990	0.0049342	mg/kg		113		61 - 130	
	MSD	1011454-51	ND	0.0058713	0.0050000	mg/kg	3.4	117	27	61 - 130	
Heptachlor	MS	1011454-51	ND	0.0048786	0.0049342	mg/kg		98.9		52 - 139	
	MSD	1011454-51	ND	0.0051327	0.0050000	mg/kg	3.8	103	30	52 - 139	
TCMX (Surrogate)	MS	1011454-51	ND	0.0067602	0.0098684	mg/kg		68.5		12 - 168	
	MSD	1011454-51	ND	0.0068883	0.010000	mg/kg		68.9		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1011454-51	ND	0.025283	0.024671	mg/kg		102		26 - 151	
	MSD	1011454-51	ND	0.026951	0.025000	mg/kg		108		26 - 151	

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1410						
Azinphos methyl	BTI1410-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1410-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1410-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1410-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1410-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1410-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1410-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1410-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1410-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1410-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1410-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1410-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1410-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1410-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1410-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1410-BLK1	97.0	%	9 - 105 (LCL - UCL)		

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1410										
Bolstar	BTI1410-BS1	LCS	0.021452	0.026403	mg/kg	81.3		9 - 146		
Chlorpyrifos	BTI1410-BS1	LCS	0.023927	0.026403	mg/kg	90.6		68 - 151		
Diazinon	BTI1410-BS1	LCS	0.019307	0.026403	mg/kg	73.1		38 - 105		
Methyl parathion	BTI1410-BS1	LCS	0.023597	0.026403	mg/kg	89.4		70 - 130		
Mevinphos	BTI1410-BS1	LCS	0.016337	0.026403	mg/kg	61.9		48 - 135		
Ronnel (Fenchlorphos)	BTI1410-BS1	LCS	0.022937	0.026403	mg/kg	86.9		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1410-BS1	LCS	0.020957	0.026403	mg/kg	79.4		66 - 164		
Triphenylphosphate (Surrogate)	BTI1410-BS1	LCS	0.082178	0.082508	mg/kg	99.6		9 - 105		

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1410	Used client sample: N										
Bolstar	MS	1011454-50	ND	0.019435	0.026578	mg/kg		73.1		1 - 167	
	MSD	1011454-50	ND	0.026230	0.026230	mg/kg	31.0	100	30	1 - 167	Q02
Chlorpyrifos	MS	1011454-50	ND	0.020266	0.026578	mg/kg		76.2		41 - 167	
	MSD	1011454-50	ND	0.026885	0.026230	mg/kg	29.4	102	20	41 - 167	Q02
Diazinon	MS	1011454-50	ND	0.014120	0.026578	mg/kg		53.1		31 - 97	
	MSD	1011454-50	ND	0.022951	0.026230	mg/kg	48.9	87.5	30	31 - 97	Q02
Methyl parathion	MS	1011454-50	ND	0.020930	0.026578	mg/kg		78.7		41 - 159	
	MSD	1011454-50	ND	0.025902	0.026230	mg/kg	22.5	98.8	20	41 - 159	Q02
Mevinphos	MS	1011454-50	ND	0.014452	0.026578	mg/kg		54.4		35 - 136	
	MSD	1011454-50	ND	0.015738	0.026230	mg/kg	9.8	60.0	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1011454-50	ND	0.019767	0.026578	mg/kg		74.4		34 - 143	
	MSD	1011454-50	ND	0.025082	0.026230	mg/kg	25.0	95.6	20	34 - 143	Q02
Stirophos (Tetrachlorvinphos)	MS	1011454-50	ND	0.018106	0.026578	mg/kg		68.1		7 - 209	
	MSD	1011454-50	ND	0.023279	0.026230	mg/kg	26.3	88.8	26	7 - 209	Q02
Triphenylphosphate (Surrogate)	MS	1011454-50	ND	0.071595	0.083056	mg/kg		86.2		9 - 105	
	MSD	1011454-50	ND	0.091803	0.081967	mg/kg		112		9 - 105	Q03

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0311						
Chloride	BTK0311-BLK1	ND	mg/kg	5.0	0.59	
Sulfate	BTK0311-BLK1	ND	mg/kg	10	2.1	

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1220 Avenida Acaso
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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0311										
Chloride	BTK0311-BS1	LCS	103.80	100.00	mg/kg	104		90 - 110		
Sulfate	BTK0311-BS1	LCS	99.097	100.00	mg/kg	99.1		90 - 110		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0311	Used client sample: Y - Description: Composite of SC-8-B,C,D,E, 09/22/2010 10:16										
Chloride	DUP	1013288-08	22.370	22.860		mg/kg	2.2		20		
	MS	1013288-08	22.370	1083.1	1010.1	mg/kg		105		80 - 120	
	MSD	1013288-08	22.370	1080.2	1010.1	mg/kg	0.3	105	20	80 - 120	
Sulfate	DUP	1013288-08	92.940	92.130		mg/kg	0.9		20		
	MS	1013288-08	92.940	1121.4	1010.1	mg/kg		102		80 - 120	
	MSD	1013288-08	92.940	1117.5	1010.1	mg/kg	0.4	101	20	80 - 120	

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0447						
EC as NaCl (Salinity)	BTK0447-BLK1	ND	mg/L	1.0	1.0	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0111										
Electrical Conductivity @ 25 C	BTK0111-BS1	LCS	307.40	303.00	umhos/cm	101		90 - 110		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0111	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Electrical Conductivity @ 25 C	DUP	1013213-04	198.00	202.80		umhos/cm	2.4		20		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1379						
Mercury	BTI1379-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1412						
Antimony	BTI1412-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1412-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1412-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1412-BLK1	0.079046	mg/kg	0.50	0.050	J
Chromium	BTI1412-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1412-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1412-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1412-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1412-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1412-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1412-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1412-BLK1	0.95934	mg/kg	2.5	0.25	J
QC Batch ID: BTI1468						
Arsenic	BTI1468-BLK1	ND	mg/kg	1.0	0.38	

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Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1379										
Mercury	BTI1379-BS1	LCS	1.3420	1.5000	mg/kg	89.5		75 - 125		
QC Batch ID: BTI1412										
Antimony	BTI1412-BS1	LCS	94.237	100.00	mg/kg	94.2		75 - 125		
Arsenic	BTI1412-BS1	LCS	9.5229	10.000	mg/kg	95.2		75 - 125		
Barium	BTI1412-BS1	LCS	98.941	100.00	mg/kg	98.9		75 - 125		
Beryllium	BTI1412-BS1	LCS	10.378	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1412-BS1	LCS	9.7953	10.000	mg/kg	98.0		75 - 125		
Chromium	BTI1412-BS1	LCS	99.075	100.00	mg/kg	99.1		75 - 125		
Cobalt	BTI1412-BS1	LCS	99.548	100.00	mg/kg	99.5		75 - 125		
Copper	BTI1412-BS1	LCS	101.34	100.00	mg/kg	101		75 - 125		
Lead	BTI1412-BS1	LCS	102.21	100.00	mg/kg	102		75 - 125		
Molybdenum	BTI1412-BS1	LCS	98.538	100.00	mg/kg	98.5		75 - 125		
Nickel	BTI1412-BS1	LCS	99.866	100.00	mg/kg	99.9		75 - 125		
Selenium	BTI1412-BS1	LCS	9.4134	10.000	mg/kg	94.1		75 - 125		
Silver	BTI1412-BS1	LCS	9.2611	10.000	mg/kg	92.6		75 - 125		
Thallium	BTI1412-BS1	LCS	104.12	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1412-BS1	LCS	105.07	100.00	mg/kg	105		75 - 125		
Zinc	BTI1412-BS1	LCS	99.186	100.00	mg/kg	99.2		75 - 125		
QC Batch ID: BTI1468										
Arsenic	BTI1468-BS1	LCS	10.415	10.000	mg/kg	104		75 - 125		

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Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1379	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Mercury	DUP	1013212-01	0.031094	0.031250		mg/kg	0.5		20		J
	MS	1013212-01	0.031094	0.72703	0.78125	mg/kg		89.1		85 - 115	
	MSD	1013212-01	0.031094	0.72125	0.78125	mg/kg	0.8	88.3	20	85 - 115	
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Antimony	DUP	1013212-01	0.81676	ND		mg/kg			20		
	MS	1013212-01	0.81676	29.001	100.00	mg/kg		28.2		16 - 119	
	MSD	1013212-01	0.81676	28.957	100.00	mg/kg	0.2	28.1	20	16 - 119	
Arsenic	DUP	1013212-01	11.200	11.134		mg/kg	0.6		20		
	MS	1013212-01	11.200	19.657	10.000	mg/kg		84.6		75 - 125	
	MSD	1013212-01	11.200	20.323	10.000	mg/kg	7.6	91.2	20	75 - 125	
Barium	DUP	1013212-01	146.87	147.61		mg/kg	0.5		20		
	MS	1013212-01	146.87	239.21	100.00	mg/kg		92.3		75 - 125	
	MSD	1013212-01	146.87	244.88	100.00	mg/kg	6.0	98.0	20	75 - 125	
Beryllium	DUP	1013212-01	0.77486	0.79216		mg/kg	2.2		20		
	MS	1013212-01	0.77486	10.078	10.000	mg/kg		93.0		75 - 125	
	MSD	1013212-01	0.77486	10.290	10.000	mg/kg	2.3	95.2	20	75 - 125	
Cadmium	DUP	1013212-01	0.56673	0.54612		mg/kg	3.7		20		
	MS	1013212-01	0.56673	9.4837	10.000	mg/kg		89.2		75 - 125	
	MSD	1013212-01	0.56673	9.6619	10.000	mg/kg	2.0	91.0	20	75 - 125	
Chromium	DUP	1013212-01	17.680	17.233		mg/kg	2.6		20		
	MS	1013212-01	17.680	106.51	100.00	mg/kg		88.8		75 - 125	
	MSD	1013212-01	17.680	109.10	100.00	mg/kg	2.9	91.4	20	75 - 125	
Cobalt	DUP	1013212-01	6.4146	6.3434		mg/kg	1.1		20		
	MS	1013212-01	6.4146	93.334	100.00	mg/kg		86.9		75 - 125	
	MSD	1013212-01	6.4146	95.258	100.00	mg/kg	2.2	88.8	20	75 - 125	
Copper	DUP	1013212-01	20.070	20.145		mg/kg	0.4		20		
	MS	1013212-01	20.070	110.52	100.00	mg/kg		90.5		75 - 125	
	MSD	1013212-01	20.070	113.37	100.00	mg/kg	3.1	93.3	20	75 - 125	
Lead	DUP	1013212-01	7.6494	7.7199		mg/kg	0.9		20		
	MS	1013212-01	7.6494	94.476	100.00	mg/kg		86.8		75 - 125	
	MSD	1013212-01	7.6494	96.831	100.00	mg/kg	2.7	89.2	20	75 - 125	
Molybdenum	DUP	1013212-01	10.637	10.275		mg/kg	3.5		20		
	MS	1013212-01	10.637	89.423	100.00	mg/kg		78.8		75 - 125	
	MSD	1013212-01	10.637	91.182	100.00	mg/kg	2.2	80.5	20	75 - 125	
Nickel	DUP	1013212-01	16.698	16.297		mg/kg	2.4		20		
	MS	1013212-01	16.698	103.79	100.00	mg/kg		87.1		75 - 125	
	MSD	1013212-01	16.698	105.71	100.00	mg/kg	2.2	89.0	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1412	Used client sample: Y - Description: GP-13-0.5, 09/21/2010 12:23										
Selenium	DUP	1013212-01	0.79020	0.76520		mg/kg	3.2		20		J
	MS	1013212-01	0.79020	8.7312	10.000	mg/kg		79.4		75 - 125	
	MSD	1013212-01	0.79020	9.8354	10.000	mg/kg	13.0	90.5	20	75 - 125	
Silver	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	8.3152	10.000	mg/kg		83.2		75 - 125	
	MSD	1013212-01	ND	8.5502	10.000	mg/kg	2.8	85.5	20	75 - 125	
Thallium	DUP	1013212-01	ND	ND		mg/kg			20		
	MS	1013212-01	ND	87.016	100.00	mg/kg		87.0		75 - 125	
	MSD	1013212-01	ND	89.474	100.00	mg/kg	2.8	89.5	20	75 - 125	
Vanadium	DUP	1013212-01	49.149	49.770		mg/kg	1.3		20		
	MS	1013212-01	49.149	145.36	100.00	mg/kg		96.2		75 - 125	
	MSD	1013212-01	49.149	148.62	100.00	mg/kg	3.3	99.5	20	75 - 125	
Zinc	DUP	1013212-01	61.480	62.481		mg/kg	1.6		20		
	MS	1013212-01	61.480	149.56	100.00	mg/kg		88.1		75 - 125	
	MSD	1013212-01	61.480	151.92	100.00	mg/kg	2.6	90.4	20	75 - 125	
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Arsenic	DUP	1013213-04	5.5520	5.6268		mg/kg	1.3		20		
	MS	1013213-04	5.5520	15.586	10.000	mg/kg		100		75 - 125	
	MSD	1013213-04	5.5520	14.892	10.000	mg/kg	7.2	93.4	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:23
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
L01	The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S05	The sample holding time was exceeded.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 10/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013287
Invoice ID: B087506

Enclosed are the results of analyses for samples received by the laboratory on 9/22/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013287 Page 1 of 9

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine / *3-5 Day Rush / *48 Hour / *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests: Include QC Data Package: ☐ Yes ☐ No; FAX Results: ☐ Yes ☐ No; Email Results: ■ Yes ☐ No; State EDT: ☐ Yes ☐ No (Include Source Number in Notes)

Sampler Information: Name: _____ Employer: AECOM Signature: _____

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	NaZS2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix (DW = Drinking Water; WW = Wastewater; GW = Groundwater; S = Soil; SG = Sludge; L = Liquid; M = Miscellaneous)	Notes
GP-7-5	-1	4-22-10	0845	X			X						X	5	X	X	X		X					S	
GP-7-10	-2	1	0852	X			X						X	5	X	X	X		X					S	
GP-7-15	-3		0900	X			X						X	5	X	X	X		X					S	
DUP-1	-4		—	X			X						X	5	X	X	X		X					S	
GCTB-1	-5		0730		X									1	X									W	
GP-8-4	-6		0940	X			X						X	5	X	X	X		X					S	Also analyze for pH
GP-9-4	-7		1017	X			X						X	5	X	X	X		X					S	Also analyze for pH
GP-10-5	-8		1151	X			X						X	5	X	X	X		X					S	" pH
GP-10-10	-9		1204	X			X						X	5	X	X	X		X					S	" pH
GP-10-15	-10	V	1234	X			X						X	5	X	X	X		X					S	" pH

CHK BY _____ DISTRIBUTION ☐ SUB-OUT ☐

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Dawn Files / AECOM	4-22-10 1727		BC Labs 4-22-10 1830

Lab No. 1013287

Page 1 of 4

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No

Custody Seal(s) Intact? Yes No N/A

Sample(s) Intact? Yes No

Temperature: 2.0 °C ☐ Cooler Blank

Lab Notes

Chain of Custody and Cooler Receipt Form for 1013287 Page 2 of 9

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Dave Files
Employer: AECOM
Signature: Dave Files

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504AM/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
GP-17-0.5	9-22-10	1356	X				X						X	5	X	X	X	X	X					S	
GP-17-3		1354	X				X						X	5	X	X	X	X	X					S	
GP-17-5		1357	X				X						X	5	X	X	X	X	X					S	HOLD
GP-3-5		1507	X				X						X	5	X	X	X	X	X					S	
GP-3-10		1515	X				X						X	5	X	X	X	X	X					S	
GP-3-15		1525	X				X						X	5	X	X	X	X	X					S	
GP-4-5		1605	X				X						X	5	X	X	X	X	X					S	
GP-4-10		1615	X				X						X	5	X	X	X	X	X					S	
GP-4-15		1625	X				X						X	5	X	X	X	X	X					S	
EQB		1657												3	X									DW	

Relinquished By (sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
Dave Files	Dave Files / AECOM	9-22-10/1727	DMO/MCA	BC Lab 9-22-10 1830

Lab No. 10-13287

Page 2 of 4

(For Lab Use Only) Sample Integrity Upon Receipt

				Temperature	Lab Notes
Sample(s) Submitted on Ice?	Yes	No			
Custody Seal(s) Intact?	Yes	No	N/A	1.9 / 1.5 °C	
Sample(s) Intact?	Yes	No		☐ Cooler Blank	

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Chain of Custody and Cooler Receipt Form for 1013287 Page 3 of 9

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ☑ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: Dawn Files
Employer: AECOM
Signature: Dawn Files

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix: DW = Drinking Water, WW = Wastewater, GW = Groundwater, S = Soil, SG = Sludge, L = Liquid, M = Miscellaneous	Notes
GP-6-5 -21	9-22-10	1711	X				X						XX	5	X	X	X	X	X					S	
GP-6-10 -22		1715	X				X						XX	5	X	X	X	X	X					S	
GP-6-15 -23	V	1725	X				X						XX	5	X	X	X	X	X					S	

Relinquished By (sign) | Print Name / Company | Date / Time | Received By (Sign) | Print Name / Company

Dawn Files / AECOM 9-22-10 / 1727 | BC Labs 9-22-10 1830

Lab No. 10-13287

Page 3 of 4

(For Lab Use Only) Sample Integrity Upon Receipt | Lab Notes

Sample(s) Submitted on Ice? Yes No | Temperature °C

Custody Seal(s) Intact? Yes No N/A

Sample(s) Intact? Yes No | ☐ Cooler Blank

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Chain of Custody and Cooler Receipt Form for 1013287 Page 4 of 9

Chain of Custody & Sample Information Record

BC Laboratories Inc.
4100 Atlas Ct.
Bakersfield, CA 93308

Client: AECOM | Contact: Chad Roper | Phone No. 805 388 3775 xt. 219

FAX No. 805 388 3577 | Email: chad.roper@aecom.com

Project Name: Hydrogen Energy California | Turn Around Time: Routine *3-5 Day Rush *48 Hour *24 Hour Rush

Project Location: 189 E. Front Street, Buttonwillow | *Lab TAT Approval: By:

Additional Reporting Requests
Include QC Data Package: ☐ Yes ☐ No
FAX Results: ☐ Yes ☐ No
Email Results: ■ Yes ☐ No
State EDT: ☐ Yes ☐ No
(Include Source Number in Notes)

Sampler Information
Name: CALEN Cooter
Employer: AECOM
Signature:

Sample ID	Date	Time	# of Containers & Preservatives: Unpreserved Jar (16 or 32 oz.)	H2SO4	HCl	HNO3	Na2S2O3	NaOH	NaOH/ZnAcetate	NH4Cl	MCAA	MeOH	Unpreserved Vial (Moisture)	Total # of Containers	Analysis Requested: 8260 Volatile Organics	8141 OP Pesticides	8081 OC Pesticides	8015 FF	6010 Metals	504M/524SIM Fumigants	365 Phosphorous	300 Anions (nitrate, sulfate)	200.7 Potassium	Matrix	Notes
SS-4 -24	9/22/10	1400	1				2				1		1	5	X	X	X	X	X	X	X	X	X	SG	
SS-3 -25	9/22/10	1441	1				2				1		1	5	X	X	X	X	X	X	X	X	X	SG	

Relinquished By (sign) | Print Name / Company | Date / Time | Received By (Sign) | Print Name / Company

CALEN Cooter/AECOM 9/22/10 1445 | BC LABS 9-22-10 1830

Lab No. 10-13287

Page 4 of 4

(For Lab Use Only) Sample Integrity Upon Receipt

Sample(s) Submitted on Ice? Yes No
Custody Seal(s) Intact? Yes No N/A
Sample(s) Intact? Yes No
Temperature °C
☐ Cooler Blank

Lab Notes

Chain of Custody and Cooler Receipt Form for 1013287 Page 5 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 5

Submission #: 1013287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☒ Comments: JWJ 9-22-10

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 103

Temperature: A 2.9 °C / C 2.9 °C

Date/Time: 9-22-10 1835

Analyst Init: JWJ

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK					A1					
40ml VOA VIAL	AH	AH	AH	AH		ATH	ATH	ATH	ATH	ATH
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JWJ Date/Time: 9/22/10 1910

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013287 Page 6 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 5

Submission #: 10-13287

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JNW 9/22/10

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: soil sleeve Thermometer ID: 1103

Temperature: A 2.3 °C / C 2.3 °C

Date/Time 9-22-10 1835

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE ☒	B	B	B	B		B	B	B	B	B
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013287 Page 7 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 of 5

Submission #: 1013287

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☒
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☒ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☒ Intact? Yes ☒ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JNW 9/22/10

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒YES ☐NO

Emissivity: 0.98 Container: VOA Thermometer ID: 103

Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-22-10 1835

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 11	12	13	14	15	16	17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AH	AH	AH	AH	AH				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/3080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013287 Page 8 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 4 Of 5

Submission #: 10-13287

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JDW 9/22/10

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Soil Sleeve Thermometer ID: 103

Temperature: A 2.3 °C / C 2.3 °C

Date/Time: 9-22-10 1835

Analyst Init: JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 11	12	13	14	15	16	17	18	19	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE R	B	B	B	B	B	B	B	B	B	
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JDW Date/Time: 9/22/10 1910

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013287 Page 9 of 9

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 5 of 5

Submission #: 1013287

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☒ Comments: JNW 9/22/10

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: IR3

Temperature: A 5.7 °C / C 5.7 °C

Date/Time: 9-22-10 1835

Analyst Init: JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25		17	18	19	20
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
1oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A/H	A/H	A/H	A/H	A/H		A/H	A/H	A/H	A/H
QT EPA 413.1, 413.2, 418.1										*
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER			JNW 9/22/10							
8 OZ. JAR			B *	B	B					*
32 OZ. JAR										
SOIL SLEEVE	B	B	B							B
PCB VIAL										
PLASTIC BAG										
FE BROWN IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JNW Date/Time: 9/22/10 1910

A = Actual / C = Corrected

[H:\DOCS\WP70\LAB_DOCS\FORMS\SAMPREC.WPD]

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-01	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:45
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-02	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:52
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-03	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-7-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-04	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-1	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-05	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	QCTB-1	**Sample Matrix:**	Water
	Sampled By:	---		
1013287-06	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:40
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-8-4	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-07	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:17
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-9-4	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-08	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 11:51
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-09	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 12:04
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-10	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 12:34
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-10-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-11	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:50
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-0.5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-12	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:54
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-2	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-13	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:57
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-17-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013287-14	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:07
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-15	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-16	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 15:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-3-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-17	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:05
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-18	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-19	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-4-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-20	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	EQB	**Sample Matrix:**	Water
	Sampled By:	---		
1013287-21	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:11
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-5	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013287-22	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:15
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-10	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-23	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 17:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	GP-6-15	**Sample Matrix:**	Solids
	Sampled By:	Dana Files		
1013287-24	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 14:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-4	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013287-25	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 13:44
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-3	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10,V11	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	49.6	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	65.3	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:04	VH1	GC-1	1.987	BTI1454

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:05	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0056	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0056	0.00095	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0056	0.00071	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0056	0.00096	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0027	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0056	0.00056	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0056	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0056	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0056	0.00087	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0038	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0056	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 23:25	ADC	MS-V2	1.130	BTI1169

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	83.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 21:20	MWB	GC-2	0.987	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-01 | **Client Sample Name:** HECA, GP-7-5, 9/22/2010 8:45:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**1.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.020**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.10**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**76**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:55	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:23	MEV	CETAC1	0.977	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	32.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	51.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:22	VH1	GC-1	0.990	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	51.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:28	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0040	0.00073	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0040	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0040	0.00050	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0040	0.00078	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0040	0.00079	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0040	0.00067	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0079	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0040	0.00040	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0040	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0040	0.00061	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0079	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	100	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-02	**Client Sample Name:**	HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/22/10 23:51	ADC	MS-V2	0.790	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	73.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 22:50	MWB	GC-2	1	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-02 | **Client Sample Name:** HECA, GP-7-10, 9/22/2010 8:52:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**13**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.67**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.11**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**0.86**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**59**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:01	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:25	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	81.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:40	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	75.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 08:50	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00078	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00085	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00072	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0085	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0085	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-03	**Client Sample Name:**	HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 00:17	ADC	MS-V2	0.850	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	72.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:13	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-03 | **Client Sample Name:** HECA, GP-7-15, 9/22/2010 9:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**25**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**230**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**16**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**15**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**9.1**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.55**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**51**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:24	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:27	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	84.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 16:58	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:13	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00081	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00071	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00071	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0088	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00068	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00097	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0088	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-04	**Client Sample Name:**	HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 00:43	ADC	MS-V2	0.880	BTI1169

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:36	MWB	GC-2	0.984	BTI1480

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-04 | **Client Sample Name:** HECA, Dup-1, 9/22/2010 12:00:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**22**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**100**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.52**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.31**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**10**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**12**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**7.2**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.16**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**49**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:04	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:12	MEV	CETAC1	0.962	BTI1493

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.6	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.1	%	86 - 115 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-05 | **Client Sample Name:** HECA, QCTB-1, 9/22/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:44	MGC	MS-V5	1	BTI1372

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0028**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND	V11	1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	23.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	34.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 17:16	VH1	GC-1	0.997	BTI1454

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	57.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:36	cc1	GC-7	0.993	BTI1484

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	**0.0035**	**mg/kg**	**0.0053**	**0.0016**	**EPA-8260**	**ND**	**J**	1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	**0.010**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	90.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	103	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.58**	**mg/kg**	**0.021**	**0.013**	**EPA-8260**			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Butanal	**0.040**	**mg/kg**			**EPA-8260**			1
TIC: Methanethiol	**0.74**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 12:20	ADC	MS-V2	1.060	BTI1169

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**51**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**22**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J,Z1**	1
Tetracosane (Surrogate)	47.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:48	MWB	GC-2	0.993	BTI1480

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**7.87**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.9**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**9100**	**mg/kg**	**50**	**10**	**EPA-300.0**	**ND**	**A01**	2
Nitrate as N	**210**	**mg/kg**	**2.0**	**0.52**	**EPA-300.0**	**ND**	**A01**	3
Total Phosphorus	**7000**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 17:48	LD1	IC5	5	BTI1491
3	EPA-300.0	09/23/10	09/24/10 14:26	LD1	IC5	2	BTI1491
4	EPA-365.4	09/23/10	09/24/10 11:44	CDR	SC-1	20	BTI1464

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-06 | **Client Sample Name:** HECA, GP-8-4, 9/22/2010 9:40:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**6.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**100**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**2.6**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**24**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**27**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.013**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**250**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**6600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:06	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:34	MEV	CETAC1	1.008	BTI1493

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081	ND	A10,V11	1
4,4'-DDE	**0.037**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081	ND	A10	1
TCMX (Surrogate)	48.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	38.6	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:08	VH1	GC-1	10	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	40.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 09:59	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0026**	**mg/kg**	**0.0047**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	**0.0025**	**mg/kg**	**0.0047**	**0.0011**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	135	%	70 - 121 (LCL - UCL)		EPA-8260		A19,S09	1
Toluene-d8 (Surrogate)	89.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	82.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 11:54	ADC	MS-V2	0.940	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**50**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**68**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	38.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 07:11	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.33**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**23.3**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**32000**	**mg/kg**	**100**	**21**	**EPA-300.0**	**ND**	**A01**	2
Nitrate as N	**4.0**	**mg/kg**	**10**	**2.6**	**EPA-300.0**	**ND**	**J,A01**	2
Total Phosphorus	**6800**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 14:41	LD1	IC5	10	BTI1491
3	EPA-365.4	09/23/10	09/24/10 11:44	CDR	SC-1	20	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-07 | **Client Sample Name:** HECA, GP-9-4, 9/22/2010 10:17:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**58**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**3.0**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**49**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.032**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.58**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	**0.17**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**150**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**6300**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:26	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:36	MEV	CETAC1	0.933	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	14.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	41.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 18:47	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 10:21	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	89.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-08	**Client Sample Name:**	HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 04:36	ADC	MS-V2	0.860	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	66.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:44	MWB	GC-2	1	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**3.85**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**22.0**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**210**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**99**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**		2
Total Phosphorus	**290**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 14:55	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 11:41	CDR	SC-1	5	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-08 | **Client Sample Name:** HECA, GP-10-5, 9/22/2010 11:51:00AM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**110**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.16**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**11**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**4.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**7.8**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.57**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**44**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**2300**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:09	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:38	MEV	CETAC1	1.025	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	42.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	77.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 19:05	VH1	GC-1	0.987	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	90.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 10:44	cc1	GC-7	0.997	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0058	0.0011	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0058	0.00097	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0058	0.00072	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0058	0.0021	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0058	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0058	0.0020	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0058	0.0012	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0058	0.0021	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0058	0.00093	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0058	0.00098	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0058	0.00093	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0058	0.0020	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.012	0.0028	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0058	0.00058	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0058	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0058	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0058	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0058	0.00089	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0058	0.0013	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0058	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0058	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0058	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.012	0.0039	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0058	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0058	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-09	**Client Sample Name:**	HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:01	ADC	MS-V2	1.150	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	81.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 01:07	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.34**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.5**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**71**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**2.0**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**		2
Total Phosphorus	**200**	**mg/kg**	**10**	**6.2**	**EPA-365.4**	**ND**		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 15:38	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 10:52	CDR	SC-1	1	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-09 | **Client Sample Name:** HECA, GP-10-10, 9/22/2010 12:04:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**15**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**53**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.092**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**7.1**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**5.5**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	**0.016**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**16**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**4.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**18**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**28**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**1600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:11	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:40	MEV	CETAC1	0.962	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	38.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	71.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 19:24	VH1	GC-1	0.984	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 11:06	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00080	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00073	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00086	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0087	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00067	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0087	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:27	ADC	MS-V2	0.870	BTI1169

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	82.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 01:29	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	**6.83**	**pH Units**	**0.05**	**0.05**	**EPA-9045**		**pH1:1**	1
pH Measurement Temperature	**21.5**	**C**	**0.1**	**0.1**	**EPA-9045**			1
Sulfate	**37**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		2
Nitrate as N	**0.59**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	2
Total Phosphorus	**150**	**mg/kg**	**10**	**6.2**	**EPA-365.4**	**ND**		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-9045	09/23/10	09/23/10 15:30	RML	B360	1	BTI1481
2	EPA-300.0	09/23/10	09/24/10 13:29	LD1	IC5	1	BTI1491
3	EPA-365.4	09/23/10	09/24/10 10:53	CDR	SC-1	1	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-10 | **Client Sample Name:** HECA, GP-10-15, 9/22/2010 12:34:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**25**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.060**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**2.4**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**0.84**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.1**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**0.75**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**4.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**1.3**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**7.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**9.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**630**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:13	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:42	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.014**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.046**	**mg/kg**	**0.0050**	**0.00045**	**EPA-8081**	**ND**		2
4,4'-DDT	**0.038**	**mg/kg**	**0.0050**	**0.00031**	**EPA-8081**	**ND**		2
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	**0.014**	**mg/kg**	**0.0025**	**0.00018**	**EPA-8081**	**ND**	**A10**	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	53.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
TCMX (Surrogate)	0	%	12 - 168 (LCL - UCL)		EPA-8081		A17	2
Dibutyl chlorendate (Surrogate)	64.7	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	51.3	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:26	VH1	GC-1	5	BTI1454
2	EPA-8081	09/22/10	09/27/10 08:43	VH1	GC-1	10	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	33.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 11:30	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0031**	**mg/kg**	**0.0044**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00080	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00073	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00055	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00086	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00087	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00074	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0087	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Toluene	**0.0012**	**mg/kg**	**0.0044**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00067	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00096	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0087	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 05:53	ADC	MS-V2	0.870	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	1200	500	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	1200	500	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	500	120	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	500	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	250	35	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	250	30	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	500	70	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	500	160	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	250	120	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**4300**	**mg/kg**	**1200**	**500**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 07:08	MWB	GC-13	25	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-11 | **Client Sample Name:** HECA, GP-17-0.5, 9/22/2010 1:50:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**27**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.72**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**27**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.038**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.67**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**160**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:15	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:44	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.0092**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.027**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.035**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	**0.0070**	**mg/kg**	**0.0025**	**0.00018**	**EPA-8081**	**ND**	**A10**	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	39.7	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	46.0	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/26/10 21:44	VH1	GC-1	5	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	**0.054**	**mg/kg**	**0.010**	**0.0010**	**EPA-8141**	**ND**		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	38.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 13:00	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	91.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 06:19	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**320**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	87.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 02:15	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-12 | **Client Sample Name:** HECA, GP-17-2, 9/22/2010 1:54:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**8.2**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.74**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.29**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**16**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.64**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**51**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 18:16	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:46	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0023**	**mg/kg**	**0.0040**	**0.0010**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0040	0.00073	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0040	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0040	0.00050	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0040	0.00078	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0040	0.00079	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0040	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0040	0.00067	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0040	0.00064	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0079	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0040	0.00040	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0040	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0040	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0040	0.00061	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0040	0.00087	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0040	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0040	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0040	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0079	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0040	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0040	0.00095	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/22/10	09/23/10 06:45	ADC	MS-V2	0.790	BTI1565

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-13 | **Client Sample Name:** HECA, GP-17-5, 9/22/2010 1:57:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	**23**	**mg/kg**	**10**	**1.2**	**Luft/FFP**	**ND**	**A52**	1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	96.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	10/08/10 01:00	MWB	GC-2	1.010	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	48.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 20:36	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	80.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 13:45	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0044	0.00082	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0044	0.00075	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0044	0.00056	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0044	0.00088	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0044	0.00089	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0044	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0044	0.00076	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0044	0.00072	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0044	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0089	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0044	0.00044	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0044	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0044	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0044	0.00069	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0044	0.00098	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0044	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0044	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0044	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0089	0.0030	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0044	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0044	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-14	**Client Sample Name:**	HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 07:10	ADC	MS-V2	0.890	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 03:45	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-14 | **Client Sample Name:** HECA, GP-3-5, 9/22/2010 3:07:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.56**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.097**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**15**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**10**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.13**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**45**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:05	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:49	MEV	CETAC1	0.919	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	**0.0039**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	36.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	75.6	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 20:55	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	77.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:09	cc1	GC-7	1	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0041	0.00075	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0041	0.00069	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0041	0.00052	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0041	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0041	0.00081	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0041	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0041	0.00082	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0041	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0041	0.00066	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0041	0.00070	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0041	0.00066	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0041	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0082	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0041	0.00041	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0041	0.0017	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0041	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0041	0.00063	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0041	0.00090	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0041	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0041	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0041	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0082	0.0028	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0041	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0041	0.00098	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 07:36	ADC	MS-V2	0.820	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	76.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:08	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-15 | **Client Sample Name:** HECA, GP-3-10, 9/22/2010 3:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**4.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**79**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.57**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.094**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**12**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**12**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**2.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**7.1**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**46**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:07	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:51	MEV	CETAC1	1.008	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	41.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 21:13	VH1	GC-1	0.987	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	92.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:31	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0049	0.00090	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0049	0.00082	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0049	0.00062	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0049	0.00097	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0049	0.00098	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0049	0.00083	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0098	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0049	0.00049	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0049	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0049	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0049	0.00075	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0098	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0049	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:02	ADC	MS-V2	0.980	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:31	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-16 | **Client Sample Name:** HECA, GP-3-15, 9/22/2010 3:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**2.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**33**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.3**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.9**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**0.77**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.8**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**23**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:09	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:53	MEV	CETAC1	1.008	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	18.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	29.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/24/10 21:31	VH1	GC-1	0.997	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	82.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 14:54	cc1	GC-7	0.993	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:28	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	74.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 04:54	MWB	GC-2	0.997	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-17 | **Client Sample Name:** HECA, GP-4-5, 9/22/2010 4:05:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**12**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.098**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**35**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**21**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**32**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.014**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**5.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**16**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.85**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**51**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:11	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 17:59	MEV	CETAC1	0.992	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	57.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	99.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 13:44	VH1	GC-1	1	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	114	%	9 - 105 (LCL - UCL)		EPA-8141		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 15:17	cc1	GC-7	0.997	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0052	0.00096	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0052	0.00087	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0052	0.00066	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0052	0.00088	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0052	0.00052	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0052	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0052	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0052	0.00080	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0035	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0052	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	91.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-18	**Client Sample Name:**	HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 08:54	ADC	MS-V2	1.040	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	40.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 05:17	MWB	GC-2	0.990	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-18 | **Client Sample Name:** HECA, GP-4-10, 9/22/2010 4:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**2.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**48**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**5.4**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**5.3**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**3.0**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**26**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**35**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:12	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:02	MEV	CETAC1	0.919	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	43.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	64.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:02	VH1	GC-1	0.993	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	113	%	9 - 105 (LCL - UCL)		EPA-8141		S09	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 15:39	cc1	GC-7	0.990	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0052	0.00096	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0052	0.00087	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0052	0.00066	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0052	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0052	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0052	0.00088	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0052	0.00084	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0052	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0052	0.00052	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0052	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0052	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0052	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0052	0.00080	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0052	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0052	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0052	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0052	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0035	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0052	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0052	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:20	ADC	MS-V2	1.040	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 05:40	MWB	GC-2	1	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-19 | **Client Sample Name:** HECA, GP-4-15, 9/22/2010 4:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**28**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.29**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.8**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.8**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**21**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:14	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:04	MEV	CETAC1	0.962	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	**0.80**	**ug/L**	**0.50**	**0.12**	**EPA-8260**	**ND**		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.4	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013287-20 | **Client Sample Name:** HECA, EQB, 9/22/2010 4:25:00PM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:13	MGC	MS-V5	1	BTI1372

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	22.4	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	38.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:21	VH1	GC-1	0.984	BTI1454

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	76.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 16:02	cc1	GC-7	0.984	BTI1484

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0039	0.00072	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0039	0.00066	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0039	0.00049	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0039	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0039	0.00077	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0039	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0039	0.00078	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0039	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0039	0.00063	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0039	0.00066	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0039	0.00063	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0039	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0078	0.0019	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0039	0.00039	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0039	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0039	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0039	0.0016	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0039	0.00060	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0039	0.00086	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0039	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0039	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0078	0.0027	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0039	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0039	0.00094	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.1	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-21	**Client Sample Name:**	HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 09:46	ADC	MS-V2	0.780	BTI1347

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1220 Avenida Acaso
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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	80.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:02	MWB	GC-2	1	BTI1480

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-21 | **Client Sample Name:** HECA, GP-6-5, 9/22/2010 5:11:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**3.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**89**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.74**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.13**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**15**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**3.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:16	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:06	MEV	CETAC1	0.947	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	32.9	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	47.3	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 14:39	VH1	GC-1	0.984	BTI1454

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 16:24	cc1	GC-7	0.987	BTI1484

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00085	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00058	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00092	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00075	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0092	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00071	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0092	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-22	**Client Sample Name:**	HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:11	ADC	MS-V2	0.920	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	69.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 06:25	MWB	GC-2	0.987	BTI1480

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-22 | **Client Sample Name:** HECA, GP-6-10, 9/22/2010 5:15:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	1.2		1
Arsenic	**9.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**270**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.38**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.050**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**8.3**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**8.7**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**4.7**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.71**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**35**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 19:18	JRG	PE-OP2	1	BTI1468
2	EPA-7471A	09/23/10	09/23/10 18:08	MEV	CETAC1	0.977	BTI1493

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	37.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	53.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 16:10	VH1	GC-1	0.984	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	90.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:10	cc1	GC-7	1	BTI1482

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0036	0.00066	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0036	0.00060	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0036	0.00045	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0036	0.0013	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0036	0.00071	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0036	0.00072	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0036	0.0013	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0036	0.00058	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0036	0.00061	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0036	0.00058	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0072	0.0017	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0036	0.00036	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0036	0.0010	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0036	0.0015	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0036	0.0014	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0036	0.00055	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0036	0.00079	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0036	0.00094	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0036	0.0011	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0036	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0072	0.0024	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0036	0.0016	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0036	0.00086	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013287-23	**Client Sample Name:**	HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 10:38	ADC	MS-V2	0.720	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	109	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/23/10 23:55	MWB	GC-13	0.984	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-23 | **Client Sample Name:** HECA, GP-6-15, 9/22/2010 5:25:00PM, Dana Files

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**0.85**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**4.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**57**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.051**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**4.8**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**3.4**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**1.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**2.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.71**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**15**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**24**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:13	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:22	MEV	CETAC1	0.962	BTI1547

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0071**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0077**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.0027**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	**0.00071**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	16.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	31.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 16:28	VH1	GC-1	0.997	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	47.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:33	cc1	GC-7	0.984	BTI1482

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0021**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0048	0.00088	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0048	0.00081	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0048	0.00060	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0048	0.00095	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0048	0.00096	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0048	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0048	0.00082	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0048	0.00078	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0048	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0096	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0048	0.00048	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0048	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
Toluene	**0.0027**	**mg/kg**	**0.0048**	**0.0012**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0048	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0048	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0048	0.00074	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0048	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0048	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0048	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0096	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0048	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0048	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	93.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	78.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 12:46	ADC	MS-V2	0.960	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	75.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:20	MWB	GC-13	0.987	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**200**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.38**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**600**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/23/10	09/24/10 15:53	LD1	IC5	1	BTI1491
2	EPA-365.4	09/23/10	09/24/10 11:08	CDR	SC-1	5	BTI1464

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-24 | **Client Sample Name:** HECA, SS-4, 9/22/2010 2:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**87**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**4.5**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**37**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.024**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**8.5**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**43**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**200**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**2200**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:23	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:33	MEV	CETAC1	0.933	BTI1547

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0019**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.0030**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	68.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	82.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 17:41	VH1	GC-1	0.993	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	59.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/22/10	09/23/10 03:55	cc1	GC-7	0.997	BTI1482

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	**0.0020**	**mg/kg**	**0.0053**	**0.0016**	**EPA-8260**	**ND**	**J**	1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	**0.0060**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	**0.0061**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	**0.0014**	**mg/kg**	**0.0053**	**0.0014**	**EPA-8260**	**ND**	**J**	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	**0.0014**	**mg/kg**	**0.0053**	**0.0013**	**EPA-8260**	**ND**	**J**	1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	89.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	88.6	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: Acetone	**0.025**	**mg/kg**	**0.021**	**0.013**	**EPA-8260**			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: Methanethiol	**0.14**	**mg/kg**			**EPA-8260**			1
TIC: Pentane	**0.021**	**mg/kg**			**EPA-8260**			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 11:29	ADC	MS-V2	1.060	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	84.7	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/22/10	09/24/10 00:45	MWB	GC-13	0.993	BTI1479

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**390**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.40**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**2200**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/23/10	09/24/10 16:07	LD1	IC5	1	BTI1491
2	EPA-365.4	09/23/10	09/24/10 11:20	CDR	SC-1	20	BTI1464

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013287-25 | **Client Sample Name:** HECA, SS-3, 9/22/2010 1:44:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.54**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**9.3**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**39**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**76**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.018**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**4.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**310**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**1.7**		1
Potassium	**1600**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/23/10	09/23/10 17:25	JRG	PE-OP2	1	BTI1469
2	EPA-7471A	09/24/10	09/27/10 10:35	MEV	CETAC1	0.933	BTI1547

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1454						
Aldrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1454-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1454-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1454-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1454-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1454-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1454-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1454-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1454-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1454-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1454-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1454-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1454-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1454-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1454-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1454-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1454-BLK1	48.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1454-BLK1	225	%	26 - 151 (LCL - UCL)		S09
QC Batch ID: BTI1470						
Aldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1470-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1470-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1470-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1470-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1470-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1470-BLK1	ND	mg/kg	0.00050	0.000086	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1470						
Endosulfan II	BTI1470-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1470-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1470-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1470-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1470-BLK1	70.9	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1470-BLK1	114	%	26 - 151 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1454										
Aldrin	BTI1454-BS1	LCS	0.0033803	0.0050000	mg/kg	67.6		60 - 124		
gamma-BHC (Lindane)	BTI1454-BS1	LCS	0.0032603	0.0050000	mg/kg	65.2		46 - 107		
4,4'-DDT	BTI1454-BS1	LCS	0.0033763	0.0050000	mg/kg	67.5		40 - 148		
Dieldrin	BTI1454-BS1	LCS	0.0034147	0.0050000	mg/kg	68.3		56 - 130		
Endrin	BTI1454-BS1	LCS	0.0038617	0.0050000	mg/kg	77.2		61 - 131		
Heptachlor	BTI1454-BS1	LCS	0.0032133	0.0050000	mg/kg	64.3		58 - 130		
TCMX (Surrogate)	BTI1454-BS1	LCS	0.0041493	0.010000	mg/kg	41.5		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1454-BS1	LCS	0.016850	0.025000	mg/kg	67.4		26 - 151		
QC Batch ID: BTI1470										
Aldrin	BTI1470-BS1	LCS	0.0036086	0.0049834	mg/kg	72.4		60 - 124		
gamma-BHC (Lindane)	BTI1470-BS1	LCS	0.0036864	0.0049834	mg/kg	74.0		46 - 107		
4,4'-DDT	BTI1470-BS1	LCS	0.0041555	0.0049834	mg/kg	83.4		40 - 148		
Dieldrin	BTI1470-BS1	LCS	0.0036841	0.0049834	mg/kg	73.9		56 - 130		
Endrin	BTI1470-BS1	LCS	0.0040801	0.0049834	mg/kg	81.9		61 - 131		
Heptachlor	BTI1470-BS1	LCS	0.0036817	0.0049834	mg/kg	73.9		58 - 130		
TCMX (Surrogate)	BTI1470-BS1	LCS	0.0055917	0.0099668	mg/kg	56.1		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1470-BS1	LCS	0.019115	0.024917	mg/kg	76.7		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1454	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
Aldrin	MS	1013287-02	ND	0.0021553	0.0049342	mg/kg		43.7		63 - 119	Q03
	MSD	1013287-02	ND	0.0032135	0.0049342	mg/kg	39.4	65.1	20	63 - 119	Q02
gamma-BHC (Lindane)	MS	1013287-02	ND	0.0024069	0.0049342	mg/kg		48.8		47 - 102	
	MSD	1013287-02	ND	0.0034543	0.0049342	mg/kg	35.7	70.0	30	47 - 102	Q02
4,4'-DDT	MS	1013287-02	ND	0.0020618	0.0049342	mg/kg		41.8		32 - 158	
	MSD	1013287-02	ND	0.0032589	0.0049342	mg/kg	45.0	66.0	30	32 - 158	Q02
Dieldrin	MS	1013287-02	ND	0.0022671	0.0049342	mg/kg		45.9		57 - 125	Q03
	MSD	1013287-02	ND	0.0034704	0.0049342	mg/kg	41.9	70.3	20	57 - 125	Q02
Endrin	MS	1013287-02	ND	0.0025763	0.0049342	mg/kg		52.2		61 - 130	Q03
	MSD	1013287-02	ND	0.0039342	0.0049342	mg/kg	41.7	79.7	27	61 - 130	Q02
Heptachlor	MS	1013287-02	ND	0.0021385	0.0049342	mg/kg		43.3		52 - 139	Q03
	MSD	1013287-02	ND	0.0031023	0.0049342	mg/kg	36.8	62.9	30	52 - 139	Q02
TCMX (Surrogate)	MS	1013287-02	ND	0.0033385	0.0098684	mg/kg		33.8		12 - 168	
	MSD	1013287-02	ND	0.0043072	0.0098684	mg/kg		43.6		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-02	ND	0.011318	0.024671	mg/kg		45.9		26 - 151	
	MSD	1013287-02	ND	0.018050	0.024671	mg/kg		73.2		26 - 151	
QC Batch ID: BTI1470	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Aldrin	MS	1013287-23	ND	0.0047930	0.0049834	mg/kg		96.2		63 - 119	
	MSD	1013287-23	ND	0.0045907	0.0049669	mg/kg	4.0	92.4	20	63 - 119	
gamma-BHC (Lindane)	MS	1013287-23	ND	0.0047880	0.0049834	mg/kg		96.1		47 - 102	
	MSD	1013287-23	ND	0.0046844	0.0049669	mg/kg	1.9	94.3	30	47 - 102	
4,4'-DDT	MS	1013287-23	ND	0.0054259	0.0049834	mg/kg		109		32 - 158	
	MSD	1013287-23	ND	0.0050033	0.0049669	mg/kg	7.8	101	30	32 - 158	
Dieldrin	MS	1013287-23	ND	0.0049920	0.0049834	mg/kg		100		57 - 125	
	MSD	1013287-23	ND	0.0047103	0.0049669	mg/kg	5.5	94.8	20	57 - 125	
Endrin	MS	1013287-23	ND	0.0055645	0.0049834	mg/kg		112		61 - 130	
	MSD	1013287-23	ND	0.0052825	0.0049669	mg/kg	4.9	106	27	61 - 130	
Heptachlor	MS	1013287-23	ND	0.0048987	0.0049834	mg/kg		98.3		52 - 139	
	MSD	1013287-23	ND	0.0046745	0.0049669	mg/kg	4.4	94.1	30	52 - 139	
TCMX (Surrogate)	MS	1013287-23	ND	0.0072960	0.0099668	mg/kg		73.2		12 - 168	
	MSD	1013287-23	ND	0.0073911	0.0099338	mg/kg		74.4		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-23	ND	0.025976	0.024917	mg/kg		104		26 - 151	
	MSD	1013287-23	ND	0.026903	0.024834	mg/kg		108		26 - 151	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1482						
Azinphos methyl	BTI1482-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1482-BLK1	ND	mg/kg	0.010	0.0014	V11
Chlorpyrifos	BTI1482-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0022	V11
Demeton O/S	BTI1482-BLK1	ND	mg/kg	0.010	0.0015	V11
Diazinon	BTI1482-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1482-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	V11
Ethoprop	BTI1482-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1482-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1482-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1482-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1482-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1482-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1482-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1482-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1482-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1482-BLK1	112	%	9 - 105 (LCL - UCL)		S09
QC Batch ID: BTI1484						
Azinphos methyl	BTI1484-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1484-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1484-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1484-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1484-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1484-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1484-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1484-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1484-BLK1	ND	mg/kg	0.010	0.0010	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1484						
Merphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1484-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1484-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1484-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1484-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1484-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1484-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1484-BLK1	123	%	9 - 105 (LCL - UCL)		S09

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1482										
Bolstar	BTI1482-BS1	LCS	0.027409	0.026578	mg/kg	103		9 - 146		
Chlorpyrifos	BTI1482-BS1	LCS	0.023256	0.026578	mg/kg	87.5		68 - 151		
Diazinon	BTI1482-BS1	LCS	0.014452	0.026578	mg/kg	54.4		38 - 105		
Methyl parathion	BTI1482-BS1	LCS	0.022757	0.026578	mg/kg	85.6		70 - 130		
Mevinphos	BTI1482-BS1	LCS	0.016445	0.026578	mg/kg	61.9		48 - 135		
Ronnel (Fenchlorphos)	BTI1482-BS1	LCS	0.022093	0.026578	mg/kg	83.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1482-BS1	LCS	0.021595	0.026578	mg/kg	81.3		66 - 164		
Triphenylphosphate (Surrogate)	BTI1482-BS1	LCS	0.088040	0.083056	mg/kg	106		9 - 105		S09
QC Batch ID: BTI1484										
Bolstar	BTI1484-BS1	LCS	0.031023	0.026403	mg/kg	118		9 - 146		
Chlorpyrifos	BTI1484-BS1	LCS	0.024587	0.026403	mg/kg	93.1		68 - 151		
Diazinon	BTI1484-BS1	LCS	0.015842	0.026403	mg/kg	60.0		38 - 105		
Methyl parathion	BTI1484-BS1	LCS	0.024092	0.026403	mg/kg	91.2		70 - 130		
Mevinphos	BTI1484-BS1	LCS	0.016172	0.026403	mg/kg	61.3		48 - 135		
Ronnel (Fenchlorphos)	BTI1484-BS1	LCS	0.023597	0.026403	mg/kg	89.4		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1484-BS1	LCS	0.022937	0.026403	mg/kg	86.9		66 - 164		
Triphenylphosphate (Surrogate)	BTI1484-BS1	LCS	0.090429	0.082508	mg/kg	110		9 - 105		S09

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1482	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Bolstar	MS	1013287-23	ND	0.024754	0.026230	mg/kg		94.4		1 - 167	
	MSD	1013287-23	ND	0.024507	0.026316	mg/kg	1.3	93.1	30	1 - 167	
Chlorpyrifos	MS	1013287-23	ND	0.018033	0.026230	mg/kg		68.8		41 - 167	
	MSD	1013287-23	ND	0.017599	0.026316	mg/kg	2.8	66.9	20	41 - 167	
Diazinon	MS	1013287-23	ND	0.019180	0.026230	mg/kg		73.1		31 - 97	
	MSD	1013287-23	ND	0.019408	0.026316	mg/kg	0.9	73.8	30	31 - 97	
Methyl parathion	MS	1013287-23	ND	0.018525	0.026230	mg/kg		70.6		41 - 159	
	MSD	1013287-23	ND	0.019408	0.026316	mg/kg	4.3	73.8	20	41 - 159	
Mevinphos	MS	1013287-23	ND	0.015246	0.026230	mg/kg		58.1		35 - 136	
	MSD	1013287-23	ND	0.017270	0.026316	mg/kg	12.1	65.6	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013287-23	ND	0.017869	0.026230	mg/kg		68.1		34 - 143	
	MSD	1013287-23	ND	0.017434	0.026316	mg/kg	2.8	66.3	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013287-23	ND	0.018197	0.026230	mg/kg		69.4		7 - 209	
	MSD	1013287-23	ND	0.018586	0.026316	mg/kg	1.8	70.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013287-23	ND	0.069016	0.081967	mg/kg		84.2		9 - 105	
	MSD	1013287-23	ND	0.072533	0.082237	mg/kg		88.2		9 - 105	
QC Batch ID: BTI1484	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
Bolstar	MS	1013287-02	ND	0.026000	0.026667	mg/kg		97.5		1 - 167	
	MSD	1013287-02	ND	0.025667	0.026667	mg/kg	1.3	96.2	30	1 - 167	
Chlorpyrifos	MS	1013287-02	ND	0.018500	0.026667	mg/kg		69.4		41 - 167	
	MSD	1013287-02	ND	0.017500	0.026667	mg/kg	5.6	65.6	20	41 - 167	
Diazinon	MS	1013287-02	ND	0.020500	0.026667	mg/kg		76.9		31 - 97	
	MSD	1013287-02	ND	0.020333	0.026667	mg/kg	0.8	76.2	30	31 - 97	
Methyl parathion	MS	1013287-02	ND	0.020333	0.026667	mg/kg		76.2		41 - 159	
	MSD	1013287-02	ND	0.020333	0.026667	mg/kg	0	76.2	20	41 - 159	
Mevinphos	MS	1013287-02	ND	0.021500	0.026667	mg/kg		80.6		35 - 136	
	MSD	1013287-02	ND	0.021167	0.026667	mg/kg	1.6	79.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013287-02	ND	0.017833	0.026667	mg/kg		66.9		34 - 143	
	MSD	1013287-02	ND	0.017000	0.026667	mg/kg	4.8	63.7	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013287-02	ND	0.022333	0.026667	mg/kg		83.7		7 - 209	
	MSD	1013287-02	ND	0.020000	0.026667	mg/kg	11.0	75.0	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013287-02	ND	0.063833	0.083333	mg/kg		76.6		9 - 105	
	MSD	1013287-02	ND	0.059667	0.083333	mg/kg		71.6		9 - 105	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1372						
Benzene	BTI1372-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1372-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1372-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1372-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1372-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1372-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1372-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1372-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1372-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.14	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1372						
trans-1,3-Dichloropropene	BTI1372-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1372-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1372-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1372-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1372-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1372-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1372-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1372-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1372-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1372-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1372-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1372-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1372-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1372-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1372-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1372-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1372-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1372-BLK1	102	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1372-BLK1	98.5	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1372-BLK1	92.5	%	86 - 115 (LCL - UCL)		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1372										
Benzene	BTI1372-BS1	LCS	24.190	25.000	ug/L	96.8		70 - 130		
Bromodichloromethane	BTI1372-BS1	LCS	26.810	25.000	ug/L	107		70 - 130		
Chlorobenzene	BTI1372-BS1	LCS	25.400	25.000	ug/L	102		70 - 130		
Chloroethane	BTI1372-BS1	LCS	25.110	25.000	ug/L	100		70 - 130		
1,4-Dichlorobenzene	BTI1372-BS1	LCS	26.330	25.000	ug/L	105		70 - 130		
1,1-Dichloroethane	BTI1372-BS1	LCS	24.960	25.000	ug/L	99.8		70 - 130		
1,1-Dichloroethene	BTI1372-BS1	LCS	26.160	25.000	ug/L	105		70 - 130		
Toluene	BTI1372-BS1	LCS	25.510	25.000	ug/L	102		70 - 130		
Trichloroethene	BTI1372-BS1	LCS	30.080	25.000	ug/L	120		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1372-BS1	LCS	10.210	10.000	ug/L	102		76 - 114		
Toluene-d8 (Surrogate)	BTI1372-BS1	LCS	9.9100	10.000	ug/L	99.1		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1372-BS1	LCS	9.8900	10.000	ug/L	98.9		86 - 115		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1372	Used client sample: N										
Benzene	MS	1013172-05	0.23000	24.560	25.000	ug/L		97.3		70 - 130	
	MSD	1013172-05	0.23000	23.950	25.000	ug/L	2.5	94.9	20	70 - 130	
Bromodichloromethane	MS	1013172-05	ND	28.230	25.000	ug/L		113		70 - 130	
	MSD	1013172-05	ND	27.790	25.000	ug/L	1.6	111	20	70 - 130	
Chlorobenzene	MS	1013172-05	ND	25.060	25.000	ug/L		100		70 - 130	
	MSD	1013172-05	ND	25.170	25.000	ug/L	0.4	101	20	70 - 130	
Chloroethane	MS	1013172-05	ND	25.620	25.000	ug/L		102		70 - 130	
	MSD	1013172-05	ND	25.300	25.000	ug/L	1.3	101	20	70 - 130	
1,4-Dichlorobenzene	MS	1013172-05	ND	26.100	25.000	ug/L		104		70 - 130	
	MSD	1013172-05	ND	26.180	25.000	ug/L	0.3	105	20	70 - 130	
1,1-Dichloroethane	MS	1013172-05	0.91000	26.180	25.000	ug/L		101		70 - 130	
	MSD	1013172-05	0.91000	26.070	25.000	ug/L	0.4	101	20	70 - 130	
1,1-Dichloroethene	MS	1013172-05	ND	26.750	25.000	ug/L		107		70 - 130	
	MSD	1013172-05	ND	26.290	25.000	ug/L	1.7	105	20	70 - 130	
Toluene	MS	1013172-05	ND	25.850	25.000	ug/L		103		70 - 130	
	MSD	1013172-05	ND	26.010	25.000	ug/L	0.6	104	20	70 - 130	
Trichloroethene	MS	1013172-05	ND	26.680	25.000	ug/L		107		70 - 130	
	MSD	1013172-05	ND	26.600	25.000	ug/L	0.3	106	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013172-05	ND	10.450	10.000	ug/L		104		76 - 114	
	MSD	1013172-05	ND	10.140	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	MS	1013172-05	ND	9.6200	10.000	ug/L		96.2		88 - 110	
	MSD	1013172-05	ND	9.8400	10.000	ug/L		98.4		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013172-05	ND	9.5600	10.000	ug/L		95.6		86 - 115	
	MSD	1013172-05	ND	9.7800	10.000	ug/L		97.8		86 - 115	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
Benzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1169-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1169						
trans-1,3-Dichloropropene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1169-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1169-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1169-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1169-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1169-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1169-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1169-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1169-BLK1	93.9	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1347						
Benzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Bromobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1347-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Ethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1347-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1347-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1347-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1347-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BLK1	98.1	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1347-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1347-BLK1	98.2	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1565						
Benzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Bromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1565-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	

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Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Hexachlorobutadiene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1565-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1565-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1565-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1565-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1565-BLK1	98.7	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1565-BLK1	101	%	74 - 121 (LCL - UCL)		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1169										
Benzene	BTI1169-BS1	LCS	0.14203	0.12500	mg/kg	114		70 - 130		
Bromodichloromethane	BTI1169-BS1	LCS	0.13725	0.12500	mg/kg	110		70 - 130		
Chlorobenzene	BTI1169-BS1	LCS	0.14710	0.12500	mg/kg	118		70 - 130		
Chloroethane	BTI1169-BS1	LCS	0.13854	0.12500	mg/kg	111		70 - 130		
1,4-Dichlorobenzene	BTI1169-BS1	LCS	0.15338	0.12500	mg/kg	123		70 - 130		
1,1-Dichloroethane	BTI1169-BS1	LCS	0.13780	0.12500	mg/kg	110		70 - 130		
1,1-Dichloroethene	BTI1169-BS1	LCS	0.13756	0.12500	mg/kg	110		70 - 130		
Toluene	BTI1169-BS1	LCS	0.14072	0.12500	mg/kg	113		70 - 130		
Trichloroethene	BTI1169-BS1	LCS	0.14587	0.12500	mg/kg	117		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1169-BS1	LCS	0.048797	0.050000	mg/kg	97.6		70 - 121		
Toluene-d8 (Surrogate)	BTI1169-BS1	LCS	0.049922	0.050000	mg/kg	99.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1169-BS1	LCS	0.050451	0.050000	mg/kg	101		74 - 121		
QC Batch ID: BTI1347										
Benzene	BTI1347-BS1	LCS	0.12403	0.12500	mg/kg	99.2		70 - 130		
Bromodichloromethane	BTI1347-BS1	LCS	0.12230	0.12500	mg/kg	97.8		70 - 130		
Chlorobenzene	BTI1347-BS1	LCS	0.13179	0.12500	mg/kg	105		70 - 130		
Chloroethane	BTI1347-BS1	LCS	0.12402	0.12500	mg/kg	99.2		70 - 130		
1,4-Dichlorobenzene	BTI1347-BS1	LCS	0.12969	0.12500	mg/kg	104		70 - 130		
1,1-Dichloroethane	BTI1347-BS1	LCS	0.12574	0.12500	mg/kg	101		70 - 130		
1,1-Dichloroethene	BTI1347-BS1	LCS	0.12240	0.12500	mg/kg	97.9		70 - 130		
Toluene	BTI1347-BS1	LCS	0.12592	0.12500	mg/kg	101		70 - 130		
Trichloroethene	BTI1347-BS1	LCS	0.12949	0.12500	mg/kg	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BS1	LCS	0.048673	0.050000	mg/kg	97.3		70 - 121		
Toluene-d8 (Surrogate)	BTI1347-BS1	LCS	0.049782	0.050000	mg/kg	99.6		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1347-BS1	LCS	0.050312	0.050000	mg/kg	101		74 - 121		
QC Batch ID: BTI1565										
Benzene	BTI1565-BS1	LCS	0.14513	0.12500	mg/kg	116		70 - 130		
Bromodichloromethane	BTI1565-BS1	LCS	0.13467	0.12500	mg/kg	108		70 - 130		
Chlorobenzene	BTI1565-BS1	LCS	0.14620	0.12500	mg/kg	117		70 - 130		
Chloroethane	BTI1565-BS1	LCS	0.14475	0.12500	mg/kg	116		70 - 130		
1,4-Dichlorobenzene	BTI1565-BS1	LCS	0.14608	0.12500	mg/kg	117		70 - 130		
1,1-Dichloroethane	BTI1565-BS1	LCS	0.14749	0.12500	mg/kg	118		70 - 130		
1,1-Dichloroethene	BTI1565-BS1	LCS	0.14779	0.12500	mg/kg	118		70 - 130		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1565										
Toluene	BTI1565-BS1	LCS	0.14061	0.12500	mg/kg	112		70 - 130		
Trichloroethene	BTI1565-BS1	LCS	0.14409	0.12500	mg/kg	115		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BS1	LCS	0.050604	0.050000	mg/kg	101		70 - 121		
Toluene-d8 (Surrogate)	BTI1565-BS1	LCS	0.048840	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1565-BS1	LCS	0.050624	0.050000	mg/kg	101		74 - 121		

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1169	Used client sample: N										
Benzene	MS	1011454-82	ND	0.14460	0.12500	mg/kg		116		70 - 130	
	MSD	1011454-82	ND	0.13682	0.12500	mg/kg	5.5	109	20	70 - 130	
Bromodichloromethane	MS	1011454-82	ND	0.13951	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13585	0.12500	mg/kg	2.7	109	20	70 - 130	
Chlorobenzene	MS	1011454-82	ND	0.14044	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.14015	0.12500	mg/kg	0.2	112	20	70 - 130	
Chloroethane	MS	1011454-82	ND	0.14011	0.12500	mg/kg		112		70 - 130	
	MSD	1011454-82	ND	0.13496	0.12500	mg/kg	3.7	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-82	ND	0.14943	0.12500	mg/kg		120		70 - 130	
	MSD	1011454-82	ND	0.14604	0.12500	mg/kg	2.3	117	20	70 - 130	
1,1-Dichloroethane	MS	1011454-82	ND	0.14196	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13656	0.12500	mg/kg	3.9	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-82	ND	0.14217	0.12500	mg/kg		114		70 - 130	
	MSD	1011454-82	ND	0.13518	0.12500	mg/kg	5.0	108	20	70 - 130	
Toluene	MS	1011454-82	ND	0.14173	0.12500	mg/kg		113		70 - 130	
	MSD	1011454-82	ND	0.14008	0.12500	mg/kg	1.2	112	20	70 - 130	
Trichloroethene	MS	1011454-82	ND	0.14875	0.12500	mg/kg		119		70 - 130	
	MSD	1011454-82	ND	0.14228	0.12500	mg/kg	4.4	114	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-82	ND	0.051334	0.050000	mg/kg		103		70 - 121	
	MSD	1011454-82	ND	0.050523	0.050000	mg/kg		101		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-82	ND	0.050309	0.050000	mg/kg		101		81 - 117	
	MSD	1011454-82	ND	0.049980	0.050000	mg/kg		100		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-82	ND	0.051623	0.050000	mg/kg		103		74 - 121	
	MSD	1011454-82	ND	0.049722	0.050000	mg/kg		99.4		74 - 121	
QC Batch ID: BTI1347	Used client sample: N										
Benzene	MS	1011454-83	ND	0.12337	0.12500	mg/kg		98.7		70 - 130	
	MSD	1011454-83	ND	0.13141	0.12500	mg/kg	6.3	105	20	70 - 130	
Bromodichloromethane	MS	1011454-83	ND	0.12205	0.12500	mg/kg		97.6		70 - 130	
	MSD	1011454-83	ND	0.12854	0.12500	mg/kg	5.2	103	20	70 - 130	
Chlorobenzene	MS	1011454-83	ND	0.12847	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13403	0.12500	mg/kg	4.2	107	20	70 - 130	
Chloroethane	MS	1011454-83	ND	0.12387	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13379	0.12500	mg/kg	7.7	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-83	ND	0.12925	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13518	0.12500	mg/kg	4.5	108	20	70 - 130	
1,1-Dichloroethane	MS	1011454-83	ND	0.12382	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13500	0.12500	mg/kg	8.6	108	20	70 - 130	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1347	Used client sample: N										
1,1-Dichloroethene	MS	1011454-83	ND	0.12077	0.12500	mg/kg		96.6		70 - 130	
	MSD	1011454-83	ND	0.13396	0.12500	mg/kg	10.4	107	20	70 - 130	
Toluene	MS	1011454-83	ND	0.12390	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13119	0.12500	mg/kg	5.7	105	20	70 - 130	
Trichloroethene	MS	1011454-83	ND	0.12869	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13649	0.12500	mg/kg	5.9	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-83	ND	0.049376	0.050000	mg/kg		98.8		70 - 121	
	MSD	1011454-83	ND	0.050907	0.050000	mg/kg		102		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-83	ND	0.049513	0.050000	mg/kg		99.0		81 - 117	
	MSD	1011454-83	ND	0.049643	0.050000	mg/kg		99.3		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-83	ND	0.049088	0.050000	mg/kg		98.2		74 - 121	
	MSD	1011454-83	ND	0.050501	0.050000	mg/kg		101		74 - 121	
QC Batch ID: BTI1565	Used client sample: N										
Benzene	MS	1011454-85	ND	0.13260	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13418	0.12500	mg/kg	1.2	107	20	70 - 130	
Bromodichloromethane	MS	1011454-85	ND	0.12495	0.12500	mg/kg		100		70 - 130	
	MSD	1011454-85	ND	0.12959	0.12500	mg/kg	3.6	104	20	70 - 130	
Chlorobenzene	MS	1011454-85	ND	0.13786	0.12500	mg/kg		110		70 - 130	
	MSD	1011454-85	ND	0.14235	0.12500	mg/kg	3.2	114	20	70 - 130	
Chloroethane	MS	1011454-85	ND	0.13184	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13647	0.12500	mg/kg	3.4	109	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-85	ND	0.14577	0.12500	mg/kg		117		70 - 130	
	MSD	1011454-85	ND	0.14256	0.12500	mg/kg	2.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1011454-85	ND	0.13317	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-85	ND	0.13582	0.12500	mg/kg	2.0	109	20	70 - 130	
1,1-Dichloroethene	MS	1011454-85	ND	0.13304	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13641	0.12500	mg/kg	2.5	109	20	70 - 130	
Toluene	MS	1011454-85	ND	0.13065	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13658	0.12500	mg/kg	4.4	109	20	70 - 130	
Trichloroethene	MS	1011454-85	ND	0.13874	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-85	ND	0.13883	0.12500	mg/kg	0.1	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-85	ND	0.049343	0.050000	mg/kg		98.7		70 - 121	
	MSD	1011454-85	ND	0.048122	0.050000	mg/kg		96.2		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-85	ND	0.049731	0.050000	mg/kg		99.5		81 - 117	
	MSD	1011454-85	ND	0.049426	0.050000	mg/kg		98.9		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-85	ND	0.049331	0.050000	mg/kg		98.7		74 - 121	
	MSD	1011454-85	ND	0.049105	0.050000	mg/kg		98.2		74 - 121	

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Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1479						
TPH - Light Naptha	BTI1479-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1479-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1479-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1479-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1479-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1479-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1479-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1479-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1479-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1479-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1479-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1479-BLK1	104	%	20 - 145 (LCL - UCL)		
QC Batch ID: BTI1480						
TPH - Light Naptha	BTI1480-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1480-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1480-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1480-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1480-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1480-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1480-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1480-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1480-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1480-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1480-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1480-BLK1	86.4	%	20 - 145 (LCL - UCL)		

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Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1479										
TPH - Diesel (FFP)	BTI1479-BS1	LCS	53.559	82.508	mg/kg	64.9		64 - 124		
Tetracosane (Surrogate)	BTI1479-BS1	LCS	2.0673	3.3003	mg/kg	62.6		20 - 145		
QC Batch ID: BTI1480										
TPH - Diesel (FFP)	BTI1480-BS1	LCS	63.694	82.237	mg/kg	77.5		64 - 124		
Tetracosane (Surrogate)	BTI1480-BS1	LCS	1.6322	3.2895	mg/kg	49.6		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1479	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
TPH - Diesel (FFP)	MS	1013287-23	ND	86.870	81.967	mg/kg		106		52 - 131	
	MSD	1013287-23	ND	91.528	82.781	mg/kg	4.2	111	30	52 - 131	
Tetracosane (Surrogate)	MS	1013287-23	ND	3.4157	3.2787	mg/kg		104		20 - 145	
	MSD	1013287-23	ND	3.5339	3.3113	mg/kg		107		20 - 145	
QC Batch ID: BTI1480	Used client sample: Y - Description: GP-7-10, 09/22/2010 08:52										
TPH - Diesel (FFP)	MS	1013287-02	ND	68.055	82.508	mg/kg		82.5		52 - 131	
	MSD	1013287-02	ND	67.969	82.508	mg/kg	0.1	82.4	30	52 - 131	
Tetracosane (Surrogate)	MS	1013287-02	ND	2.6012	3.3003	mg/kg		78.8		20 - 145	
	MSD	1013287-02	ND	2.5988	3.3003	mg/kg		78.7		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1464						
Total Phosphorus	BTI1464-BLK1	ND	mg/kg	10	6.2	
QC Batch ID: BTI1491						
Sulfate	BTI1491-BLK1	ND	mg/kg	10	2.1	
Nitrate as N	BTI1491-BLK1	ND	mg/kg	1.0	0.26	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1464										
Total Phosphorus	BTI1464-BS1	LCS	205.52	200.00	mg/kg	103		85 - 115		
QC Batch ID: BTI1481										
pH	BTI1481-BS1	LCS	6.9690	7.0000	pH Units	99.6		95 - 105		
QC Batch ID: BTI1491										
Sulfate	BTI1491-BS1	LCS	99.769	100.00	mg/kg	99.8		90 - 110		
Nitrate as N	BTI1491-BS1	LCS	5.0780	5.0000	mg/kg	102		90 - 110		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1464	Used client sample: Y - Description: GP-10-5, 09/22/2010 11:51										
Total Phosphorus	DUP	1013287-08	288.10	239.90		mg/kg	18.3		20		
	MS	1013287-08	288.10	451.30	200.00	mg/kg		81.6		80 - 120	
	MSD	1013287-08	288.10	434.20	200.00	mg/kg	11.1	73.0	20	80 - 120	Q03
QC Batch ID: BTI1481	Used client sample: Y - Description: GP-8-4, 09/22/2010 09:40										
pH	DUP	1013287-06	7.8730	7.8790		pH Units	0.1		20		
QC Batch ID: BTI1491	Used client sample: Y - Description: GP-10-15, 09/22/2010 12:34										
Sulfate	DUP	1013287-10	36.860	37.370		mg/kg	1.4		20		
	MS	1013287-10	36.860	1048.2	1010.1	mg/kg		100		80 - 120	
	MSD	1013287-10	36.860	1048.1	1010.1	mg/kg	0.0	100	20	80 - 120	
Nitrate as N	DUP	1013287-10	0.59000	0.63000		mg/kg	6.6		20		J
	MS	1013287-10	0.59000	49.303	50.505	mg/kg		96.5		80 - 120	
	MSD	1013287-10	0.59000	49.384	50.505	mg/kg	0.2	96.6	20	80 - 120	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1468						
Antimony	BTI1468-BLK1	1.2271	mg/kg	5.0	0.50	J
Arsenic	BTI1468-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1468-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1468-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1468-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1468-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1468-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1468-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1468-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1468-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1468-BLK1	1.6868	mg/kg	2.5	0.25	J
Potassium	BTI1468-BLK1	ND	mg/kg	50	5.0	
QC Batch ID: BTI1469						
Antimony	BTI1469-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1469-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1469-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1469-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1469-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1469-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1469-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1469-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1469-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1469-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1469-BLK1	ND	mg/kg	0.50	0.050	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1469						
Zinc	BTI1469-BLK1	1.7151	mg/kg	2.5	0.25	J
Potassium	BTI1469-BLK1	ND	mg/kg	50	5.0	
QC Batch ID: BTI1493						
Mercury	BTI1493-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1547						
Mercury	BTI1547-BLK1	ND	mg/kg	0.16	0.012	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1468										
Antimony	BTI1468-BS1	LCS	102.65	100.00	mg/kg	103		75 - 125		
Arsenic	BTI1468-BS1	LCS	10.415	10.000	mg/kg	104		75 - 125		
Barium	BTI1468-BS1	LCS	106.85	100.00	mg/kg	107		75 - 125		
Beryllium	BTI1468-BS1	LCS	10.896	10.000	mg/kg	109		75 - 125		
Cadmium	BTI1468-BS1	LCS	10.623	10.000	mg/kg	106		75 - 125		
Chromium	BTI1468-BS1	LCS	107.25	100.00	mg/kg	107		75 - 125		
Cobalt	BTI1468-BS1	LCS	108.11	100.00	mg/kg	108		75 - 125		
Copper	BTI1468-BS1	LCS	103.80	100.00	mg/kg	104		75 - 125		
Lead	BTI1468-BS1	LCS	110.78	100.00	mg/kg	111		75 - 125		
Molybdenum	BTI1468-BS1	LCS	105.59	100.00	mg/kg	106		75 - 125		
Nickel	BTI1468-BS1	LCS	108.55	100.00	mg/kg	109		75 - 125		
Selenium	BTI1468-BS1	LCS	10.345	10.000	mg/kg	103		75 - 125		
Silver	BTI1468-BS1	LCS	9.7404	10.000	mg/kg	97.4		75 - 125		
Thallium	BTI1468-BS1	LCS	108.30	100.00	mg/kg	108		75 - 125		
Vanadium	BTI1468-BS1	LCS	112.42	100.00	mg/kg	112		75 - 125		
Zinc	BTI1468-BS1	LCS	109.77	100.00	mg/kg	110		75 - 125		
Potassium	BTI1468-BS1	LCS	496.95	500.00	mg/kg	99.4		75 - 125		
QC Batch ID: BTI1469										
Antimony	BTI1469-BS1	LCS	91.031	100.00	mg/kg	91.0		75 - 125		
Arsenic	BTI1469-BS1	LCS	9.2873	10.000	mg/kg	92.9		75 - 125		
Barium	BTI1469-BS1	LCS	95.683	100.00	mg/kg	95.7		75 - 125		
Beryllium	BTI1469-BS1	LCS	9.8616	10.000	mg/kg	98.6		75 - 125		
Cadmium	BTI1469-BS1	LCS	9.6401	10.000	mg/kg	96.4		75 - 125		
Chromium	BTI1469-BS1	LCS	96.240	100.00	mg/kg	96.2		75 - 125		
Cobalt	BTI1469-BS1	LCS	98.140	100.00	mg/kg	98.1		75 - 125		
Copper	BTI1469-BS1	LCS	93.861	100.00	mg/kg	93.9		75 - 125		
Lead	BTI1469-BS1	LCS	99.381	100.00	mg/kg	99.4		75 - 125		
Molybdenum	BTI1469-BS1	LCS	95.466	100.00	mg/kg	95.5		75 - 125		
Nickel	BTI1469-BS1	LCS	97.527	100.00	mg/kg	97.5		75 - 125		
Selenium	BTI1469-BS1	LCS	9.1405	10.000	mg/kg	91.4		75 - 125		
Silver	BTI1469-BS1	LCS	8.8356	10.000	mg/kg	88.4		75 - 125		
Thallium	BTI1469-BS1	LCS	99.058	100.00	mg/kg	99.1		75 - 125		
Vanadium	BTI1469-BS1	LCS	102.28	100.00	mg/kg	102		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1469										
Zinc	BTI1469-BS1	LCS	100.07	100.00	mg/kg	100		75 - 125		
Potassium	BTI1469-BS1	LCS	446.21	500.00	mg/kg	89.2		75 - 125		
QC Batch ID: BTI1493										
Mercury	BTI1493-BS1	LCS	1.6287	1.5000	mg/kg	109		75 - 125		
QC Batch ID: BTI1547										
Mercury	BTI1547-BS1	LCS	1.6277	1.5000	mg/kg	109		75 - 125		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Antimony	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	30.006	100.00	mg/kg		30.0		16 - 119	
	MSD	1013213-04	ND	29.324	100.00	mg/kg	2.3	29.3	20	16 - 119	
Arsenic	DUP	1013213-04	5.5520	5.6268		mg/kg	1.3		20		
	MS	1013213-04	5.5520	15.586	10.000	mg/kg		100		75 - 125	
	MSD	1013213-04	5.5520	14.892	10.000	mg/kg	7.2	93.4	20	75 - 125	
Barium	DUP	1013213-04	138.68	139.51		mg/kg	0.6		20		
	MS	1013213-04	138.68	237.34	100.00	mg/kg		98.7		75 - 125	
	MSD	1013213-04	138.68	237.11	100.00	mg/kg	0.2	98.4	20	75 - 125	
Beryllium	DUP	1013213-04	0.84581	0.87001		mg/kg	2.8		20		
	MS	1013213-04	0.84581	10.956	10.000	mg/kg		101		75 - 125	
	MSD	1013213-04	0.84581	10.913	10.000	mg/kg	0.4	101	20	75 - 125	
Cadmium	DUP	1013213-04	0.31336	0.34072		mg/kg	8.4		20		J
	MS	1013213-04	0.31336	10.107	10.000	mg/kg		97.9		75 - 125	
	MSD	1013213-04	0.31336	10.121	10.000	mg/kg	0.1	98.1	20	75 - 125	
Chromium	DUP	1013213-04	20.264	20.827		mg/kg	2.7		20		
	MS	1013213-04	20.264	117.61	100.00	mg/kg		97.3		75 - 125	
	MSD	1013213-04	20.264	117.70	100.00	mg/kg	0.1	97.4	20	75 - 125	
Cobalt	DUP	1013213-04	7.6085	7.6282		mg/kg	0.3		20		
	MS	1013213-04	7.6085	102.61	100.00	mg/kg		95.0		75 - 125	
	MSD	1013213-04	7.6085	102.91	100.00	mg/kg	0.3	95.3	20	75 - 125	
Copper	DUP	1013213-04	20.385	20.852		mg/kg	2.3		20		
	MS	1013213-04	20.385	119.30	100.00	mg/kg		98.9		75 - 125	
	MSD	1013213-04	20.385	118.25	100.00	mg/kg	1.1	97.9	20	75 - 125	
Lead	DUP	1013213-04	7.5133	8.0370		mg/kg	6.7		20		
	MS	1013213-04	7.5133	102.64	100.00	mg/kg		95.1		75 - 125	
	MSD	1013213-04	7.5133	102.80	100.00	mg/kg	0.2	95.3	20	75 - 125	
Molybdenum	DUP	1013213-04	1.5497	1.4179		mg/kg	8.9		20		J
	MS	1013213-04	1.5497	87.530	100.00	mg/kg		86.0		75 - 125	
	MSD	1013213-04	1.5497	86.966	100.00	mg/kg	0.7	85.4	20	75 - 125	
Nickel	DUP	1013213-04	16.116	16.404		mg/kg	1.8		20		
	MS	1013213-04	16.116	111.81	100.00	mg/kg		95.7		75 - 125	
	MSD	1013213-04	16.116	111.72	100.00	mg/kg	0.1	95.6	20	75 - 125	
Selenium	DUP	1013213-04	ND	1.0020		mg/kg			20		
	MS	1013213-04	ND	10.470	10.000	mg/kg		105		75 - 125	
	MSD	1013213-04	ND	11.426	10.000	mg/kg	8.7	114	20	75 - 125	
Silver	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	8.8149	10.000	mg/kg		88.1		75 - 125	
	MSD	1013213-04	ND	8.8370	10.000	mg/kg	0.3	88.4	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1468	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Thallium	DUP	1013213-04	ND	ND		mg/kg			20		
	MS	1013213-04	ND	94.009	100.00	mg/kg		94.0		75 - 125	
	MSD	1013213-04	ND	92.842	100.00	mg/kg	1.2	92.8	20	75 - 125	
Vanadium	DUP	1013213-04	56.037	58.327		mg/kg	4.0		20		
	MS	1013213-04	56.037	162.21	100.00	mg/kg		106		75 - 125	
	MSD	1013213-04	56.037	161.74	100.00	mg/kg	0.4	106	20	75 - 125	
Zinc	DUP	1013213-04	94.419	94.287		mg/kg	0.1		20		
	MS	1013213-04	94.419	189.17	100.00	mg/kg		94.8		75 - 125	
	MSD	1013213-04	94.419	190.93	100.00	mg/kg	1.8	96.5	20	75 - 125	
Potassium	DUP	1013213-04	5060.3	5171.3		mg/kg	2.2		20		
	MS	1013213-04	5060.3	5863.5	500.00	mg/kg		161		75 - 125	A03
	MSD	1013213-04	5060.3	5854.4	500.00	mg/kg	1.1	159	20	75 - 125	A03
QC Batch ID: BTI1469	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Antimony	DUP	1013287-23	0.85421	ND		mg/kg			20		
	MS	1013287-23	0.85421	42.118	100.00	mg/kg		41.3		16 - 119	
	MSD	1013287-23	0.85421	46.176	100.00	mg/kg	9.4	45.3	20	16 - 119	
Arsenic	DUP	1013287-23	4.3686	4.6532		mg/kg	6.3		20		
	MS	1013287-23	4.3686	15.481	10.000	mg/kg		111		75 - 125	
	MSD	1013287-23	4.3686	14.896	10.000	mg/kg	5.4	105	20	75 - 125	
Barium	DUP	1013287-23	56.910	54.695		mg/kg	4.0		20		
	MS	1013287-23	56.910	163.83	100.00	mg/kg		107		75 - 125	
	MSD	1013287-23	56.910	163.58	100.00	mg/kg	0.2	107	20	75 - 125	
Beryllium	DUP	1013287-23	0.15328	0.14927		mg/kg	2.7		20		J
	MS	1013287-23	0.15328	10.929	10.000	mg/kg		108		75 - 125	
	MSD	1013287-23	0.15328	10.972	10.000	mg/kg	0.4	108	20	75 - 125	
Cadmium	DUP	1013287-23	0.051299	ND		mg/kg			20		
	MS	1013287-23	0.051299	10.609	10.000	mg/kg		106		75 - 125	
	MSD	1013287-23	0.051299	10.554	10.000	mg/kg	0.5	105	20	75 - 125	
Chromium	DUP	1013287-23	4.7607	4.5584		mg/kg	4.3		20		
	MS	1013287-23	4.7607	109.70	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	4.7607	109.98	100.00	mg/kg	0.3	105	20	75 - 125	
Cobalt	DUP	1013287-23	2.7302	2.6197		mg/kg	4.1		20		
	MS	1013287-23	2.7302	108.00	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	2.7302	108.23	100.00	mg/kg	0.2	106	20	75 - 125	
Copper	DUP	1013287-23	3.3730	3.3716		mg/kg	0.0		20		
	MS	1013287-23	3.3730	108.18	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	3.3730	108.88	100.00	mg/kg	0.7	106	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1469	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Lead	DUP	1013287-23	1.0075	1.1810		mg/kg	15.9		20		J
	MS	1013287-23	1.0075	106.85	100.00	mg/kg		106		75 - 125	
	MSD	1013287-23	1.0075	106.48	100.00	mg/kg	0.4	105	20	75 - 125	
Molybdenum	DUP	1013287-23	1.2233	1.1862		mg/kg	3.1		20		J
	MS	1013287-23	1.2233	103.96	100.00	mg/kg		103		75 - 125	
	MSD	1013287-23	1.2233	103.85	100.00	mg/kg	0.1	103	20	75 - 125	
Nickel	DUP	1013287-23	2.6269	2.5356		mg/kg	3.5		20		
	MS	1013287-23	2.6269	107.59	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	2.6269	107.94	100.00	mg/kg	0.3	105	20	75 - 125	
Selenium	DUP	1013287-23	0.70667	0.54661		mg/kg	25.5		20		J,A02
	MS	1013287-23	0.70667	10.416	10.000	mg/kg		97.1		75 - 125	
	MSD	1013287-23	0.70667	10.329	10.000	mg/kg	0.9	96.2	20	75 - 125	
Silver	DUP	1013287-23	ND	ND		mg/kg			20		
	MS	1013287-23	ND	9.6823	10.000	mg/kg		96.8		75 - 125	
	MSD	1013287-23	ND	9.7460	10.000	mg/kg	0.7	97.5	20	75 - 125	
Thallium	DUP	1013287-23	ND	ND		mg/kg			20		
	MS	1013287-23	ND	105.84	100.00	mg/kg		106		75 - 125	
	MSD	1013287-23	ND	105.19	100.00	mg/kg	0.6	105	20	75 - 125	
Vanadium	DUP	1013287-23	14.974	14.710		mg/kg	1.8		20		
	MS	1013287-23	14.974	128.09	100.00	mg/kg		113		75 - 125	
	MSD	1013287-23	14.974	128.03	100.00	mg/kg	0.1	113	20	75 - 125	
Zinc	DUP	1013287-23	24.310	24.595		mg/kg	1.2		20		
	MS	1013287-23	24.310	129.71	100.00	mg/kg		105		75 - 125	
	MSD	1013287-23	24.310	129.63	100.00	mg/kg	0.1	105	20	75 - 125	
Potassium	DUP	1013287-23	1544.4	1466.0		mg/kg	5.2		20		
	MS	1013287-23	1544.4	2138.3	500.00	mg/kg		119		75 - 125	
	MSD	1013287-23	1544.4	2055.2	500.00	mg/kg	15.0	102	20	75 - 125	
QC Batch ID: BTI1493	Used client sample: Y - Description: Dup-1, 09/22/2010 00:00										
Mercury	DUP	1013287-04	ND	ND		mg/kg			20		
	MS	1013287-04	ND	0.73523	0.76923	mg/kg		95.6		85 - 115	
	MSD	1013287-04	ND	0.72585	0.76923	mg/kg	1.3	94.4	20	85 - 115	
QC Batch ID: BTI1547	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Mercury	DUP	1013287-23	ND	0.014769		mg/kg			20		J
	MS	1013287-23	ND	0.76277	0.76923	mg/kg		99.2		85 - 115	
	MSD	1013287-23	ND	0.75708	0.76923	mg/kg	0.7	98.4	20	85 - 115	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 10/08/2010 14:28
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
A19	Surrogate is high due to matrix interference. Interferences verified through second extraction/analysis.
A52	Chromatogram not typical of diesel.
pH1:1	pH result reported on a 1:1 dilution of sample
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Chromatogram not typical of mineral oil.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 11/08/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013288
Invoice ID: B087496

Enclosed are the results of analyses for samples received by the laboratory on 9/22/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013288 Page 1 of 4

BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 2

Report To
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avocado Ave
City, State, Zip: Emeryville CA 94608
Phone: 925 398 3775 Fax: 925 398 3577
Email Address: chad.roper@aecom.com
Work Order #: 10-13288

Project #:
Project Name: Aydogan Energy CA
Global ID #:
Sampler(s): Tom Shortz

Analysis Requested: 8081 OCPs; 8015 Diesel; 8015 Motor Oil; 8015 Gasoline; 8260 BTEX; 8260 Full Scan; 8260 Oxygenates; Please refer to back of this page for detailed analysis and method legend.

Comments:

Sample #	Description	Date Sampled	Time Sampled	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Notes
	SC-6-A -1	9/22/10	8:46	X						2	
	SC-6-B	9/22/10	8:48	X						2	Composite B to E
	SC-6-C -2	9/22/10	8:50	X						2	prior to analy.
	SC-6-D	9/22/10	8:52	X						2	
	SC-6-E	9/22/10	8:54	X						2	
	SC-4-A -3	9/22/10	9:12	X						2	
	SC-4-B	9/22/10	9:14	X						2	Composite B to E
	SC-4-C	9/22/10	9:16	X						2	prior to analy
	SC-4-D -4	9/22/10	9:18	X						2	
	SC-4-E	9/22/10	9:20	X						2	
	SC-9-A -5	9/22/10	9:48	X						2	
	SC-9-B	9/22/10	9:50	X						2	
	SC-9-C -6	9/22/10	9:52	X						2	
	SC-9-D	9/22/10	9:54	X						2	

DISTRIB
Sample Login Verified
OK BY

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

	Relinquished By	Date	Time	Received By
1.		9-22-10	19:30	
2.				
3.				

System # (Needed for EDT)

	Received By	Date	Time
1.		9-22-10	1838
2.			
3.			

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013288 Page 2 of 4

Chain of Custody Form

Page 1 of 2

Report to: Client: AECOM | Project #: | Project Name: Hydesign Energy CA | Global ID #: | Sampler(s): Tom Shott

Attn: Chad Roper | Street Address: 1220 Avenida Acaso | City, State, Zip: Camarillo CA 93012 | Phone: fax 388 3775 Fax: 805 388 3577

Email Address: chad.roper@aecom.com | Work Order #: 10-13288

Analysis Requested

Comments:

Sample #	Description	Date Sampled	Time Sampled	Soil	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*	Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No
	SC-9-E - 6	9/22/10	9:56	X					2	
	SC-8-A - 7	9/22/10	10:08	X					2	Composite B to E
	SC-8-B - 8	9/22/10	10:10	X					2	prior to analy
	SC-8-C - 8	9/22/10	10:12	X					2	
	SC-8-D - 8	9/22/10	10:14	X					2	
	SC-8-E - 8	9/22/10	10:16	X					2	Composite B to E
	SC-7-A - 9	9/22/10	10:48	X					2	prior to analy
	SC-7-B - 10	9/22/10	10:50	X					2	
	SC-7-C - 10	9/22/10	10:52	X					2	
	SC-7-D - 10	9/22/10	10:54	X					2	
	SC-7-E - 10	9/22/10	10:56	X					2	

Billing: ☐ Same as above

Client: | Address: | City: | State: | Zip: | Attn: | PO#:

EDF Required? ☐ Yes ☐ No

Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

	Relinquished By	Date	Time	Received By	Date	Time
1.		9-22-10	12:30	If Received By	Date	Time
2.		Date	Time	2. Received By	Date	Time
3.		Date	Time	3. Received By	Date	Time

System # (Needed for EDT)

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013288 Page 3 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 1 of 2

Submission #: 10-13288

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑YES ☐NO

Emissivity: 0.95 Container: 8oz jar Thermometer ID: 103

Temperature: A 5.7 °C / C 5.7 °C

Date/Time: 4-22-10 1835

Analyst Init: JCW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR	A	ABCD	A	ABCD	A	ABCD	A	ABCD	A	ABCD
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JCW Date/Time: 4/22/10 1910
A = Actual / C = Corrected

[H:\DOCS\SHIPPING\LAB_DOCS\FORMS\SAMREC1.VP01]

Chain of Custody and Cooler Receipt Form for 1013288 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 2

Submission #: 1013288

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☒	Ice Chest ☒ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☒ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ (Intact? Yes ☐ No ☐) Containers ☐ (Intact? Yes ☐ No ☐) None ☒ Comments:

All samples received? Yes ☒ No ☐ All samples containers intact? Yes ☒ No ☐ Description(s) match COC? Yes ☒ No ☐

COC Received ☒YES ☐ NO

Emissivity: 0.95 Container: 80zjar Thermometer ID: 103

Temperature: A 5.7 °C / C 5.7 °C

Date/Time 9-22-10 1835

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JDW Date/Time: 9/22/10 1910

A = Actual / C = Corrected

[H:\DOCS\WP60\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013288-01	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:46
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-6-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-02	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 08:54
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-6-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-03	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:12
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-4-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-04	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:20
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-4-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-05	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:48
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-9-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-06	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 09:56
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-9-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	---		
1013288-07	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:08
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-8-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013288-08	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:16
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Composite of SC-8-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-09	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:48
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SC-7-A	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013288-10	**COC Number:**	---	**Receive Date:**	09/22/2010 18:30
	Project Number:	---	**Sampling Date:**	09/22/2010 10:56
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Compoiste of SC-7-B,C,D,E	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-01 | **Client Sample Name:** HECA, SC-6-A, 9/22/2010 8:46:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**6.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:40	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0029**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.0088**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0016**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	47.1	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	82.4	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	73.1	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 17:59	VH1	GC-1	0.993	BTI1470
2	EPA-8081	09/22/10	09/26/10 22:02	VH1	GC-1	1.987	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**17**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**73**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 16:46	LD1	IC2	1	BTK0311

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013288-02 | **Client Sample Name:** HECA, Composite of SC-6-B,C,D,E, 9/22/2010 8:54:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**140**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**83**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:27	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0448

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-03 | **Client Sample Name:** HECA, SC-4-A, 9/22/2010 9:12:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**8.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:52	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-04 | **Client Sample Name:** HECA, Composite of SC-4-B,C,D,E, 9/22/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0045**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.017**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0025**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00055**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	51.7	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	74.3	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	59.1	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:17	VH1	GC-1	0.997	BTI1470
2	EPA-8081	09/22/10	09/26/10 22:20	VH1	GC-1	4.983	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-05 | **Client Sample Name:** HECA, SC-9-A, 9/22/2010 9:48:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**7.8**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:57	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-06 | **Client Sample Name:** HECA, Composite of SC-9-B,C,D,E, 9/22/2010 9:56:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0049**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0010**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.044**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0071**	**mg/kg**	**0.0010**	**0.000062**	**EPA-8081**	**ND**	**A01,V11**	3
Dieldrin	**0.0036**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0022**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	50.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	51.7	%	12 - 168 (LCL - UCL)		EPA-8081			3
Dibutyl chlorendate (Surrogate)	91.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.3	%	26 - 151 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	76.6	%	26 - 151 (LCL - UCL)		EPA-8081			3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:35	VH1	GC-1	0.990	BTI1470
2	EPA-8081	09/22/10	09/26/10 23:51	VH1	GC-1	19.802	BTI1470
3	EPA-8081	09/22/10	09/26/10 22:38	VH1	GC-1	1.980	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-07 | **Client Sample Name:** HECA, SC-8-A, 9/22/2010 10:08:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**6.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 12:58	JRG	PE-OP2	1	BTI1566

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0037**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	**0.010**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.0014**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	44.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	46.9	%	12 - 168 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	68.2	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	62.4	%	26 - 151 (LCL - UCL)		EPA-8081			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 18:54	VH1	GC-1	0.987	BTI1470
2	EPA-8081	09/22/10	09/27/10 00:09	VH1	GC-1	1.974	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**22**	**mg/kg**	**5.0**	**0.59**	**EPA-300.0**	**ND**	**S05**	1
Sulfate	**93**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**	**S05**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	11/03/10	11/03/10 17:00	LD1	IC2	1	BTK0311

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

BCL Sample ID: 1013288-08 | **Client Sample Name:** HECA, Composite of SC-8-B,C,D,E, 9/22/2010 10:16:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	**170**	**umhos/cm**	**1.0**	**1.0**	**EPA-120.1**			1
EC as NaCl (Salinity)	**99**	**mg/L**	**1.0**	**1.0**	**Calc**	**ND**		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-120.1	10/29/10	10/29/10 09:31	RML	MET-1	1	BTK0111
2	Calc	11/04/10	11/08/10 11:12	MSA	Calc	1	BTK0448

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013288-09 | **Client Sample Name:** HECA, SC-7-A, 9/22/2010 10:48:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Arsenic	**14**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:00	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013288-10 | **Client Sample Name:** HECA, Compoiste of SC-7-B,C,D,E, 9/22/2010 10:56:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.0048**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0020**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**		1
4,4'-DDE	**0.050**	**mg/kg**	**0.010**	**0.00090**	**EPA-8081**	**ND**	**A01**	2
4,4'-DDT	**0.012**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A01,V11**	3
Dieldrin	**0.0013**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.0027**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	54.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
TCMX (Surrogate)	56.6	%	12 - 168 (LCL - UCL)		EPA-8081			3
Dibutyl chlorendate (Surrogate)	132	%	26 - 151 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	83.0	%	26 - 151 (LCL - UCL)		EPA-8081			2
Dibutyl chlorendate (Surrogate)	89.2	%	26 - 151 (LCL - UCL)		EPA-8081			3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/22/10	09/25/10 19:12	VH1	GC-1	0.997	BTI1470
2	EPA-8081	09/22/10	09/27/10 00:45	VH1	GC-1	19.934	BTI1470
3	EPA-8081	09/22/10	09/27/10 00:27	VH1	GC-1	4.983	BTI1470

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1470						
Aldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1470-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1470-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1470-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1470-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1470-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1470-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1470-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1470-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1470-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1470-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1470-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1470-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1470-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1470-BLK1	70.9	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1470-BLK1	114	%	26 - 151 (LCL - UCL)		

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Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1470										
Aldrin	BTI1470-BS1	LCS	0.0036086	0.0049834	mg/kg	72.4		60 - 124		
gamma-BHC (Lindane)	BTI1470-BS1	LCS	0.0036864	0.0049834	mg/kg	74.0		46 - 107		
4,4'-DDT	BTI1470-BS1	LCS	0.0041555	0.0049834	mg/kg	83.4		40 - 148		
Dieldrin	BTI1470-BS1	LCS	0.0036841	0.0049834	mg/kg	73.9		56 - 130		
Endrin	BTI1470-BS1	LCS	0.0040801	0.0049834	mg/kg	81.9		61 - 131		
Heptachlor	BTI1470-BS1	LCS	0.0036817	0.0049834	mg/kg	73.9		58 - 130		
TCMX (Surrogate)	BTI1470-BS1	LCS	0.0055917	0.0099668	mg/kg	56.1		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1470-BS1	LCS	0.019115	0.024917	mg/kg	76.7		26 - 151		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1470	Used client sample: Y - Description: GP-6-15, 09/22/2010 17:25										
Aldrin	MS	1013287-23	ND	0.0047930	0.0049834	mg/kg		96.2		63 - 119	
	MSD	1013287-23	ND	0.0045907	0.0049669	mg/kg	4.0	92.4	20	63 - 119	
gamma-BHC (Lindane)	MS	1013287-23	ND	0.0047880	0.0049834	mg/kg		96.1		47 - 102	
	MSD	1013287-23	ND	0.0046844	0.0049669	mg/kg	1.9	94.3	30	47 - 102	
4,4'-DDT	MS	1013287-23	ND	0.0054259	0.0049834	mg/kg		109		32 - 158	
	MSD	1013287-23	ND	0.0050033	0.0049669	mg/kg	7.8	101	30	32 - 158	
Dieldrin	MS	1013287-23	ND	0.0049920	0.0049834	mg/kg		100		57 - 125	
	MSD	1013287-23	ND	0.0047103	0.0049669	mg/kg	5.5	94.8	20	57 - 125	
Endrin	MS	1013287-23	ND	0.0055645	0.0049834	mg/kg		112		61 - 130	
	MSD	1013287-23	ND	0.0052825	0.0049669	mg/kg	4.9	106	27	61 - 130	
Heptachlor	MS	1013287-23	ND	0.0048987	0.0049834	mg/kg		98.3		52 - 139	
	MSD	1013287-23	ND	0.0046745	0.0049669	mg/kg	4.4	94.1	30	52 - 139	
TCMX (Surrogate)	MS	1013287-23	ND	0.0072960	0.0099668	mg/kg		73.2		12 - 168	
	MSD	1013287-23	ND	0.0073911	0.0099338	mg/kg		74.4		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013287-23	ND	0.025976	0.024917	mg/kg		104		26 - 151	
	MSD	1013287-23	ND	0.026903	0.024834	mg/kg		108		26 - 151	

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Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0311						
Chloride	BTK0311-BLK1	ND	mg/kg	5.0	0.59	
Sulfate	BTK0311-BLK1	ND	mg/kg	10	2.1	

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Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0311										
Chloride	BTK0311-BS1	LCS	103.80	100.00	mg/kg	104		90 - 110		
Sulfate	BTK0311-BS1	LCS	99.097	100.00	mg/kg	99.1		90 - 110		

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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0311	Used client sample: Y - Description: Composite of SC-8-B,C,D,E, 09/22/2010 10:16										
Chloride	DUP	1013288-08	22.370	22.860		mg/kg	2.2		20		
	MS	1013288-08	22.370	1083.1	1010.1	mg/kg		105		80 - 120	
	MSD	1013288-08	22.370	1080.2	1010.1	mg/kg	0.3	105	20	80 - 120	
Sulfate	DUP	1013288-08	92.940	92.130		mg/kg	0.9		20		
	MS	1013288-08	92.940	1121.4	1010.1	mg/kg		102		80 - 120	
	MSD	1013288-08	92.940	1117.5	1010.1	mg/kg	0.4	101	20	80 - 120	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTK0448						
EC as NaCl (Salinity)	BTK0448-BLK1	ND	mg/L	1.0	1.0	

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AECOM
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Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTK0111										
Electrical Conductivity @ 25 C	BTK0111-BS1	LCS	307.40	303.00	umhos/cm	101		90 - 110		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Modified WET Test (STLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTK0111	Used client sample: Y - Description: Composite of SC-2-B,C,D,E, 09/21/2010 14:44										
Electrical Conductivity @ 25 C	DUP	1013213-04	198.00	202.80		umhos/cm	2.4		20		

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AECOM
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Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1566						
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1566										
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 11/08/2010 12:26
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
S05	The sample holding time was exceeded.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 09/28/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013352
Invoice ID: B087535

Enclosed are the results of analyses for samples received by the laboratory on 9/23/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

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Chain of Custody and Cooler Receipt Form for 1013352 Page 1 of 4

Chain of Custody Form

BC Laboratories, Inc.

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenue A
City, State, Zip: Concord, CA
Phone: 925 288 3772 Fax: 925 288 3577
Email Address: chad.roper@aecom.com
Work Order #: 10-1335 B

Project #:
Project Name: HECA
Global ID #:
Sampler(s): GAREN LOSTER

Page 1 of 1

Sample #	Description	Date Sampled	Time Sampled	Soil	OPP	OCP	TPH-EE	METALS	Phos/Herbs	SULFATE/Nitrate/GEN	POTASSIUM	Sample Matrix: Soil, Sludge, Drinking Water, Ground Water, Waste Water, Other	Turnaround # of work days*	Are there any tests with holding times less than or equal to 48 hours? Yes / No — Notes
SS-7	SEDIMENT SAMPLE	9/23/10	1440	X	X	X	X	X	X	X	X	X	2	
SS-2	SEDIMENT SAMPLE	9/23/10	1545	X	X	X	X	X	X	X	X	X	2	
Duplicate														
DUP-2	SEDIMENT SAMPLE (DUPLICATE)	9/23/10	[redacted]		A	A	X	X	X	X	X	X	2	
SS-1	SOIL SAMPLE	9/23/10	1625	X	X	X	X	X	X	X	X	X	2	
SS-6		9/23/10	17:00	X	X	X	X	X	X	X	X	X	2	
SS-5		9/23/10	16:50	X	X	X	X	X	X	X	X	X	2	

Comments:

CHK BY [illegible] DISTRIBUTION [illegible] SUB-OUT

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

1. Relinquished By: GAREN LOSTER Date 9/23/10 Time 1603
2. Relinquished By: Date 9/23/10 Time 1810
3. Relinquished By: Date Time

1. Received By: Date 9/23/10 Time 1810
2. Received By: Date Time
3. Received By: Date Time

System # (Needed for EDT)

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013352 Page 2 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 3

Submission #: 1013352

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: GJA Thermometer ID: 103

Temperature: A 4.9 °C / C 4.9 °C

Date/Time 9-23-10 1820

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK							A1			
40ml VOA VIAL	A4	A4	A4	A4	A4	A4				
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER					B	B				
8 OZ. JAR										
32 OZ. JAR		B	B		B	B	JNW 9/23			
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9-23-10 1829
A = Actual / C = Corrected

(R:\DOCS\WF60\LAB_DOCS\FORMS\SAMREC2.VFD)

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Chain of Custody and Cooler Receipt Form for 1013352 Page 3 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 Of 3

Submission #: 1013352

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging

Custody Seals Ice Chest ☑ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments: between samples & ice

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: 32oz Thermometer ID: 103

Temperature: A 16.7 °C / C 16.7 °C

Date/Time 9-23-10 1820

Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
500ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B									
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JKW Date/Time: 9-23-10 1829

A = Actual / C = Corrected

[S:\DOCS\WP98\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013352 Page 4 of 4

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 Of 3

Submission #:

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: SW 9/23

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: IR3

Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820

Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	1	1	1	1	1	1	1	1	1	1
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER				B						
8 OZ. JAR				8						
32 OZ. JAR										
SOIL SLEEVE				10W						
PCB VIAL				9128						
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JKW Date/Time: 9-23-10 1927

A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013352-01	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:40
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-7 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-02	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:45
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-2 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-03	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	Dup-2 Sediment Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-04	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:25
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-1 Soil Sample	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-05	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 17:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-6	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-06	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:50
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	SS-5	**Sample Matrix:**	Solids
	Sampled By:	Galen Cooter		
1013352-07	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	HECA	**Sample Depth:**	---
	Sampling Point:	TB	**Sample Matrix:**	Water
	Sampled By:	---		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND	V11	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	62.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	109	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:40	VH1	GC-1	1.007	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 15:24	cc1	GC-7	1.017	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0021**	**mg/kg**	**0.0054**	**0.0014**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00092	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00069	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00093	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	**0.0013**	**mg/kg**	**0.0054**	**0.0013**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0023	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00084	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0037	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013352-01	**Client Sample Name:**	HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 22:37	ADC	MS-V2	1.090	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**49**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	40.2	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 00:17	MWB	GC-13	0.997	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**210**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.79**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**510**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:19	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 12:52	CDR	SC-1	5	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-01 | **Client Sample Name:** HECA, SS-7 Sediment Sample, 9/23/2010 2:40:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**86**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**15**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**14**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.019**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.88**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.050**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**30**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**62**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3000**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:01	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:03	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	53.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	93.5	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:58	VH1	GC-1	2.034	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.020	0.0038	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.020	0.0028	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.020	0.0016	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.020	0.0044	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.020	0.0030	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.020	0.0012	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.020	0.012	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.020	0.0022	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.020	0.0016	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.020	0.011	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.020	0.0020	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.020	0.0022	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.020	0.0042	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.020	0.0028	EPA-8141	ND		1
Naled	ND	mg/kg	0.020	0.0034	EPA-8141	ND		1
Phorate	ND	mg/kg	0.020	0.0012	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.020	0.0032	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.020	0.0050	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.020	0.0020	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.020	0.0022	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	74.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 15:47	cc1	GC-7	2.020	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0018**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Bromochloromethane	ND	mg/kg	0.0050	0.00093	EPA-8260	ND	S08,Z1	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND	S08,Z1	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Chloroform	ND	mg/kg	0.0050	0.00064	EPA-8260	ND	S08,Z1	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Dibromochloromethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00082	EPA-8260	ND	S08,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00086	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00082	EPA-8260	ND	S08,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Ethylbenzene	**0.0029**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
p-Isopropyltoluene	**0.025**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND	S08,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND	S08,Z1	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Toluene	**0.048**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**S08,Z1**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND	S08,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND	S08,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00078	EPA-8260	ND	S08,Z1	1
Trichloroethene	**0.0019**	**mg/kg**	**0.0050**	**0.0011**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,2,4-Trimethylbenzene	**0.021**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
1,3,5-Trimethylbenzene	**0.0077**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**S08,Z1**	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
Total Xylenes	**0.015**	**mg/kg**	**0.010**	**0.0034**	**EPA-8260**	**ND**	**S08,Z1**	1
p- & m-Xylenes	**0.010**	**mg/kg**	**0.0050**	**0.0022**	**EPA-8260**	**ND**	**S08,Z1**	1
o-Xylene	**0.0047**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**J,S08,Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	86.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	84.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1-Ethyl-1-methylcyclopropane	**0.11**	**mg/kg**			**EPA-8260**		**S08,Z1**	1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 2-Butanone	0.050	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methyl-2-propanethiol	0.068	mg/kg			EPA-8260		S08,Z1	1
TIC: 2-Methylbutane	0.025	mg/kg			EPA-8260		S08,Z1	1
TIC: 4-Methyldecane	0.19	mg/kg			EPA-8260		S08,Z1	1
TIC: Acetone	0.075	mg/kg	0.020	0.012	EPA-8260		S08,Z1	1
TIC: Carbon disulfide	0.038	mg/kg			EPA-8260		S08,Z1	1
TIC: Methyl isobutyl ketone	0.042	mg/kg			EPA-8260		S08,Z1	1
TIC: n-Heptane	0.046	mg/kg			EPA-8260		S08,Z1	1
TIC: Pentane	0.063	mg/kg			EPA-8260		S08,Z1	1
TIC: trans, cis-1,2,4-Trimethylcyclohexane	0.18	mg/kg			EPA-8260		S08,Z1	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 15:58	ADC	MS-V2	1.010	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	3000	1400	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	3000	420	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	3000	360	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	6000	840	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	6000	2000	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**93000**	**mg/kg**	**15000**	**6000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 02:45	MWB	GC-13	300	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**140**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.44**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**1600**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:34	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:55	CDR	SC-1	5	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-02 | **Client Sample Name:** HECA, SS-2 Sediment Sample, 9/23/2010 3:45:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.6**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.7**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**63**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**22**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.053**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3500**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:03	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:05	MEV	CETAC1	0.977	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0050	0.00026	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0050	0.0014	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0050	0.0038	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0050	0.00076	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0050	0.0025	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.50	0.15	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0050	0.00063	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0050	0.00045	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0050	0.00031	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0050	0.00032	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0050	0.00086	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0050	0.00066	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0050	0.00035	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0050	0.00061	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0050	0.0026	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0050	0.0015	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0050	0.0013	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.50	0.074	EPA-8081	ND	A10	1
TCMX (Surrogate)	54.4	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	106	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 02:16	VH1	GC-1	9.901	BTI1586

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	80.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:10	cc1	GC-7	1.010	BTI1599

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0014**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND	S08,Z1	1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND	S08,Z1	1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND	S08,Z1	1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND	S08,Z1	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND	S08,Z1	1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND	S08,Z1	1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND	S08,Z1	1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND	S08,Z1	1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND	S08,Z1	1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND	S08,Z1	1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND	S08,Z1	1
Ethylbenzene	**0.0018**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**J,S08,Z1**	1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND	S08,Z1	1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
p-Isopropyltoluene	**0.017**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND	S08,Z1	1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND	S08,Z1	1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND	S08,Z1	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
Toluene	**0.046**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**S08,Z1**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND	S08,Z1	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND	S08,Z1	1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND	S08,Z1	1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND	S08,Z1	1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND	S08,Z1	1
1,2,4-Trimethylbenzene	**0.013**	**mg/kg**	**0.0050**	**0.0013**	**EPA-8260**	**ND**	**S08,Z1**	1
1,3,5-Trimethylbenzene	**0.0054**	**mg/kg**	**0.0050**	**0.0015**	**EPA-8260**	**ND**	**S08,Z1**	1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND	S08,Z1	1
Total Xylenes	**0.0088**	**mg/kg**	**0.010**	**0.0034**	**EPA-8260**	**ND**	**J,S08,Z1**	1
p- & m-Xylenes	**0.0057**	**mg/kg**	**0.0050**	**0.0022**	**EPA-8260**	**ND**	**S08,Z1**	1
o-Xylene	**0.0031**	**mg/kg**	**0.0050**	**0.0012**	**EPA-8260**	**ND**	**J,S08,Z1**	1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	87.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	78.7	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,2-Trimethylcyclohexane	**0.092**	**mg/kg**			**EPA-8260**		**S08,Z1**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 2-Butyl-1,1,3-trimethylcyclohexane	**0.13**	**mg/kg**			**EPA-8260**		**S08,Z1**	1
TIC: 2-Methyl-1-propene	**0.23**	**mg/kg**			**EPA-8260**		**S08,Z1**	1
TIC: 2-Methyl-2-propanethiol	**0.088**	**mg/kg**			**EPA-8260**		**S08,Z1**	1
TIC: 4-Methyldecane	**0.24**	**mg/kg**			**EPA-8260**		**S08,Z1**	1
TIC: Methanethiol	**0.090**	**mg/kg**			**EPA-8260**		**S08,Z1**	1
TIC: Pentane	**0.035**	**mg/kg**			**EPA-8260**		**S08,Z1**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 16:23	ADC	MS-V2	1	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	6000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	3000	1400	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	3000	420	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	3000	360	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	6000	840	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	**20000**	**mg/kg**	**6000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
TPH - WD-40	ND	mg/kg	3000	1500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	ND	mg/kg	15000	6000	Luft/FFP	ND	A01	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 11:44	EJB	GC-13	300	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**96**	**mg/kg**	**10**	**2.1**	**EPA-300.0**	**ND**		1
Nitrate as N	**0.41**	**mg/kg**	**1.0**	**0.26**	**EPA-300.0**	**ND**	**J**	1
Total Phosphorus	**1400**	**mg/kg**	**50**	**31**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 11:48	LD1	IC5	1	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:56	CDR	SC-1	5	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-03 | **Client Sample Name:** HECA, Dup-2 Sediment Sample, 9/23/2010 12:00:00AM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.9**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**5.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.6**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**17**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**4.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**51**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.049**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**14**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3400**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:05	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:07	MEV	CETAC1	0.962	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	**0.0078**	**mg/kg**	**0.0025**	**0.00038**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	**0.0062**	**mg/kg**	**0.0025**	**0.00032**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.020**	**mg/kg**	**0.0025**	**0.00022**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.0011**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	65.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	55.8	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 02:34	VH1	GC-1	4.983	BTI1586

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	32.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:32	cc1	GC-7	1.017	BTI1599

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0066	0.0012	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0066	0.00083	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0066	0.0024	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0066	0.0013	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0066	0.0022	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0066	0.0013	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0066	0.0024	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0066	0.0011	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1

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1220 Avenida Acaso
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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0066	0.0022	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.013	0.0031	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0066	0.00066	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0066	0.0018	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0066	0.0028	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0066	0.0026	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0066	0.0010	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0066	0.0014	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0066	0.0017	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0066	0.0020	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0066	0.0021	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.013	0.0045	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0066	0.0029	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0066	0.0016	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	126	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	91.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	80.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013352-04	**Client Sample Name:**	HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/23/10 23:54	ADC	MS-V2	1.310	BTI1347

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	250	100	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	250	100	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	100	25	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	100	25	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	50	23	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	50	7.0	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	50	6.0	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	100	32	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	50	25	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**140**	**mg/kg**	**250**	**100**	**Luft/FFP**	**ND**	**J,A01**	1
Tetracosane (Surrogate)	65.3	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 12:08	EJB	GC-13	5	BTI1613

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**26000**	**mg/kg**	**100**	**21**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**3600**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	2
Total Phosphorus	**9200**	**mg/kg**	**400**	**250**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 12:02	LD1	IC5	10	BTI1519
2	EPA-300.0	09/24/10	09/24/10 17:19	LD1	IC5	50	BTI1519
3	EPA-365.4	09/24/10	09/24/10 13:21	CDR	SC-1	40	BTI1539

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-04 | **Client Sample Name:** HECA, SS-1 Soil Sample, 9/23/2010 4:25:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.1**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**63**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**7.4**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**31**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**46**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.027**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**19**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**56**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**230**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**8500**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:07	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:14	MEV	CETAC1	0.962	BTI1555

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.0020**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	**0.00082**	**mg/kg**	**0.0010**	**0.00013**	**EPA-8081**	**ND**	**J,A10,V11**	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10,V11	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	48.2	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	79.5	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 03:47	VH1	GC-1	2.034	BTI1586

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	79.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 16:55	cc1	GC-7	1.017	BTI1599

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0053	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0053	0.00089	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0053	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0053	0.0010	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0053	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0053	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0053	0.00090	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0053	0.00086	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1

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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0053	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0025	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0053	0.00053	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0053	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0053	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0053	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0053	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0053	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0053	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0053	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0053	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0053	0.0023	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0053	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 00:19	ADC	MS-V2	1.060	BTI1347

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**26**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**	**J**	1
Tetracosane (Surrogate)	68.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 11:19	EJB	GC-13	1	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**9700**	**mg/kg**	**500**	**100**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**5400**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	1
Total Phosphorus	**2300**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 16:22	LD1	IC5	50	BTI1519
2	EPA-365.4	09/24/10	09/24/10 13:52	CDR	SC-1	20	BTI1539

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-05 | **Client Sample Name:** HECA, SS-6, 9/23/2010 5:00:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**3.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**44**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.27**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.96**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**11**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**8.6**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.012**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**11**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**84**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3000**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:08	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 12:52	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.010	0.00052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.010	0.0028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.010	0.0076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.010	0.0015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.010	0.0050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	1.0	0.30	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.010	0.0013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.010	0.00090	EPA-8081	ND	A10	1
4,4'-DDT	**0.0083**	**mg/kg**	**0.010**	**0.00062**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	ND	mg/kg	0.010	0.00064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.010	0.0017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.010	0.0013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.010	0.0026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.010	0.00070	EPA-8081	ND	A09,A10	1
Endrin aldehyde	ND	mg/kg	0.010	0.0012	EPA-8081	ND	A10,V11	1
Heptachlor	ND	mg/kg	0.010	0.0052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.010	0.0030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.010	0.0026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	1.0	0.15	EPA-8081	ND	A10	1
TCMX (Surrogate)	46.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	81.8	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 04:05	VH1	GC-1	20	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND	V11	1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	57.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/26/10 17:17	cc1	GC-7	4.983	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0017**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013352-06	**Client Sample Name:**	HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 00:45	ADC	MS-V2	0.840	BTI1347

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	300	120	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	300	120	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	120	30	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	120	30	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	60	28	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	60	8.4	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	60	7.2	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	120	17	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	120	39	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	60	30	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**1200**	**mg/kg**	**300**	**120**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 14:37	EJB	GC-13	6	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Sulfate	**6200**	**mg/kg**	**50**	**10**	**EPA-300.0**	**ND**	**A01**	1
Nitrate as N	**4500**	**mg/kg**	**50**	**13**	**EPA-300.0**	**ND**	**A01**	2
Total Phosphorus	**4600**	**mg/kg**	**200**	**120**	**EPA-365.4**	**ND**	**A01**	3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	09/24/10	09/24/10 12:46	LD1	IC5	5	BTI1519
2	EPA-300.0	09/24/10	09/24/10 17:34	LD1	IC5	50	BTI1519
3	EPA-365.4	09/24/10	09/24/10 13:13	CDR	SC-1	20	BTI1539

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013352-06 | **Client Sample Name:** HECA, SS-5, 9/23/2010 4:50:00PM, Galen Cooter

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**76**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.41**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**17**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**5.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.024**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**34**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**83**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1
Potassium	**3200**	**mg/kg**	**50**	**5.0**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:10	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:16	MEV	CETAC1	0.933	BTI1555

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013352-07 | **Client Sample Name:** HECA, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013352-07 | **Client Sample Name:** HECA, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.8	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	1013352-07	**Client Sample Name:**	HECA, TB, 9/23/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/24/10 13:22	MGC	MS-V5	1	BTI1540

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1586						
Aldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1586-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1586-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1586-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1586-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1586-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1586-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1586-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1586-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1586-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1586-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1586-BLK1	64.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1586-BLK1	113	%	26 - 151 (LCL - UCL)		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1586										
Aldrin	BTI1586-BS1	LCS	0.0051784	0.0049834	mg/kg	104		60 - 124		
gamma-BHC (Lindane)	BTI1586-BS1	LCS	0.0051621	0.0049834	mg/kg	104		46 - 107		
4,4'-DDT	BTI1586-BS1	LCS	0.0057216	0.0049834	mg/kg	115		40 - 148		
Dieldrin	BTI1586-BS1	LCS	0.0052930	0.0049834	mg/kg	106		56 - 130		
Endrin	BTI1586-BS1	LCS	0.0058944	0.0049834	mg/kg	118		61 - 131		
Heptachlor	BTI1586-BS1	LCS	0.0052877	0.0049834	mg/kg	106		58 - 130		
TCMX (Surrogate)	BTI1586-BS1	LCS	0.0072794	0.0099668	mg/kg	73.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1586-BS1	LCS	0.029195	0.024917	mg/kg	117		26 - 151		

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1220 Avenida Acaso
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Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1586	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Aldrin	MS	1013353-25	ND	0.0020775	0.0049669	mg/kg		41.8		63 - 119	Q03
	MSD	1013353-25	ND	0.0015380	0.0049180	mg/kg	28.9	31.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-25	ND	0.0028245	0.0049669	mg/kg		56.9		47 - 102	
	MSD	1013353-25	ND	0.0021197	0.0049180	mg/kg	27.5	43.1	30	47 - 102	Q03
4,4'-DDT	MS	1013353-25	ND	0.0023752	0.0049669	mg/kg		47.8		32 - 158	
	MSD	1013353-25	ND	0.0014216	0.0049180	mg/kg	49.3	28.9	30	32 - 158	Q03
Dieldrin	MS	1013353-25	ND	0.0023921	0.0049669	mg/kg		48.2		57 - 125	Q03
	MSD	1013353-25	ND	0.0019193	0.0049180	mg/kg	21.0	39.0	20	57 - 125	Q03
Endrin	MS	1013353-25	ND	0.0027523	0.0049669	mg/kg		55.4		61 - 130	Q03
	MSD	1013353-25	ND	0.0021859	0.0049180	mg/kg	22.0	44.4	27	61 - 130	Q03
Heptachlor	MS	1013353-25	ND	0.0023308	0.0049669	mg/kg		46.9		52 - 139	Q03
	MSD	1013353-25	ND	0.0016489	0.0049180	mg/kg	33.3	33.5	30	52 - 139	Q03
TCMX (Surrogate)	MS	1013353-25	ND	0.0033381	0.0099338	mg/kg		33.6		12 - 168	
	MSD	1013353-25	ND	0.0025393	0.0098361	mg/kg		25.8		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-25	ND	0.014076	0.024834	mg/kg		56.7		26 - 151	
	MSD	1013353-25	ND	0.0094797	0.024590	mg/kg		38.6		26 - 151	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1599						
Azinphos methyl	BTI1599-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1599-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1599-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1599-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1599-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1599-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1599-BLK1	100	%	9 - 105 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1599										
Bolstar	BTI1599-BS1	LCS	0.024917	0.026578	mg/kg	93.8		9 - 146		
Chlorpyrifos	BTI1599-BS1	LCS	0.022259	0.026578	mg/kg	83.8		68 - 151		
Diazinon	BTI1599-BS1	LCS	0.010797	0.026578	mg/kg	40.6		38 - 105		
Methyl parathion	BTI1599-BS1	LCS	0.021595	0.026578	mg/kg	81.3		70 - 130		
Mevinphos	BTI1599-BS1	LCS	0.015282	0.026578	mg/kg	57.5		48 - 135		
Ronnel (Fenchlorphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		66 - 164		
Triphenylphosphate (Surrogate)	BTI1599-BS1	LCS	0.080399	0.083056	mg/kg	96.8		9 - 105		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1599	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Bolstar	MS	1013353-25	ND	0.024257	0.026403	mg/kg		91.9		1 - 167	
	MSD	1013353-25	ND	0.019802	0.026403	mg/kg	20.2	75.0	30	1 - 167	
Chlorpyrifos	MS	1013353-25	ND	0.017987	0.026403	mg/kg		68.1		41 - 167	
	MSD	1013353-25	ND	0.016172	0.026403	mg/kg	10.6	61.3	20	41 - 167	
Diazinon	MS	1013353-25	ND	0.020132	0.026403	mg/kg		76.2		31 - 97	
	MSD	1013353-25	ND	0.016997	0.026403	mg/kg	16.9	64.4	30	31 - 97	
Methyl parathion	MS	1013353-25	ND	0.019472	0.026403	mg/kg		73.8		41 - 159	
	MSD	1013353-25	ND	0.016667	0.026403	mg/kg	15.5	63.1	20	41 - 159	
Mevinphos	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		35 - 136	
	MSD	1013353-25	ND	0.015677	0.026403	mg/kg	20.8	59.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-25	ND	0.017822	0.026403	mg/kg		67.5		34 - 143	
	MSD	1013353-25	ND	0.015512	0.026403	mg/kg	13.9	58.8	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		7 - 209	
	MSD	1013353-25	ND	0.016007	0.026403	mg/kg	18.7	60.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-25	ND	0.074752	0.082508	mg/kg		90.6		9 - 105	
	MSD	1013353-25	ND	0.065182	0.082508	mg/kg		79.0		9 - 105	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1540						
Benzene	BTI1540-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1540-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1540-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1540-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1540-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1540-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1540-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1540-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1540-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.14	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1540						
trans-1,3-Dichloropropene	BTI1540-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1540-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1540-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1540-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1540-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1540-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1540-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1540-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1540-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1540-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1540-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1540-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1540-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1540-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1540-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1540-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1540-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1540-BLK1	99.5	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1540-BLK1	98.7	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1540-BLK1	94.9	%	86 - 115 (LCL - UCL)		

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1540										
Benzene	BTI1540-BS1	LCS	23.050	25.000	ug/L	92.2		70 - 130		
Bromodichloromethane	BTI1540-BS1	LCS	23.930	25.000	ug/L	95.7		70 - 130		
Chlorobenzene	BTI1540-BS1	LCS	24.110	25.000	ug/L	96.4		70 - 130		
Chloroethane	BTI1540-BS1	LCS	26.200	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	BTI1540-BS1	LCS	24.740	25.000	ug/L	99.0		70 - 130		
1,1-Dichloroethane	BTI1540-BS1	LCS	26.590	25.000	ug/L	106		70 - 130		
1,1-Dichloroethene	BTI1540-BS1	LCS	25.090	25.000	ug/L	100		70 - 130		
Toluene	BTI1540-BS1	LCS	23.770	25.000	ug/L	95.1		70 - 130		
Trichloroethene	BTI1540-BS1	LCS	25.260	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1540-BS1	LCS	9.8600	10.000	ug/L	98.6		76 - 114		
Toluene-d8 (Surrogate)	BTI1540-BS1	LCS	9.7300	10.000	ug/L	97.3		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1540-BS1	LCS	9.8400	10.000	ug/L	98.4		86 - 115		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1540	Used client sample: N										
Benzene	MS	1013347-02	ND	24.200	25.000	ug/L		96.8		70 - 130	
	MSD	1013347-02	ND	24.150	25.000	ug/L	0.2	96.6	20	70 - 130	
Bromodichloromethane	MS	1013347-02	ND	26.280	25.000	ug/L		105		70 - 130	
	MSD	1013347-02	ND	25.300	25.000	ug/L	3.8	101	20	70 - 130	
Chlorobenzene	MS	1013347-02	ND	25.740	25.000	ug/L		103		70 - 130	
	MSD	1013347-02	ND	25.330	25.000	ug/L	1.6	101	20	70 - 130	
Chloroethane	MS	1013347-02	ND	27.280	25.000	ug/L		109		70 - 130	
	MSD	1013347-02	ND	26.680	25.000	ug/L	2.2	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1013347-02	ND	26.620	25.000	ug/L		106		70 - 130	
	MSD	1013347-02	ND	25.820	25.000	ug/L	3.1	103	20	70 - 130	
1,1-Dichloroethane	MS	1013347-02	ND	28.020	25.000	ug/L		112		70 - 130	
	MSD	1013347-02	ND	27.790	25.000	ug/L	0.8	111	20	70 - 130	
1,1-Dichloroethene	MS	1013347-02	ND	26.360	25.000	ug/L		105		70 - 130	
	MSD	1013347-02	ND	26.030	25.000	ug/L	1.3	104	20	70 - 130	
Toluene	MS	1013347-02	ND	25.800	25.000	ug/L		103		70 - 130	
	MSD	1013347-02	ND	25.200	25.000	ug/L	2.4	101	20	70 - 130	
Trichloroethene	MS	1013347-02	ND	26.770	25.000	ug/L		107		70 - 130	
	MSD	1013347-02	ND	25.710	25.000	ug/L	4.0	103	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013347-02	ND	9.4900	10.000	ug/L		94.9		76 - 114	
	MSD	1013347-02	ND	9.6200	10.000	ug/L		96.2		76 - 114	
Toluene-d8 (Surrogate)	MS	1013347-02	ND	9.9100	10.000	ug/L		99.1		88 - 110	
	MSD	1013347-02	ND	9.7800	10.000	ug/L		97.8		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013347-02	ND	9.3600	10.000	ug/L		93.6		86 - 115	
	MSD	1013347-02	ND	9.8400	10.000	ug/L		98.4		86 - 115	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
Benzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1347-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1347						
trans-1,3-Dichloropropene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1347-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1347-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1347-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1347-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1347-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1347-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BLK1	98.1	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1347-BLK1	99.2	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1347-BLK1	98.2	%	74 - 121 (LCL - UCL)		

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Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1347										
Benzene	BTI1347-BS1	LCS	0.12403	0.12500	mg/kg	99.2		70 - 130		
Bromodichloromethane	BTI1347-BS1	LCS	0.12230	0.12500	mg/kg	97.8		70 - 130		
Chlorobenzene	BTI1347-BS1	LCS	0.13179	0.12500	mg/kg	105		70 - 130		
Chloroethane	BTI1347-BS1	LCS	0.12402	0.12500	mg/kg	99.2		70 - 130		
1,4-Dichlorobenzene	BTI1347-BS1	LCS	0.12969	0.12500	mg/kg	104		70 - 130		
1,1-Dichloroethane	BTI1347-BS1	LCS	0.12574	0.12500	mg/kg	101		70 - 130		
1,1-Dichloroethene	BTI1347-BS1	LCS	0.12240	0.12500	mg/kg	97.9		70 - 130		
Toluene	BTI1347-BS1	LCS	0.12592	0.12500	mg/kg	101		70 - 130		
Trichloroethene	BTI1347-BS1	LCS	0.12949	0.12500	mg/kg	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1347-BS1	LCS	0.048673	0.050000	mg/kg	97.3		70 - 121		
Toluene-d8 (Surrogate)	BTI1347-BS1	LCS	0.049782	0.050000	mg/kg	99.6		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1347-BS1	LCS	0.050312	0.050000	mg/kg	101		74 - 121		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1347	Used client sample: N										
Benzene	MS	1011454-83	ND	0.12337	0.12500	mg/kg		98.7		70 - 130	
	MSD	1011454-83	ND	0.13141	0.12500	mg/kg	6.3	105	20	70 - 130	
Bromodichloromethane	MS	1011454-83	ND	0.12205	0.12500	mg/kg		97.6		70 - 130	
	MSD	1011454-83	ND	0.12854	0.12500	mg/kg	5.2	103	20	70 - 130	
Chlorobenzene	MS	1011454-83	ND	0.12847	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13403	0.12500	mg/kg	4.2	107	20	70 - 130	
Chloroethane	MS	1011454-83	ND	0.12387	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13379	0.12500	mg/kg	7.7	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-83	ND	0.12925	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13518	0.12500	mg/kg	4.5	108	20	70 - 130	
1,1-Dichloroethane	MS	1011454-83	ND	0.12382	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13500	0.12500	mg/kg	8.6	108	20	70 - 130	
1,1-Dichloroethene	MS	1011454-83	ND	0.12077	0.12500	mg/kg		96.6		70 - 130	
	MSD	1011454-83	ND	0.13396	0.12500	mg/kg	10.4	107	20	70 - 130	
Toluene	MS	1011454-83	ND	0.12390	0.12500	mg/kg		99.1		70 - 130	
	MSD	1011454-83	ND	0.13119	0.12500	mg/kg	5.7	105	20	70 - 130	
Trichloroethene	MS	1011454-83	ND	0.12869	0.12500	mg/kg		103		70 - 130	
	MSD	1011454-83	ND	0.13649	0.12500	mg/kg	5.9	109	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-83	ND	0.049376	0.050000	mg/kg		98.8		70 - 121	
	MSD	1011454-83	ND	0.050907	0.050000	mg/kg		102		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-83	ND	0.049513	0.050000	mg/kg		99.0		81 - 117	
	MSD	1011454-83	ND	0.049643	0.050000	mg/kg		99.3		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-83	ND	0.049088	0.050000	mg/kg		98.2		74 - 121	
	MSD	1011454-83	ND	0.050501	0.050000	mg/kg		101		74 - 121	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1613						
TPH - Light Naptha	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1613-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1613-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1613-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1613-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1613-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1613-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1613-BLK1	98.9	%	20 - 145 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1613										
TPH - Diesel (FFP)	BTI1613-BS1	LCS	80.925	82.781	mg/kg	97.8		64 - 124		
Tetracosane (Surrogate)	BTI1613-BS1	LCS	3.5637	3.3113	mg/kg	108		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1613	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
TPH - Diesel (FFP)	MS	1013353-25	ND	65.153	83.056	mg/kg		78.4		52 - 131	
	MSD	1013353-25	ND	51.755	83.056	mg/kg	22.9	62.3	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-25	ND	3.3909	3.3223	mg/kg		102		20 - 145	
	MSD	1013353-25	ND	3.0128	3.3223	mg/kg		90.7		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1519						
Sulfate	BTI1519-BLK1	ND	mg/kg	10	2.1	
Nitrate as N	BTI1519-BLK1	ND	mg/kg	1.0	0.26	
QC Batch ID: BTI1539						
Total Phosphorus	BTI1539-BLK1	ND	mg/kg	10	6.2	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1519										
Sulfate	BTI1519-BS1	LCS	99.802	100.00	mg/kg	99.8		90 - 110		
Nitrate as N	BTI1519-BS1	LCS	4.9510	5.0000	mg/kg	99.0		90 - 110		
QC Batch ID: BTI1539										
Total Phosphorus	BTI1539-BS1	LCS	202.84	200.00	mg/kg	101		85 - 115		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Chemical Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1519	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Sulfate	DUP	013352-05RE1	9673.0	9761.5		mg/kg	0.9		20		
	MS	013352-05RE1	9673.0	61914	50505	mg/kg		103		80 - 120	
	MSD	013352-05RE1	9673.0	62177	50505	mg/kg	0.5	104	20	80 - 120	
Nitrate as N	DUP	013352-05RE1	5374.5	5482.0		mg/kg	2.0		20		
	MS	013352-05RE1	5374.5	7846.0	2525.3	mg/kg		97.9		80 - 120	
	MSD	013352-05RE1	5374.5	7859.1	2525.3	mg/kg	0.5	98.4	20	80 - 120	
QC Batch ID: BTI1539	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Total Phosphorus	DUP	1013352-05	2334.4	2988.0		mg/kg	24.6		20		Q01
	MS	1013352-05	2334.4	2315.6	200.00	mg/kg		-9.4		80 - 120	A03
	MSD	1013352-05	2334.4	2345.6	200.00	mg/kg	789	5.6	20	80 - 120	A03

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1555						
Mercury	BTI1555-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1566						
Antimony	BTI1566-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1566-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1566-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1566-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1566-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1566-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1566-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1566-BLK1	0.35796	mg/kg	2.5	0.25	J
Potassium	BTI1566-BLK1	ND	mg/kg	50	5.0	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1555										
Mercury	BTI1555-BS1	LCS	1.4542	1.5000	mg/kg	96.9		75 - 125		
QC Batch ID: BTI1566										
Antimony	BTI1566-BS1	LCS	100.65	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		
Barium	BTI1566-BS1	LCS	102.58	100.00	mg/kg	103		75 - 125		
Beryllium	BTI1566-BS1	LCS	10.399	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1566-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125		
Chromium	BTI1566-BS1	LCS	103.19	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1566-BS1	LCS	104.14	100.00	mg/kg	104		75 - 125		
Copper	BTI1566-BS1	LCS	100.44	100.00	mg/kg	100		75 - 125		
Lead	BTI1566-BS1	LCS	106.62	100.00	mg/kg	107		75 - 125		
Molybdenum	BTI1566-BS1	LCS	102.32	100.00	mg/kg	102		75 - 125		
Nickel	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Selenium	BTI1566-BS1	LCS	9.5899	10.000	mg/kg	95.9		75 - 125		
Silver	BTI1566-BS1	LCS	9.3760	10.000	mg/kg	93.8		75 - 125		
Thallium	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1566-BS1	LCS	108.14	100.00	mg/kg	108		75 - 125		
Zinc	BTI1566-BS1	LCS	103.41	100.00	mg/kg	103		75 - 125		
Potassium	BTI1566-BS1	LCS	480.56	500.00	mg/kg	96.1		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1555	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Mercury	DUP	1013352-05	0.012059	0.015000		mg/kg	21.7		20		J,A02
	MS	1013352-05	0.012059	0.73838	0.73529	mg/kg		98.8		85 - 115	
	MSD	1013352-05	0.012059	0.73985	0.73529	mg/kg	0.2	99.0	20	85 - 115	
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Antimony	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	29.026	100.00	mg/kg		29.0		16 - 119	
	MSD	1013288-01	ND	29.067	100.00	mg/kg	0.1	29.1	20	16 - 119	
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	
Barium	DUP	1013288-01	147.86	143.51		mg/kg	3.0		20		
	MS	1013288-01	147.86	240.61	100.00	mg/kg		92.8		75 - 125	
	MSD	1013288-01	147.86	241.18	100.00	mg/kg	0.6	93.3	20	75 - 125	
Beryllium	DUP	1013288-01	0.89421	0.88155		mg/kg	1.4		20		
	MS	1013288-01	0.89421	10.702	10.000	mg/kg		98.1		75 - 125	
	MSD	1013288-01	0.89421	10.457	10.000	mg/kg	2.5	95.6	20	75 - 125	
Cadmium	DUP	1013288-01	0.33235	0.29947		mg/kg	10.4		20		J
	MS	1013288-01	0.33235	9.8579	10.000	mg/kg		95.3		75 - 125	
	MSD	1013288-01	0.33235	9.6586	10.000	mg/kg	2.1	93.3	20	75 - 125	
Chromium	DUP	1013288-01	20.175	20.542		mg/kg	1.8		20		
	MS	1013288-01	20.175	115.10	100.00	mg/kg		94.9		75 - 125	
	MSD	1013288-01	20.175	112.86	100.00	mg/kg	2.4	92.7	20	75 - 125	
Cobalt	DUP	1013288-01	7.6614	7.5462		mg/kg	1.5		20		
	MS	1013288-01	7.6614	99.201	100.00	mg/kg		91.5		75 - 125	
	MSD	1013288-01	7.6614	97.365	100.00	mg/kg	2.0	89.7	20	75 - 125	
Copper	DUP	1013288-01	19.628	19.377		mg/kg	1.3		20		
	MS	1013288-01	19.628	115.66	100.00	mg/kg		96.0		75 - 125	
	MSD	1013288-01	19.628	113.30	100.00	mg/kg	2.5	93.7	20	75 - 125	
Lead	DUP	1013288-01	7.2603	7.1235		mg/kg	1.9		20		
	MS	1013288-01	7.2603	100.72	100.00	mg/kg		93.5		75 - 125	
	MSD	1013288-01	7.2603	99.382	100.00	mg/kg	1.4	92.1	20	75 - 125	
Molybdenum	DUP	1013288-01	1.1281	1.1938		mg/kg	5.7		20		J
	MS	1013288-01	1.1281	84.626	100.00	mg/kg		83.5		75 - 125	
	MSD	1013288-01	1.1281	82.470	100.00	mg/kg	2.6	81.3	20	75 - 125	
Nickel	DUP	1013288-01	14.944	14.876		mg/kg	0.5		20		
	MS	1013288-01	14.944	109.43	100.00	mg/kg		94.5		75 - 125	
	MSD	1013288-01	14.944	107.64	100.00	mg/kg	1.9	92.7	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Selenium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	7.6892	10.000	mg/kg		76.9		75 - 125	
	MSD	1013288-01	ND	8.7582	10.000	mg/kg	13.0	87.6	20	75 - 125	
Silver	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	8.5742	10.000	mg/kg		85.7		75 - 125	
	MSD	1013288-01	ND	8.3853	10.000	mg/kg	2.2	83.9	20	75 - 125	
Thallium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	91.857	100.00	mg/kg		91.9		75 - 125	
	MSD	1013288-01	ND	89.610	100.00	mg/kg	2.5	89.6	20	75 - 125	
Vanadium	DUP	1013288-01	51.833	51.455		mg/kg	0.7		20		
	MS	1013288-01	51.833	154.17	100.00	mg/kg		102		75 - 125	
	MSD	1013288-01	51.833	151.40	100.00	mg/kg	2.7	99.6	20	75 - 125	
Zinc	DUP	1013288-01	85.886	84.545		mg/kg	1.6		20		
	MS	1013288-01	85.886	177.25	100.00	mg/kg		91.4		75 - 125	
	MSD	1013288-01	85.886	174.57	100.00	mg/kg	3.0	88.7	20	75 - 125	
Potassium	DUP	1013288-01	5172.8	5146.4		mg/kg	0.5		20		
	MS	1013288-01	5172.8	6025.1	500.00	mg/kg		170		75 - 125	A03
	MSD	1013288-01	5172.8	5825.3	500.00	mg/kg	26.5	131	20	75 - 125	A03,Q02

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:20
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A03	The sample concentration is more than 4 times the spike level.
A09	PQL's were raised due to high concentration of target analytes requiring sample dilution.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
Q01	Sample precision is not within the control limits.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S08	The internal standard on the sample was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.
Z1	Sample was analysed twice and both times internal standards were low.

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BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 09/28/2010

Chad Roper

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

RE: Hydrogen Energy California
BC Work Order: 1013353
Invoice ID: B087570

Enclosed are the results of analyses for samples received by the laboratory on 9/23/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Tina Green
Client Services Manager

Authorized Signature

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

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Chain of Custody and Cooler Receipt Form for 1013353 Page 1 of 13

BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 3

Report To
Client: AECOM
Attn: Chad Roper
Street Address: 220 Arnold Rd
City, State, Zip: Camarillo CA
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@aecom.com
Work Order #: 10-12353

Project #:
Project Name: Hydrogen Energy
Global ID #:
Sampler(s): Tom Shoaf

Analysis Requested

Comments:

Sample #	Description	Date Sampled	Time Sampled	8260B VOCs	8260B TPH as Gas/BTEX	8015M TPH-D	8081 OCPs	8141 OPPs	6010 Lead	6010 THC as Gas/BTEX	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*
1	GP-5-5	9/23/10	8:40	X	X	X	X	X		X	X						2
2	GP-5-10	9/23/10	8:52	X	X	X	X	X		X	X						2
3	GP-5-15	9/23/10	8:58	X	X	X	X	X		X	X						2
4	DUPE-4	9/23/10		X	X	X	X	X		X	X						2
5	GP-18-0.5	9/23/10	9:13	X	X	X	X	X		X	X						2
6	GP-18-2	9/23/10	9:20	X	X	X	X	X		X	X						2
7	GP-18-5	9/23/10	9:40	X	X	X	X	X		X	X						2
8	GP-2-5	9/23/10	10:05		X	X					X						2
9	GP-2-10	9/23/10	10:15	X			X	X			X						2
10	GP-2-15	9/23/10	10:30	X			X	X			X						2
11	GP-1-5	9/23/10	10:55		X	X					X						2
12	GP-1-10	9/23/10	11:05	X			X	X			X						2
13	GP-1-15	9/23/10	11:20	X			X	X			X						2
											X						2

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Notes

CHK BY

DISTRIBUTION
JKP SUM MRTL RLP
SUB-OUT ☐

Billing
☐ Same as above
Client:
Address:
City: State: Zip:
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

	Relinquished By	Date	Time	Received By	Date	Time
1.		9-23-10	1810		9-23-10	1812
2.						
3.						

System # (Needed for EDT)

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013353 Page 2 of 13

Chain of Custody Form

BC Laboratories, Inc.

Page 2 of 3

Report To: Client: AECOM | Project #:
Attn: Chad Roper | Project Name: Hydrogen Energy CA
Street Address: 1220 Avenida Acaso | Global ID #:
City, State, Zip: Camarillo CA | Sampler(s): Tom Shook
Phone: | Fax:
Email Address:
Work Order #: 10-133353

Comments: See Notes for Hold

Please check boxes where analysis is requested.

Sample #	Description	Date Sampled	Time Sampled	Sample Matrix: Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Analysis Requested: 8015M TPH 22 ppm	8015M TPH ppm	6010 7471 22 ppm	8141 OPPs	8260 VOC	Turnaround # of work days*	Notes
14	GP-21-0.5	9/23/10	12:30	X						X	X	X	X	X	7	GP-15-5 Hold
15	GP-21-2	9/23/10	12:45	X						X	X	X	X	X	7	
16	GP-21-5	9/23/10	12:55	X						X	X	X	X	X	7	GP-16-5 Hold
17	GP-15-0.5	9/23/10	13:05	X						X	X	X	X	X	7	
18	GP-15-2	9/23/10	13:15	X						X	X	X	X	X	7	GP-20-5 Hold
19	GP-15-5	9/23/10	13:25	X						X	X	X	X	X	7	
20	GP-16-0.5	9/23/10	14:20	X						X	X	X	X	X	7	GP-21-5 Hold
21	GP-16-2	9/23/10	14:30	X						X	X	X	X	X	7	
22	GP-16-5	9/23/10	14:40	X						X	X	X	X	X	7	
23	GP-20-0.5	9/23/10	15:10	X						X	X	X	X	X	7	
24	GP-20-2	9/23/10	15:15	X						X	X	X	X	X	2	
25	GP-20-5	9/23/10	15:20	X						X	X	X	X	X	2	

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Billing: ☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

	1. Relinquished By	Date	Time	1. Received By	Date	Time
	Tom Shook	9-23-10	18:00		9/23/10	1810
	2. Relinquished By	Date	Time	2. Received By	Date	Time
	3. Relinquished By	Date	Time	3. Received By	Date	Time

System # (Needed for EDT)

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013353 Page 3 of 13

BC Laboratories, Inc.

Chain of Custody Form

Page 3 of 3

Report To:
Client: AECOM
Attn: Chad Roper
Street Address: 1220 Avenida Acaso
City, State, Zip: Camarillo CA
Phone: 805 388 3775 Fax: 805 388 3577
Email Address: chad.roper@AECOM.com
Work Order #: 0-133553

Project #:
Project Name: Hydrogen Energy
Global ID #:
Sampler(s): Tom Shook

Analysis Requested

Please refer to the back of this page for possible analytes and methods.

Sample #	Description	Date Sampled	Time Sampled	Soil	Sludge	Drinking Water	Ground Water	Waste Water	Other	Turnaround # of work days*
-20	GP-14-0.5	9/23/10	15:55	X						2
-21	GP-11-2	9/23/10	16:00	X						2
-22	GP-14-5	9/23/10	16:10	X						2

Comments: See Notes for Hold

Are there any tests with holding times less than or equal to 48 hours? ☐ Yes ☐ No

* Standard Turnaround = 10 work days

Notes: Hold on GP-14-5

Billing
☐ Same as above
Client:
Address:
City: State Zip
Attn:
PO#:

EDF Required? ☐ Yes ☐ No
Send Copy to State of CA? (EDT) ☐ Yes ☐ No

Global ID (Needed for EDF)

	Relinquished By	Date	Time	Received By
1.	Tom	9-23-10	19:18	
2.				
3.				

System # (Needed for EDT)

	Received By	Date	Time
1.		9/23/10	810
2.			
3.			

BC Laboratories, Inc. – 4100 Atlas Ct. – Bakersfield, CA 93308 – 661.327.4911 – Fax: 661.327.1918 – www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1013353 Page 4 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 1 Of 10

Submission #: 1013353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: JW 9/23

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103

Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820

Analyst Init JW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	AH	AM	AM	AM	AM	AM	AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:_____
Sample Numbering Completed By: JW Date/Time: 9-23-10 1929
A = Actual / C = Corrected

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

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Chain of Custody and Cooler Receipt Form for 1013353 Page 5 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 2 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: WWa123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103

Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1820

Analyst Init JW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2ea. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
P1A PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER				B	B	B	B			
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE	B	B	B					B	B	B
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JW Date/Time: 9-23-10 1929

A = Actual / C = Corrected

[N:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013353 Page 6 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 3 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: ice not touching samples

Custody Seals: Ice Chest ☑ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VCQ Thermometer ID: 103

Temperature: A 13.4 °C / C 13.4 °C

Date/Time 9-23-10 1820

Analyst Init JMM

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	1	1	1	AM	AM	AM	AM	AM	AM	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JMM Date/Time: 9-23-10 1824
A = Actual / C = Corrected

[N:\DOCS\WF60\LAB_DOCS\FORMS\EAMREC2.VIEW]

Chain of Custody and Cooler Receipt Form for 1013353 Page 7 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 4 Of 10

Submission #: 10-13353

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: 1W4123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 1W3

Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820

Analyst Init: JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A/4	A/4	A/4	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JDW Date/Time: 9-23-10 1925

A = Actual / C = Corrected

[P:\DOCS\WP8\LAB_DOCS\FORMS\SAMPREC2.WPD]

Chain of Custody and Cooler Receipt Form for 1013353 Page 8 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 5 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals: Ice Chest ☑ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: WO#123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103

Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1820

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
50 ml VOA VIAL- 504										
QT EPA 508/608/8050										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE pe	B	B	B							
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JNW Date/Time: 9-23-10 1929
A = Actual / C = Corrected

(H:\DOCS\WP8\LAB_DOCS\FORMS\SAMREC2.VIF6)

Chain of Custody and Cooler Receipt Form for 1013353 Page 9 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 9 Of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments: between samples & ice

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 32oz jar Thermometer ID: 103

Temperature: A 16.7 °C / C 16.7 °C

Date/Time 9-23-10 1820

Analyst Init: JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M				B	B	B	B		B	
QT AMBER										
8 OZ. JAR								B		B
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JKW Date/Time: 9-23-10 1829
A = Actual / C = Corrected

[H:\DOCS\WP50\LAB_DOCS\FORMS\SAMPLEC~1.WPD]

Chain of Custody and Cooler Receipt Form for 1013353 Page 10 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 7 of 10

Submission #: 1013353

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: ice not touching samples

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 103

Temperature: A 13.4 °C / C 13.4 °C

Date/Time 9-23-10 1820

Analyst Init: JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 21	22	23	24	25	6	7	8	29	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
Ion. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL	AM	AM	AM	AM	AM	"	"	"	"	"
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 631										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JDW Date/Time: 9-23-10 1824

A = Actual / C = Corrected

[H:\DOCS\WP\PM\LAB_DOCS\FORMS\SAMPREC2.WFD]

Chain of Custody and Cooler Receipt Form for 1013353 Page 11 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 05/24/08 Page 8 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Too much packaging

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☐ Comments: between samples & ice

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: 32oz jar Thermometer ID: 103

Temperature: A 16.7 °C / C 16.7 °C

Date/Time 9-23-10 1820

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	24	25	6	7	8	29	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR	B	B	B	B	B					
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:
Sample Numbering Completed By: JDW Date/Time: 9-23-10 1825
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 12 of 13

IC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 9 of 10

Submission #: 10-13353

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☑
BC Lab Field Service ☐ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: WW123

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103

Temperature: A 2.9 °C / C 2.9 °C

Date/Time 9-23-10 1820

Analyst Init JW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS									A1	
40ml VOA VIAL TRAVEL BLANK						A11	A11	A11		
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: _____ Date/Time: 9-24-10 1924

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1013353 Page 13 of 13

BC LABORATORIES INC. SAMPLE RECEIPT FORM Rev. No. 12 06/24/08 Page 10 of 10

Submission #: 10-13353

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☑	Ice Chest ☑ None ☐
BC Lab Field Service ☐ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments: Not enough ice

Custody Seals: Ice Chest ☑ Intact? Yes ☑ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments: WO#123

0 °C
0 °C

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: Temp Blank Thermometer ID: 103

Temperature: A 12.9 °C / C 12.9 °C

Date/Time 9-23-10 1820

Analyst Init JKW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	26	27	28	29	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK									A1	
40ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR						B	B	B		
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: JKW Date/Time: 9-23-10 1929

A = Actual / C = Corrected

[H:\DOCS\WP\BMLAB_DOCS\FORMS\SAMREC2.WPD]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-01	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-02	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:52
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-03	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 08:58
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-5-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-04	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	DUPE-4	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-05	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:13
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-06	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-07	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 09:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-18-5	**Sample Matrix:**	Solids
	Sampled By:	---		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-08	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-5	**Sample Matrix:**	Solids
	Sampled By:	---		
1013353-09	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-10	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-2-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-11	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 10:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-12	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 11:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-10	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-13	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 11:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-1-15	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-14	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:30
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-15	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:45
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-16	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 12:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-21-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-17	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:05
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-18	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-19	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 13:25
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-15-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-20	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-21	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:30
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-22	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 14:40
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-16-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-23	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:10
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-24	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:15
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-25	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:20
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-20-5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-26	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 15:55
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-0.5	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-27	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-2	**Sample Matrix:**	Solids
	Sampled By:	Tom Shook		
1013353-28	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 16:10
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	GP-14-5	**Sample Matrix:**	Solids
	Sampled By:	---		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1013353-29	**COC Number:**	---	**Receive Date:**	09/23/2010 18:10
	Project Number:	---	**Sampling Date:**	09/23/2010 00:00
	Sampling Location:	Heca	**Sample Depth:**	---
	Sampling Point:	TB	**Sample Matrix:**	Water
	Sampled By:	---		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	15.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	46.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 00:02	VH1	GC-1	0.990	BTI1587

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	64.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:04	cc1	GC-7	0.993	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.7	%	74 - 121 (LCL - UCL)		EPA-8260			1

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 01:10	ADC	MS-V2	0.910	BTI1451

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	76.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 11:30	MWB	GC-13	0.997	BTI1609

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-01 | **Client Sample Name:** Heca, GP-5-5, 9/23/2010 8:40:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**29**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**11**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**10**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.021**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**3.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**7.7**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**41**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:18	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:18	MEV	CETAC1	1.008	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	46.1	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	67.7	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 00:21	VH1	GC-1	0.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	86.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:27	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00092	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00069	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00093	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00088	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0023	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00084	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0037	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	94.3	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 01:36	ADC	MS-V2	1.090	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	92.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 11:54	MWB	GC-13	0.993	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-02 | **Client Sample Name:** Heca, GP-5-10, 9/23/2010 8:52:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.0**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.077**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**13**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**13**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.013**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.87**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.3**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.55**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**43**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:20	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:20	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	54.7	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	86.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 15:57	VH1	GC-1	0.997	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	94.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 09:50	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	101	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 02:01	ADC	MS-V2	1	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	99.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 12:19	MWB	GC-13	0.993	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-03 | **Client Sample Name:** Heca, GP-5-15, 9/23/2010 8:58:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**1.6**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**21**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Chromium	**4.5**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**2.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Copper	**2.8**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Mercury	ND	mg/kg	0.16	0.012	EPA-7471A	ND		2
Molybdenum	**0.32**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**1.6**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**22**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:21	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:22	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	28.3	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	50.7	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 16:15	VH1	GC-1	1.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	48.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:13	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.11	0.021	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.056**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.11	0.014	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.11	0.034	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Ethylbenzene	**0.040**	**mg/kg**	**0.11**	**0.034**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.092**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Methylene chloride	ND	mg/kg	0.22	0.054	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.11	0.011	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
n-Propylbenzene	**0.069**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Toluene	**0.066**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.11	0.047	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.11	0.045	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.11	0.017	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**0.72**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.25**	**mg/kg**	**0.11**	**0.034**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
Total Xylenes	**0.24**	**mg/kg**	**0.22**	**0.076**	**EPA-8260**	**ND**	**A01**	1
p- & m-Xylenes	**0.12**	**mg/kg**	**0.11**	**0.049**	**EPA-8260**	**ND**	**A01**	1
o-Xylene	**0.13**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	109	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: (3-Methyl-2-butenyl)benzene	**0.37**	**mg/kg**			**EPA-8260**		**A01**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,1,2,3-Tetramethylcyclohexane	0.59	mg/kg			EPA-8260		A01	1
TIC: 1,3-Diethylbenzene	0.27	mg/kg			EPA-8260		A01	1
TIC: 1,4-Dimethylcyclohexane	0.36	mg/kg			EPA-8260		A01	1
TIC: Decahydro-2-methylnaphthalene	0.22	mg/kg			EPA-8260		A01	1
TIC: trans-1,2-Dimethylcyclohexane	0.40	mg/kg			EPA-8260		A01	1
TIC: trans-1,3,5-Trimethylcyclohexane	0.26	mg/kg			EPA-8260		A01	1
TIC: trans-Decahydronaphthalene	0.42	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 16:48	ADC	MS-V2	22.400	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	100	46	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	100	12	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	200	28	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	200	65	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**2700**	**mg/kg**	**500**	**200**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:06	MWB	GC-13	10	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-04 | **Client Sample Name:** Heca, DUPE-4, 9/23/2010 12:00:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.53**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.64**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**13**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.021**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**9.9**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**35**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**110**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:23	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:24	MEV	CETAC1	0.962	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0025	0.00022	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	75.9	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	120	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 04:23	VH1	GC-1	5	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	67.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:35	cc1	GC-7	4.967	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.12	0.022	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.12	0.020	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.086**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.12	0.015	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.12	0.043	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.12	0.024	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.12	0.040	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.12	0.024	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.12	0.043	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.12	0.019	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.12	0.036	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.12	0.020	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.12	0.019	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.12	0.029	EPA-8260	ND	A01	1
Ethylbenzene	**0.054**	**mg/kg**	**0.12**	**0.036**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.12	0.040	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.13**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**A01**	1
Methylene chloride	ND	mg/kg	0.24	0.057	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.12	0.012	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
n-Propylbenzene	**0.10**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.12	0.033	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
Toluene	**0.25**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.12	0.050	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.12	0.048	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.12	0.018	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.12	0.026	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.12	0.031	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**1.2**	**mg/kg**	**0.12**	**0.031**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.46**	**mg/kg**	**0.12**	**0.036**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.12	0.038	EPA-8260	ND	A01	1
Total Xylenes	**0.55**	**mg/kg**	**0.24**	**0.081**	**EPA-8260**	**ND**	**A01**	1
p- & m-Xylenes	**0.30**	**mg/kg**	**0.12**	**0.052**	**EPA-8260**	**ND**	**A01**	1
o-Xylene	**0.25**	**mg/kg**	**0.12**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	93.5	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.4	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	109	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,3-Trimethylcyclohexane	**0.47**	**mg/kg**			**EPA-8260**		**A01**	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,2,3,4-Tetrahydro-6-methylnaphthalene	1.1	mg/kg			EPA-8260		A01	1
TIC: 1,2,3-Trimethylcyclohexane	0.77	mg/kg			EPA-8260		A01	1
TIC: 1,2,4,5-Tetramethylbenzene	0.41	mg/kg			EPA-8260		A01	1
TIC: 1,4-Dimethylcyclohexane	0.42	mg/kg			EPA-8260		A01	1
TIC: 1-Methyl-3-(1-methylethyl)cyclopentane	1.5	mg/kg			EPA-8260		A01	1
TIC: Decahydro-2-methylnaphthalene	0.85	mg/kg			EPA-8260		A01	1
TIC: Ethylcyclohexane	0.21	mg/kg			EPA-8260		A01	1
TIC: trans, cis-1,2,4-Trimethylcyclohexane	0.64	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 17:14	ADC	MS-V2	23.800	BTI1451

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	5000	2000	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	2000	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	990	460	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	990	140	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	990	120	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	2000	280	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	2000	640	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	990	500	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**25000**	**mg/kg**	**5000**	**2000**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:56	MWB	GC-13	99.010	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-05 | **Client Sample Name:** Heca, GP-18-0.5, 9/23/2010 9:13:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	**1.3**	**mg/kg**	**5.0**	**0.50**	**EPA-6010B**	**ND**	**J**	1
Arsenic	**7.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**120**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**1.3**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**18**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**63**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**17**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.079**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**36**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**290**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:25	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:27	MEV	CETAC1	0.977	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.0019**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A09,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	41.0	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	71.9	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 16:52	VH1	GC-1	1.993	BTI1587

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	68.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 10:57	cc1	GC-7	0.990	BTI1624

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Bromochloromethane	ND	mg/kg	0.11	0.021	EPA-8260	ND	A01	1
Bromodichloromethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
Bromoform	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
Bromomethane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
n-Butylbenzene	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
sec-Butylbenzene	**0.033**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
tert-Butylbenzene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Carbon tetrachloride	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Chlorobenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Chloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Chloroform	ND	mg/kg	0.11	0.014	EPA-8260	ND	A01	1
Chloromethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
2-Chlorotoluene	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
4-Chlorotoluene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
Dibromochloromethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	mg/kg	0.11	0.022	EPA-8260	ND	A01	1
Dibromomethane	ND	mg/kg	0.11	0.040	EPA-8260	ND	A01	1
1,2-Dichlorobenzene	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichlorobenzene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,4-Dichlorobenzene	ND	mg/kg	0.11	0.033	EPA-8260	ND	A01	1
Dichlorodifluoromethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloroethane	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	mg/kg	0.11	0.019	EPA-8260	ND	A01	1
1,1-Dichloroethene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
cis-1,2-Dichloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
trans-1,2-Dichloroethene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,2-Dichloropropane	ND	mg/kg	0.11	0.018	EPA-8260	ND	A01	1
1,3-Dichloropropane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
2,2-Dichloropropane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,1-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
trans-1,3-Dichloropropene	ND	mg/kg	0.11	0.027	EPA-8260	ND	A01	1
Ethylbenzene	**0.039**	**mg/kg**	**0.11**	**0.033**	**EPA-8260**	**ND**	**J,A01**	1
Hexachlorobutadiene	ND	mg/kg	0.11	0.038	EPA-8260	ND	A01	1
Isopropylbenzene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
p-Isopropyltoluene	**0.058**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Methylene chloride	ND	mg/kg	0.22	0.054	EPA-8260	ND	A01	1
Methyl t-butyl ether	ND	mg/kg	0.11	0.011	EPA-8260	ND	A01	1
Naphthalene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
n-Propylbenzene	**0.043**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**J,A01**	1
Styrene	ND	mg/kg	0.11	0.031	EPA-8260	ND	A01	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Tetrachloroethene	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
Toluene	**0.058**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.11	0.047	EPA-8260	ND	A01	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.11	0.045	EPA-8260	ND	A01	1
1,1,1-Trichloroethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,1,2-Trichloroethane	ND	mg/kg	0.11	0.017	EPA-8260	ND	A01	1
Trichloroethene	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
Trichlorofluoromethane	ND	mg/kg	0.11	0.025	EPA-8260	ND	A01	1
1,2,3-Trichloropropane	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.11	0.029	EPA-8260	ND	A01	1
1,2,4-Trimethylbenzene	**0.36**	**mg/kg**	**0.11**	**0.029**	**EPA-8260**	**ND**	**A01**	1
1,3,5-Trimethylbenzene	**0.15**	**mg/kg**	**0.11**	**0.033**	**EPA-8260**	**ND**	**A01**	1
Vinyl chloride	ND	mg/kg	0.11	0.036	EPA-8260	ND	A01	1
Total Xylenes	**0.18**	**mg/kg**	**0.22**	**0.076**	**EPA-8260**	**ND**	**J,A01**	1
p- & m-Xylenes	**0.083**	**mg/kg**	**0.11**	**0.049**	**EPA-8260**	**ND**	**J,A01**	1
o-Xylene	**0.093**	**mg/kg**	**0.11**	**0.027**	**EPA-8260**	**ND**	**J,A01**	1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.5	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	106	%	74 - 121 (LCL - UCL)		EPA-8260			1
TIC: 1,1,2,3-Tetramethylcyclohexane	**0.49**	**mg/kg**			**EPA-8260**		**A01**	1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TIC: 1,1,3-Trimethylcyclohexane	0.19	mg/kg			EPA-8260		A01	1
TIC: 1,2,3,4-Tetrahydro-6-methylnaphthalene	0.30	mg/kg			EPA-8260		A01	1
TIC: 1,2,3-Trimethylcyclohexane	0.49	mg/kg			EPA-8260		A01	1
TIC: 1,2,4,5-Tetramethylbenzene	0.14	mg/kg			EPA-8260		A01	1
TIC: 1,2,4-Trimethylcyclohexane	0.19	mg/kg			EPA-8260		A01	1
TIC: 1-Ethyl-2-methylbenzene	0.31	mg/kg			EPA-8260		A01	1
TIC: 4-Ethyl-1,2-dimethylbenzene	0.24	mg/kg			EPA-8260		A01	1
TIC: Bicyclo[3.3.1]nonane	0.48	mg/kg			EPA-8260		A01	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 17:40	ADC	MS-V2	22.300	BTI1451

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Aviation Gas	ND	mg/kg	500	200	Luft/FFP	ND	A01	1
TPH - Stoddard Solvent	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Heavy Naptha	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Gasoline	ND	mg/kg	200	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP4)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP5)	ND	mg/kg	100	46	Luft/FFP	ND	A01	1
TPH - Jet Fuel (JP8)	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Kerosene	ND	mg/kg	100	14	Luft/FFP	ND	A01	1
TPH - Diesel (FFP)	ND	mg/kg	100	12	Luft/FFP	ND	A01	1
TPH - Fuel Oil	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Crude Oil	ND	mg/kg	200	28	Luft/FFP	ND	A01	1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	200	65	Luft/FFP	ND	A01	1
TPH - WD-40	ND	mg/kg	100	50	Luft/FFP	ND	A01	1
TPH - Mineral Oil	**2000**	**mg/kg**	**500**	**200**	**Luft/FFP**	**ND**	**A01**	1
Tetracosane (Surrogate)	0	%	20 - 145 (LCL - UCL)		Luft/FFP		A01,A17	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 18:31	MWB	GC-13	9.967	BTI1609

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-06 | **Client Sample Name:** Heca, GP-18-2, 9/23/2010 9:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**110**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.51**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.63**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**5.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**27**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**12**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.018**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**34**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**110**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:26	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:29	MEV	CETAC1	0.977	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00022**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**	**J**	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.00065**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	47.0	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	85.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:10	VH1	GC-1	0.993	BTI1587

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	49.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 11:20	cc1	GC-7	0.993	BTI1624

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 18:06	ADC	MS-V2	0.940	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**290**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	88.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 05:14	MWB	GC-13	0.997	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-07 | **Client Sample Name:** Heca, GP-18-5, 9/23/2010 9:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**4.5**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**ND**		1
Beryllium	**0.62**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.14**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**4.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.022**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**0.91**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**12**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	**0.073**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**50**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.36**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:28	JRG	PE-OP2	1	BTI1566
2	EPA-7471A	09/24/10	09/27/10 13:31	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-08 | **Client Sample Name:** Heca, GP-2-5, 9/23/2010 10:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	**0.00035**	**mg/kg**	**0.00050**	**0.000076**	**EPA-8081**	**ND**	**J**	1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	**0.0010**	**mg/kg**	**0.00050**	**0.000063**	**EPA-8081**	**ND**	**V11**	1
4,4'-DDE	**0.0039**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	**0.0050**	**mg/kg**	**0.00050**	**0.000031**	**EPA-8081**	**ND**	**V11**	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	**0.00055**	**mg/kg**	**0.00050**	**0.000035**	**EPA-8081**	**ND**		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.5	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	44.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:28	VH1	GC-1	0.984	BTI1587

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-08 | **Client Sample Name:** Heca, GP-2-5, 9/23/2010 10:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	56.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 11:42	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.0	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	98.6	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013353-09	**Client Sample Name:**	Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 11:15	ADC	MS-V2	0.840	BTI1451

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	**95**	**mg/kg**	**50**	**20**	**Luft/FFP**	**ND**		1
Tetracosane (Surrogate)	93.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 04:00	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-09 | **Client Sample Name:** Heca, GP-2-10, 9/23/2010 10:15:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**2.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 13:29	JRG	PE-OP2	1	BTI1566

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0056	0.0010	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0056	0.00095	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0056	0.00071	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0056	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0056	0.0020	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0056	0.00096	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0056	0.00092	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0056	0.0019	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0027	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0056	0.00056	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0056	0.0016	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0056	0.0024	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0056	0.0023	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0056	0.00087	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0056	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0056	0.0015	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0056	0.0017	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0056	0.0018	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0038	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0056	0.0025	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0056	0.0014	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	99.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	99.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 11:41	ADC	MS-V2	1.130	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	93.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 12:44	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-10 | **Client Sample Name:** Heca, GP-2-15, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**1.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:04	JRG	PE-OP2	1	BTI1567

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-11 | **Client Sample Name:** Heca, GP-1-5, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	28.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	38.5	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 17:46	VH1	GC-1	1	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-11 | **Client Sample Name:** Heca, GP-1-5, 9/23/2010 10:55:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	63.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 12:05	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0047	0.00086	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0047	0.00079	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0047	0.00059	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0047	0.00093	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0047	0.00094	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0047	0.0017	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0047	0.00080	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0047	0.00076	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0047	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0094	0.0023	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0047	0.00047	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0047	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0047	0.0020	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0047	0.0019	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0047	0.00072	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0047	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0047	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0047	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0047	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0094	0.0032	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0047	0.0021	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0047	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 12:33	ADC	MS-V2	0.940	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	56.6	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 13:08	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-12 | **Client Sample Name:** Heca, GP-1-10, 9/23/2010 11:05:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**0.88**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:14	JRG	PE-OP2	1	BTI1567

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0049	0.00090	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0049	0.00082	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0049	0.00062	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0049	0.00097	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0049	0.00098	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0049	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0049	0.00083	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0049	0.00079	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0049	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0098	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0049	0.00049	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0049	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0049	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0049	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0049	0.00075	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0049	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0049	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0049	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0049	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0098	0.0033	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0049	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0049	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	100	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 12:58	ADC	MS-V2	0.980	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	92.3	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 13:33	MWB	GC-13	1	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-13 | **Client Sample Name:** Heca, GP-1-15, 9/23/2010 11:20:00AM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Lead	**0.69**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:16	JRG	PE-OP2	1	BTI1567

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0025	0.00013	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0025	0.00070	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0025	0.0019	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0025	0.00038	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0025	0.0012	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.25	0.075	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0025	0.00032	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0025	0.00022	EPA-8081	ND	A10	1
4,4'-DDT	**0.010**	**mg/kg**	**0.0025**	**0.00016**	**EPA-8081**	**ND**	**A10,V11**	1
Dieldrin	ND	mg/kg	0.0025	0.00016	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0025	0.00043	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0025	0.00033	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0025	0.00018	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0025	0.00030	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0025	0.0013	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0025	0.00075	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0025	0.00065	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.25	0.037	EPA-8081	ND	A10	1
TCMX (Surrogate)	60.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	105	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:04	VH1	GC-1	5	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.050	0.0095	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Chlorpyrifos	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.050	0.011	EPA-8141	ND		1
Demeton O/S	ND	mg/kg	0.050	0.0075	EPA-8141	ND		1
Diazinon	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.050	0.031	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Ethoprop	ND	mg/kg	0.050	0.0040	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.050	0.027	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Merphos	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.050	0.010	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.050	0.0070	EPA-8141	ND		1
Naled	ND	mg/kg	0.050	0.0085	EPA-8141	ND		1
Phorate	ND	mg/kg	0.050	0.0030	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.050	0.0080	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.050	0.012	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.050	0.0050	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.050	0.0055	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	54.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 12:27	cc1	GC-7	5	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0050	0.00092	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0050	0.00084	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0050	0.00063	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0050	0.00099	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0050	0.0010	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0050	0.0018	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0050	0.00085	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0050	0.00081	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0050	0.0017	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.010	0.0024	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0050	0.00050	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0050	0.0014	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0050	0.0021	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0050	0.0020	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0050	0.00077	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0050	0.0011	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0050	0.0013	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0050	0.0015	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0050	0.0016	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.010	0.0034	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0050	0.0022	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0050	0.0012	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	95.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013353-14	**Client Sample Name:**	Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 13:24	ADC	MS-V2	1	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	39.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 14:12	EJB	GC-13	0.987	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-14 | **Client Sample Name:** Heca, GP-21-0.5, 9/23/2010 12:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**21**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**160**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.82**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.40**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**20**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.056**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**5.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**58**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**78**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:18	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:33	MEV	CETAC1	0.933	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	ND	mg/kg	0.0010	0.00015	EPA-8081	ND	A10	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10,V11	1
4,4'-DDE	ND	mg/kg	0.0010	0.000090	EPA-8081	ND	A10	1
4,4'-DDT	ND	mg/kg	0.0010	0.000062	EPA-8081	ND	A10,V11	1
Dieldrin	ND	mg/kg	0.0010	0.000064	EPA-8081	ND	A10	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	ND	mg/kg	0.0010	0.000070	EPA-8081	ND	A10	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	44.1	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	57.1	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 18:06	VH1	GC-1	2	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	65.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 14:20	cc1	GC-7	1	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0054	0.00098	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0054	0.00090	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0054	0.00067	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0054	0.0018	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0054	0.0011	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0054	0.0019	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0054	0.00087	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0054	0.00091	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0054	0.00087	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0054	0.0018	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.011	0.0026	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0054	0.00054	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0054	0.0015	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0054	0.0022	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0054	0.0021	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0054	0.00082	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0054	0.0012	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0054	0.0014	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0054	0.0016	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0054	0.0017	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.011	0.0036	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0054	0.0024	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0054	0.0013	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	92.0	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID:	1013353-15	**Client Sample Name:**	Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 13:49	ADC	MS-V2	1.070	BTI1451

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/25/10 04:50	MWB	GC-13	0.997	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-15 | **Client Sample Name:** Heca, GP-21-2, 9/23/2010 12:45:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**19**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.71**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.42**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**20**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**6.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**15**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.059**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**66**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:26	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:39	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	**0.00033**	**mg/kg**	**0.00050**	**0.00025**	**EPA-8081**	**ND**	**J**	1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	10.2	%	12 - 168 (LCL - UCL)		EPA-8081		S09	1
Dibutyl chlorendate (Surrogate)	47.4	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 18:24	VH1	GC-1	0.993	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	40.0	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 15:05	cc1	GC-7	0.993	BTI1624

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.8	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	96.3	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 14:40	ADC	MS-V2	0.856	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 15:12	MWB	GC-13	0.997	BTI1609

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-17 | **Client Sample Name:** Heca, GP-15-0.5, 9/23/2010 1:05:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**35**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**190**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.92**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.25**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**26**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**11**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.28**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**		2
Molybdenum	**9.8**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**13**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**71**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**78**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:27	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:42	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND	V11	1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND	V11	1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND	V11	1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	9.5	%	12 - 168 (LCL - UCL)		EPA-8081		S09	1
Dibutyl chlorendate (Surrogate)	47.9	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 10:20	VH1	GC-1	0.987	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	41.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 15:27	cc1	GC-7	1	BTI1624

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Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0027**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00078	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	89.6	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	75.2	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/24/10 18:31	ADC	MS-V2	0.912	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	67.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 13:23	EJB	GC-13	0.990	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-18 | **Client Sample Name:** Heca, GP-15-2, 9/23/2010 1:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**21**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**69**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Cadmium	**0.19**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**14**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**3.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**14**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**3.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**18**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**8.0**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**44**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**46**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:29	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:44	MEV	CETAC1	0.992	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.0010	0.000052	EPA-8081	ND	A10	1
alpha-BHC	ND	mg/kg	0.0010	0.00028	EPA-8081	ND	A10	1
beta-BHC	ND	mg/kg	0.0010	0.00076	EPA-8081	ND	A10	1
delta-BHC	**0.00069**	**mg/kg**	**0.0010**	**0.00015**	**EPA-8081**	**ND**	**J,A10**	1
gamma-BHC (Lindane)	ND	mg/kg	0.0010	0.00050	EPA-8081	ND	A10	1
Chlordane (Technical)	ND	mg/kg	0.10	0.030	EPA-8081	ND	A10	1
4,4'-DDD	**0.0010**	**mg/kg**	**0.0010**	**0.00013**	**EPA-8081**	**ND**	**A10,V11**	1
4,4'-DDE	**0.016**	**mg/kg**	**0.0010**	**0.000090**	**EPA-8081**	**ND**	**A10**	1
4,4'-DDT	**0.00096**	**mg/kg**	**0.0010**	**0.000062**	**EPA-8081**	**ND**	**J,A10,V11**	1
Dieldrin	**0.0014**	**mg/kg**	**0.0010**	**0.000064**	**EPA-8081**	**ND**	**A10**	1
Endosulfan I	ND	mg/kg	0.0010	0.00017	EPA-8081	ND	A10	1
Endosulfan II	ND	mg/kg	0.0010	0.00013	EPA-8081	ND	A10	1
Endosulfan sulfate	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10	1
Endrin	**0.00031**	**mg/kg**	**0.0010**	**0.000070**	**EPA-8081**	**ND**	**J,A10**	1
Endrin aldehyde	ND	mg/kg	0.0010	0.00012	EPA-8081	ND	A10	1
Heptachlor	ND	mg/kg	0.0010	0.00052	EPA-8081	ND	A10,V11	1
Heptachlor epoxide	ND	mg/kg	0.0010	0.00030	EPA-8081	ND	A10	1
Methoxychlor	ND	mg/kg	0.0010	0.00026	EPA-8081	ND	A10,V11	1
Toxaphene	ND	mg/kg	0.10	0.015	EPA-8081	ND	A10	1
TCMX (Surrogate)	25.7	%	12 - 168 (LCL - UCL)		EPA-8081		A10	1
Dibutyl chlorendate (Surrogate)	64.4	%	26 - 151 (LCL - UCL)		EPA-8081		A10	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/27/10 01:22	VH1	GC-1	1.974	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	41.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 16:13	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0028**	**mg/kg**	**0.0046**	**0.0012**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0046	0.00084	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0046	0.00076	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0046	0.00057	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0046	0.00090	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0046	0.00091	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0046	0.0016	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0046	0.00077	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0046	0.00074	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0091	0.0022	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0046	0.00046	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0046	0.0013	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0046	0.0019	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0046	0.0018	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0046	0.00070	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0046	0.0010	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0046	0.0012	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0046	0.0014	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0046	0.0015	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0091	0.0031	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0046	0.0020	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0046	0.0011	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.2	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	93.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 17:40	ADC	MS-V2	0.910	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	89.0	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/27/10 13:48	EJB	GC-13	0.993	BTI1609

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-20 | **Client Sample Name:** Heca, GP-16-0.5, 9/23/2010 2:20:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.77**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**21**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.2**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**19**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**9.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.032**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**45**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**76**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:30	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:46	MEV	CETAC1	0.947	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	**0.0044**	**mg/kg**	**0.00050**	**0.000045**	**EPA-8081**	**ND**		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	**0.00034**	**mg/kg**	**0.00050**	**0.000032**	**EPA-8081**	**ND**	**J**	1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	20.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	54.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 19:55	VH1	GC-1	0.997	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	46.2	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 16:35	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0038**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00077	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00053	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00083	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00068	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0084	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	**0.0018**	**mg/kg**	**0.0042**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00092	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0084	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	95.9	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	90.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 18:06	ADC	MS-V2	0.840	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	77.4	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 16:02	MWB	GC-13	0.997	BTI1609

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-21 | **Client Sample Name:** Heca, GP-16-2, 9/23/2010 2:30:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.9**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**140**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.88**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.55**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Chromium	**25**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**22**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**10**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.037**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.6**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**21**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.86**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**50**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**71**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:32	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:48	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	14.3	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	34.2	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 20:31	VH1	GC-1	0.997	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	34.6	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 17:20	cc1	GC-7	0.997	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0019**	**mg/kg**	**0.0037**	**0.00096**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0037	0.00068	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0037	0.00062	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0037	0.00047	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0037	0.00073	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0037	0.00074	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0037	0.00060	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0037	0.00063	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0037	0.00060	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0037	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0074	0.0018	EPA-8260	ND		1
Methyl t-butyl ether	**0.00053**	**mg/kg**	**0.0037**	**0.00037**	**EPA-8260**	**ND**	**J**	1
Naphthalene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0037	0.0010	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0037	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0037	0.0015	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0037	0.00057	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0037	0.00081	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0037	0.00096	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0037	0.0011	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0037	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0074	0.0025	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0037	0.0016	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0037	0.00089	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	102	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	97.8	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 18:58	ADC	MS-V2	0.740	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	91.5	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 22:39	MWB	GC-13	0.997	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-23 | **Client Sample Name:** Heca, GP-20-0.5, 9/23/2010 3:10:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**16**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**190**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**1.1**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.28**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.3**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**10**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.022**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**1.0**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**66**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**70**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:33	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/24/10	09/27/10 13:50	MEV	CETAC1	0.919	BTI1555

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND	V11	1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND	V11	1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	17.2	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	45.1	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/26/10 20:49	VH1	GC-1	0.984	BTI1587

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND	V11	1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND	V11	1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND	V11	1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	49.4	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 17:43	cc1	GC-7	0.990	BTI1624

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Bromobenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0038	0.00071	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0038	0.00065	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0038	0.00049	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0038	0.0014	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0038	0.00076	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0038	0.0013	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0038	0.00077	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0038	0.0014	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0038	0.00062	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0038	0.00065	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0038	0.00062	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0038	0.0013	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0077	0.0018	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0038	0.00038	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0038	0.0011	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0038	0.0016	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0038	0.0015	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0038	0.00059	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0038	0.00085	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0038	0.0010	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0038	0.0012	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0077	0.0026	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0038	0.0017	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0038	0.00092	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	98.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.9	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/23/10	09/27/10 19:23	ADC	MS-V2	0.770	BTI1451

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	86.9	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:03	MWB	GC-13	0.990	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-24 | **Client Sample Name:** Heca, GP-20-2, 9/23/2010 3:15:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**6.7**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**150**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.94**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.18**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**22**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**16**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**6.9**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.023**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**1.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**15**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**49**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**56**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:35	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:08	MEV	CETAC1	0.977	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.8	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	43.0	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/25/10 21:55	VH1	GC-1	0.997	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	71.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 04:09	cc1	GC-7	1	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0048**	**mg/kg**	**0.0042**	**0.0011**	**EPA-8260**	**ND**		1
Bromobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0042	0.00078	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0042	0.00071	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0042	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0042	0.00084	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0042	0.00085	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0042	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0042	0.00072	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0042	0.00069	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0085	0.0020	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0042	0.00042	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0042	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
Toluene	**0.0027**	**mg/kg**	**0.0042**	**0.0010**	**EPA-8260**	**ND**	**J**	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0042	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0042	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0042	0.00065	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0042	0.00094	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0042	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0042	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0042	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0085	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0042	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0042	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	96.1	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	87.8	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 20:14	ADC	MS-V2	0.850	BTI1565

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	81.8	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:28	MWB	GC-13	1	BTI1613

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-26 | **Client Sample Name:** Heca, GP-14-0.5, 9/23/2010 3:55:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**7.3**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**170**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.92**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.33**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**19**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**7.5**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**20**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.1**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.030**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**4.4**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Nickel	**14**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	ND	mg/kg	1.0	0.51	EPA-6010B	ND		1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	ND	mg/kg	5.0	0.73	EPA-6010B	ND		1
Vanadium	**47**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**67**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:36	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:11	MEV	CETAC1	1.025	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin	ND	mg/kg	0.00050	0.000026	EPA-8081	ND		1
alpha-BHC	ND	mg/kg	0.00050	0.00014	EPA-8081	ND		1
beta-BHC	ND	mg/kg	0.00050	0.00038	EPA-8081	ND		1
delta-BHC	ND	mg/kg	0.00050	0.000076	EPA-8081	ND		1
gamma-BHC (Lindane)	ND	mg/kg	0.00050	0.00025	EPA-8081	ND		1
Chlordane (Technical)	ND	mg/kg	0.050	0.015	EPA-8081	ND		1
4,4'-DDD	ND	mg/kg	0.00050	0.000063	EPA-8081	ND		1
4,4'-DDE	ND	mg/kg	0.00050	0.000045	EPA-8081	ND		1
4,4'-DDT	ND	mg/kg	0.00050	0.000031	EPA-8081	ND		1
Dieldrin	ND	mg/kg	0.00050	0.000032	EPA-8081	ND		1
Endosulfan I	ND	mg/kg	0.00050	0.000086	EPA-8081	ND		1
Endosulfan II	ND	mg/kg	0.00050	0.000066	EPA-8081	ND		1
Endosulfan sulfate	ND	mg/kg	0.00050	0.00013	EPA-8081	ND		1
Endrin	ND	mg/kg	0.00050	0.000035	EPA-8081	ND		1
Endrin aldehyde	ND	mg/kg	0.00050	0.000061	EPA-8081	ND		1
Heptachlor	ND	mg/kg	0.00050	0.00026	EPA-8081	ND		1
Heptachlor epoxide	ND	mg/kg	0.00050	0.00015	EPA-8081	ND		1
Methoxychlor	ND	mg/kg	0.00050	0.00013	EPA-8081	ND	V11	1
Toxaphene	ND	mg/kg	0.050	0.0074	EPA-8081	ND		1
TCMX (Surrogate)	21.6	%	12 - 168 (LCL - UCL)		EPA-8081			1
Dibutyl chlorendate (Surrogate)	50.8	%	26 - 151 (LCL - UCL)		EPA-8081			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8081	09/23/10	09/25/10 22:13	VH1	GC-1	0.997	BTI1586

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Azinphos methyl	ND	mg/kg	0.010	0.0019	EPA-8141	ND		1
Bolstar	ND	mg/kg	0.010	0.0014	EPA-8141	ND	V11	1
Chlorpyrifos	ND	mg/kg	0.010	0.00080	EPA-8141	ND		1
Coumaphos	ND	mg/kg	0.010	0.0022	EPA-8141	ND	V11	1
Demeton O/S	ND	mg/kg	0.010	0.0015	EPA-8141	ND	V11	1
Diazinon	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Dichlorvos	ND	mg/kg	0.010	0.0062	EPA-8141	ND		1
Disulfoton	ND	mg/kg	0.010	0.0011	EPA-8141	ND	V11	1
Ethoprop	ND	mg/kg	0.010	0.00080	EPA-8141	ND	V11	1
Fensulfothion	ND	mg/kg	0.010	0.0054	EPA-8141	ND		1
Fenthion	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Merphos	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Methyl parathion	ND	mg/kg	0.010	0.0021	EPA-8141	ND		1
Mevinphos	ND	mg/kg	0.010	0.0014	EPA-8141	ND		1
Naled	ND	mg/kg	0.010	0.0017	EPA-8141	ND		1
Phorate	ND	mg/kg	0.010	0.00060	EPA-8141	ND		1
Ronnel (Fenchlorphos)	ND	mg/kg	0.010	0.0016	EPA-8141	ND		1
Stirophos (Tetrachlorvinphos)	ND	mg/kg	0.010	0.0025	EPA-8141	ND		1
Tokuthion (Prothiofos)	ND	mg/kg	0.010	0.0010	EPA-8141	ND		1
Trichloronate	ND	mg/kg	0.010	0.0011	EPA-8141	ND		1
Triphenylphosphate (Surrogate)	44.8	%	9 - 105 (LCL - UCL)		EPA-8141			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8141	09/23/10	09/24/10 04:32	cc1	GC-7	0.987	BTI1599

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.0030**	**mg/kg**	**0.0043**	**0.0011**	**EPA-8260**	**ND**	**J**	1
Bromobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Bromochloromethane	ND	mg/kg	0.0043	0.00079	EPA-8260	ND		1
Bromodichloromethane	ND	mg/kg	0.0043	0.00072	EPA-8260	ND		1
Bromoform	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Bromomethane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
n-Butylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
sec-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
tert-Butylbenzene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Carbon tetrachloride	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Chlorobenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Chloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Chloroform	ND	mg/kg	0.0043	0.00054	EPA-8260	ND		1
Chloromethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
2-Chlorotoluene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
4-Chlorotoluene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
Dibromochloromethane	ND	mg/kg	0.0043	0.00085	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dibromoethane	ND	mg/kg	0.0043	0.00086	EPA-8260	ND		1
Dibromomethane	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Dichlorodifluoromethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloroethane	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloroethane	ND	mg/kg	0.0043	0.00073	EPA-8260	ND		1
1,1-Dichloroethene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,2-Dichloropropane	ND	mg/kg	0.0043	0.00070	EPA-8260	ND		1
1,3-Dichloropropane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
2,2-Dichloropropane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,1-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
Ethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Hexachlorobutadiene	ND	mg/kg	0.0043	0.0015	EPA-8260	ND		1
Isopropylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
p-Isopropyltoluene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Methylene chloride	ND	mg/kg	0.0086	0.0021	EPA-8260	ND		1
Methyl t-butyl ether	ND	mg/kg	0.0043	0.00043	EPA-8260	ND		1
Naphthalene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
n-Propylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Styrene	ND	mg/kg	0.0043	0.0012	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Tetrachloroethene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
Toluene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	mg/kg	0.0043	0.0018	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	mg/kg	0.0043	0.0017	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	mg/kg	0.0043	0.00066	EPA-8260	ND		1
Trichloroethene	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
Trichlorofluoromethane	ND	mg/kg	0.0043	0.00095	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	mg/kg	0.0043	0.0011	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	mg/kg	0.0043	0.0013	EPA-8260	ND		1
Vinyl chloride	ND	mg/kg	0.0043	0.0014	EPA-8260	ND		1
Total Xylenes	ND	mg/kg	0.0086	0.0029	EPA-8260	ND		1
p- & m-Xylenes	ND	mg/kg	0.0043	0.0019	EPA-8260	ND		1
o-Xylene	ND	mg/kg	0.0043	0.0010	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	114	%	70 - 121 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.7	%	81 - 117 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.5	%	74 - 121 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 20:40	ADC	MS-V2	0.860	BTI1565

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Aviation Gas	ND	mg/kg	50	20	Luft/FFP	ND		1
TPH - Stoddard Solvent	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Heavy Naptha	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Gasoline	ND	mg/kg	20	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP4)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Jet Fuel (JP5)	ND	mg/kg	10	4.6	Luft/FFP	ND		1
TPH - Jet Fuel (JP8)	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Kerosene	ND	mg/kg	10	1.4	Luft/FFP	ND		1
TPH - Diesel (FFP)	ND	mg/kg	10	1.2	Luft/FFP	ND		1
TPH - Fuel Oil	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Crude Oil	ND	mg/kg	20	2.8	Luft/FFP	ND		1
TPH - Hydraulic Oil / Motor Oil	ND	mg/kg	20	6.5	Luft/FFP	ND		1
TPH - WD-40	ND	mg/kg	10	5.0	Luft/FFP	ND		1
TPH - Mineral Oil	ND	mg/kg	50	20	Luft/FFP	ND		1
Tetracosane (Surrogate)	78.1	%	20 - 145 (LCL - UCL)		Luft/FFP			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	Luft/FFP	09/23/10	09/24/10 23:52	MWB	GC-13	0.993	BTI1613

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

BCL Sample ID: 1013353-27 | **Client Sample Name:** Heca, GP-14-2, 9/23/2010 4:00:00PM, Tom Shook

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony	ND	mg/kg	5.0	0.50	EPA-6010B	ND		1
Arsenic	**5.4**	**mg/kg**	**1.0**	**0.38**	**EPA-6010B**	**ND**		1
Barium	**210**	**mg/kg**	**0.50**	**0.077**	**EPA-6010B**	**0.079**		1
Beryllium	**0.99**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Cadmium	**0.39**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**	**J**	1
Chromium	**23**	**mg/kg**	**0.50**	**0.060**	**EPA-6010B**	**ND**		1
Cobalt	**8.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Copper	**25**	**mg/kg**	**1.0**	**0.12**	**EPA-6010B**	**ND**		1
Lead	**8.7**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**		1
Mercury	**0.028**	**mg/kg**	**0.16**	**0.012**	**EPA-7471A**	**ND**	**J**	2
Molybdenum	**2.0**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**ND**	**J**	1
Nickel	**18**	**mg/kg**	**0.50**	**0.058**	**EPA-6010B**	**ND**		1
Selenium	**0.69**	**mg/kg**	**1.0**	**0.51**	**EPA-6010B**	**ND**	**J**	1
Silver	ND	mg/kg	0.50	0.050	EPA-6010B	ND		1
Thallium	**0.73**	**mg/kg**	**5.0**	**0.73**	**EPA-6010B**	**ND**	**J**	1
Vanadium	**60**	**mg/kg**	**0.50**	**0.050**	**EPA-6010B**	**ND**		1
Zinc	**73**	**mg/kg**	**2.5**	**0.25**	**EPA-6010B**	**0.62**		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-6010B	09/24/10	09/27/10 17:38	JRG	PE-OP2	1	BTI1567
2	EPA-7471A	09/27/10	09/28/10 10:13	MEV	CETAC1	1.008	BTI1658

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-8260	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-8260	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-8260	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-8260	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-8260	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-8260	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-8260	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-8260	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-8260	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-8260	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-8260	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-8260	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-8260	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-8260	ND		1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-8260	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-8260	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-8260	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Methylene chloride	ND	ug/L	1.0	0.48	EPA-8260	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-8260	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-8260	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-8260	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-8260	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-8260	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-8260	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-8260	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-8260	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-8260	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-8260	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-8260	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-8260	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-8260	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-8260	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-8260	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-8260	ND		1
Total Xylenes	ND	ug/L	1.0	0.36	EPA-8260	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-8260	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	76 - 114 (LCL - UCL)		EPA-8260			1
Toluene-d8 (Surrogate)	97.9	%	88 - 110 (LCL - UCL)		EPA-8260			1
4-Bromofluorobenzene (Surrogate)	99.5	%	86 - 115 (LCL - UCL)		EPA-8260			1

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1013353-29 | **Client Sample Name:** Heca, TB, 9/23/2010 12:00:00AM

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260	09/24/10	09/27/10 09:26	MGC	MS-V5	1	BTI1541

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1586						
Aldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1586-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1586-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1586-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1586-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1586-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1586-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1586-BLK1	ND	mg/kg	0.00050	0.000086	
Endosulfan II	BTI1586-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1586-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1586-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1586-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1586-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1586-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1586-BLK1	64.8	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1586-BLK1	113	%	26 - 151 (LCL - UCL)		
QC Batch ID: BTI1587						
Aldrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000026	
alpha-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.00014	
beta-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.00038	
delta-BHC	BTI1587-BLK1	ND	mg/kg	0.00050	0.000076	
gamma-BHC (Lindane)	BTI1587-BLK1	ND	mg/kg	0.00050	0.00025	
Chlordane (Technical)	BTI1587-BLK1	ND	mg/kg	0.050	0.015	
4,4'-DDD	BTI1587-BLK1	ND	mg/kg	0.00050	0.000063	
4,4'-DDE	BTI1587-BLK1	ND	mg/kg	0.00050	0.000045	
4,4'-DDT	BTI1587-BLK1	ND	mg/kg	0.00050	0.000031	
Dieldrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000032	
Endosulfan I	BTI1587-BLK1	ND	mg/kg	0.00050	0.000086	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1587						
Endosulfan II	BTI1587-BLK1	ND	mg/kg	0.00050	0.000066	
Endosulfan sulfate	BTI1587-BLK1	ND	mg/kg	0.00050	0.00013	
Endrin	BTI1587-BLK1	ND	mg/kg	0.00050	0.000035	
Endrin aldehyde	BTI1587-BLK1	ND	mg/kg	0.00050	0.000061	
Heptachlor	BTI1587-BLK1	ND	mg/kg	0.00050	0.00026	
Heptachlor epoxide	BTI1587-BLK1	ND	mg/kg	0.00050	0.00015	
Methoxychlor	BTI1587-BLK1	ND	mg/kg	0.00050	0.00013	
Toxaphene	BTI1587-BLK1	ND	mg/kg	0.050	0.0074	
TCMX (Surrogate)	BTI1587-BLK1	66.4	%	12 - 168 (LCL - UCL)		
Dibutyl chlorendate (Surrogate)	BTI1587-BLK1	117	%	26 - 151 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1586										
Aldrin	BTI1586-BS1	LCS	0.0051784	0.0049834	mg/kg	104		60 - 124		
gamma-BHC (Lindane)	BTI1586-BS1	LCS	0.0051621	0.0049834	mg/kg	104		46 - 107		
4,4'-DDT	BTI1586-BS1	LCS	0.0057216	0.0049834	mg/kg	115		40 - 148		
Dieldrin	BTI1586-BS1	LCS	0.0052930	0.0049834	mg/kg	106		56 - 130		
Endrin	BTI1586-BS1	LCS	0.0058944	0.0049834	mg/kg	118		61 - 131		
Heptachlor	BTI1586-BS1	LCS	0.0052877	0.0049834	mg/kg	106		58 - 130		
TCMX (Surrogate)	BTI1586-BS1	LCS	0.0072794	0.0099668	mg/kg	73.0		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1586-BS1	LCS	0.029195	0.024917	mg/kg	117		26 - 151		
QC Batch ID: BTI1587										
Aldrin	BTI1587-BS1	LCS	0.0049153	0.0049834	mg/kg	98.6		60 - 124		
gamma-BHC (Lindane)	BTI1587-BS1	LCS	0.0048429	0.0049834	mg/kg	97.2		46 - 107		
4,4'-DDT	BTI1587-BS1	LCS	0.0056116	0.0049834	mg/kg	113		40 - 148		
Dieldrin	BTI1587-BS1	LCS	0.0050850	0.0049834	mg/kg	102		56 - 130		
Endrin	BTI1587-BS1	LCS	0.0054814	0.0049834	mg/kg	110		61 - 131		
Heptachlor	BTI1587-BS1	LCS	0.0050449	0.0049834	mg/kg	101		58 - 130		
TCMX (Surrogate)	BTI1587-BS1	LCS	0.0070704	0.0099668	mg/kg	70.9		12 - 168		
Dibutyl chlorendate (Surrogate)	BTI1587-BS1	LCS	0.028168	0.024917	mg/kg	113		26 - 151		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organochlorine Pesticides (EPA Method 8081)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1586	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Aldrin	MS	1013353-25	ND	0.0020775	0.0049669	mg/kg		41.8		63 - 119	Q03
	MSD	1013353-25	ND	0.0015380	0.0049180	mg/kg	28.9	31.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-25	ND	0.0028245	0.0049669	mg/kg		56.9		47 - 102	
	MSD	1013353-25	ND	0.0021197	0.0049180	mg/kg	27.5	43.1	30	47 - 102	Q03
4,4'-DDT	MS	1013353-25	ND	0.0023752	0.0049669	mg/kg		47.8		32 - 158	
	MSD	1013353-25	ND	0.0014216	0.0049180	mg/kg	49.3	28.9	30	32 - 158	Q03
Dieldrin	MS	1013353-25	ND	0.0023921	0.0049669	mg/kg		48.2		57 - 125	Q03
	MSD	1013353-25	ND	0.0019193	0.0049180	mg/kg	21.0	39.0	20	57 - 125	Q03
Endrin	MS	1013353-25	ND	0.0027523	0.0049669	mg/kg		55.4		61 - 130	Q03
	MSD	1013353-25	ND	0.0021859	0.0049180	mg/kg	22.0	44.4	27	61 - 130	Q03
Heptachlor	MS	1013353-25	ND	0.0023308	0.0049669	mg/kg		46.9		52 - 139	Q03
	MSD	1013353-25	ND	0.0016489	0.0049180	mg/kg	33.3	33.5	30	52 - 139	Q03
TCMX (Surrogate)	MS	1013353-25	ND	0.0033381	0.0099338	mg/kg		33.6		12 - 168	
	MSD	1013353-25	ND	0.0025393	0.0098361	mg/kg		25.8		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-25	ND	0.014076	0.024834	mg/kg		56.7		26 - 151	
	MSD	1013353-25	ND	0.0094797	0.024590	mg/kg		38.6		26 - 151	
QC Batch ID: BTI1587	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
Aldrin	MS	1013353-03	ND	0.0031689	0.0049180	mg/kg		64.4		63 - 119	
	MSD	1013353-03	ND	0.0029672	0.0049180	mg/kg	6.6	60.3	20	63 - 119	Q03
gamma-BHC (Lindane)	MS	1013353-03	ND	0.0031433	0.0049180	mg/kg		63.9		47 - 102	
	MSD	1013353-03	ND	0.0029708	0.0049180	mg/kg	5.6	60.4	30	47 - 102	
4,4'-DDT	MS	1013353-03	ND	0.0035052	0.0049180	mg/kg		71.3		32 - 158	
	MSD	1013353-03	ND	0.0032528	0.0049180	mg/kg	7.5	66.1	30	32 - 158	
Dieldrin	MS	1013353-03	ND	0.0031767	0.0049180	mg/kg		64.6		57 - 125	
	MSD	1013353-03	ND	0.0030200	0.0049180	mg/kg	5.1	61.4	20	57 - 125	
Endrin	MS	1013353-03	ND	0.0035246	0.0049180	mg/kg		71.7		61 - 130	
	MSD	1013353-03	ND	0.0033525	0.0049180	mg/kg	5.0	68.2	27	61 - 130	
Heptachlor	MS	1013353-03	ND	0.0032443	0.0049180	mg/kg		66.0		52 - 139	
	MSD	1013353-03	ND	0.0030652	0.0049180	mg/kg	5.7	62.3	30	52 - 139	
TCMX (Surrogate)	MS	1013353-03	ND	0.0045328	0.0098361	mg/kg		46.1		12 - 168	
	MSD	1013353-03	ND	0.0043731	0.0098361	mg/kg		44.5		12 - 168	
Dibutyl chlorendate (Surrogate)	MS	1013353-03	ND	0.015927	0.024590	mg/kg		64.8		26 - 151	
	MSD	1013353-03	ND	0.014356	0.024590	mg/kg		58.4		26 - 151	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1599						
Azinphos methyl	BTI1599-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1599-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1599-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1599-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1599-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Merphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1599-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1599-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1599-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1599-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1599-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1599-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1599-BLK1	100	%	9 - 105 (LCL - UCL)		
QC Batch ID: BTI1624						
Azinphos methyl	BTI1624-BLK1	ND	mg/kg	0.010	0.0019	
Bolstar	BTI1624-BLK1	ND	mg/kg	0.010	0.0014	
Chlorpyrifos	BTI1624-BLK1	ND	mg/kg	0.010	0.00080	
Coumaphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0022	
Demeton O/S	BTI1624-BLK1	ND	mg/kg	0.010	0.0015	
Diazinon	BTI1624-BLK1	ND	mg/kg	0.010	0.00060	
Dichlorvos	BTI1624-BLK1	ND	mg/kg	0.010	0.0062	
Disulfoton	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Ethoprop	BTI1624-BLK1	ND	mg/kg	0.010	0.00080	
Fensulfothion	BTI1624-BLK1	ND	mg/kg	0.010	0.0054	
Fenthion	BTI1624-BLK1	ND	mg/kg	0.010	0.0010	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1624						
Merphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Methyl parathion	BTI1624-BLK1	ND	mg/kg	0.010	0.0021	
Mevinphos	BTI1624-BLK1	ND	mg/kg	0.010	0.0014	
Naled	BTI1624-BLK1	ND	mg/kg	0.010	0.0017	
Phorate	BTI1624-BLK1	ND	mg/kg	0.010	0.00060	
Ronnel (Fenchlorphos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0016	
Stirophos (Tetrachlorvinphos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0025	
Tokuthion (Prothiofos)	BTI1624-BLK1	ND	mg/kg	0.010	0.0010	
Trichloronate	BTI1624-BLK1	ND	mg/kg	0.010	0.0011	
Triphenylphosphate (Surrogate)	BTI1624-BLK1	102	%	9 - 105 (LCL - UCL)		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1599										
Bolstar	BTI1599-BS1	LCS	0.024917	0.026578	mg/kg	93.8		9 - 146		
Chlorpyrifos	BTI1599-BS1	LCS	0.022259	0.026578	mg/kg	83.8		68 - 151		
Diazinon	BTI1599-BS1	LCS	0.010797	0.026578	mg/kg	40.6		38 - 105		
Methyl parathion	BTI1599-BS1	LCS	0.021595	0.026578	mg/kg	81.3		70 - 130		
Mevinphos	BTI1599-BS1	LCS	0.015282	0.026578	mg/kg	57.5		48 - 135		
Ronnel (Fenchlorphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1599-BS1	LCS	0.020764	0.026578	mg/kg	78.1		66 - 164		
Triphenylphosphate (Surrogate)	BTI1599-BS1	LCS	0.080399	0.083056	mg/kg	96.8		9 - 105		
QC Batch ID: BTI1624										
Bolstar	BTI1624-BS1	LCS	0.024751	0.026578	mg/kg	93.1		9 - 146		
Chlorpyrifos	BTI1624-BS1	LCS	0.021927	0.026578	mg/kg	82.5		68 - 151		
Diazinon	BTI1624-BS1	LCS	0.012292	0.026578	mg/kg	46.2		38 - 105		
Methyl parathion	BTI1624-BS1	LCS	0.021927	0.026578	mg/kg	82.5		70 - 130		
Mevinphos	BTI1624-BS1	LCS	0.014120	0.026578	mg/kg	53.1		48 - 135		
Ronnel (Fenchlorphos)	BTI1624-BS1	LCS	0.020930	0.026578	mg/kg	78.7		60 - 126		
Stirophos (Tetrachlorvinphos)	BTI1624-BS1	LCS	0.020930	0.026578	mg/kg	78.7		66 - 164		
Triphenylphosphate (Surrogate)	BTI1624-BS1	LCS	0.078571	0.083056	mg/kg	94.6		9 - 105		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Organo-Phosphorus Pesticide Analysis (EPA Method 8141)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1599	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
Bolstar	MS	1013353-25	ND	0.024257	0.026403	mg/kg		91.9		1 - 167	
	MSD	1013353-25	ND	0.019802	0.026403	mg/kg	20.2	75.0	30	1 - 167	
Chlorpyrifos	MS	1013353-25	ND	0.017987	0.026403	mg/kg		68.1		41 - 167	
	MSD	1013353-25	ND	0.016172	0.026403	mg/kg	10.6	61.3	20	41 - 167	
Diazinon	MS	1013353-25	ND	0.020132	0.026403	mg/kg		76.2		31 - 97	
	MSD	1013353-25	ND	0.016997	0.026403	mg/kg	16.9	64.4	30	31 - 97	
Methyl parathion	MS	1013353-25	ND	0.019472	0.026403	mg/kg		73.8		41 - 159	
	MSD	1013353-25	ND	0.016667	0.026403	mg/kg	15.5	63.1	20	41 - 159	
Mevinphos	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		35 - 136	
	MSD	1013353-25	ND	0.015677	0.026403	mg/kg	20.8	59.4	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-25	ND	0.017822	0.026403	mg/kg		67.5		34 - 143	
	MSD	1013353-25	ND	0.015512	0.026403	mg/kg	13.9	58.8	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-25	ND	0.019307	0.026403	mg/kg		73.1		7 - 209	
	MSD	1013353-25	ND	0.016007	0.026403	mg/kg	18.7	60.6	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-25	ND	0.074752	0.082508	mg/kg		90.6		9 - 105	
	MSD	1013353-25	ND	0.065182	0.082508	mg/kg		79.0		9 - 105	
QC Batch ID: BTI1624	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
Bolstar	MS	1013353-03	ND	0.029703	0.026403	mg/kg		112		1 - 167	
	MSD	1013353-03	ND	0.026080	0.026578	mg/kg	13.6	98.1	30	1 - 167	
Chlorpyrifos	MS	1013353-03	ND	0.021617	0.026403	mg/kg		81.9		41 - 167	
	MSD	1013353-03	ND	0.019601	0.026578	mg/kg	10.4	73.8	20	41 - 167	
Diazinon	MS	1013353-03	ND	0.022442	0.026403	mg/kg		85.0		31 - 97	
	MSD	1013353-03	ND	0.020598	0.026578	mg/kg	9.2	77.5	30	31 - 97	
Methyl parathion	MS	1013353-03	ND	0.023927	0.026403	mg/kg		90.6		41 - 159	
	MSD	1013353-03	ND	0.021096	0.026578	mg/kg	13.2	79.4	20	41 - 159	
Mevinphos	MS	1013353-03	ND	0.018812	0.026403	mg/kg		71.2		35 - 136	
	MSD	1013353-03	ND	0.018106	0.026578	mg/kg	4.5	68.1	30	35 - 136	
Ronnel (Fenchlorphos)	MS	1013353-03	ND	0.020627	0.026403	mg/kg		78.1		34 - 143	
	MSD	1013353-03	ND	0.018605	0.026578	mg/kg	11.0	70.0	20	34 - 143	
Stirophos (Tetrachlorvinphos)	MS	1013353-03	ND	0.021122	0.026403	mg/kg		80.0		7 - 209	
	MSD	1013353-03	ND	0.019435	0.026578	mg/kg	9.0	73.1	26	7 - 209	
Triphenylphosphate (Surrogate)	MS	1013353-03	ND	0.075413	0.082508	mg/kg		91.4		9 - 105	
	MSD	1013353-03	ND	0.071927	0.083056	mg/kg		86.6		9 - 105	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1541						
Benzene	BTI1541-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BTI1541-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BTI1541-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BTI1541-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BTI1541-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BTI1541-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BTI1541-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BTI1541-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BTI1541-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.14	

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1541						
trans-1,3-Dichloropropene	BTI1541-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BTI1541-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BTI1541-BLK1	ND	ug/L	1.0	0.48	
Methyl t-butyl ether	BTI1541-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BTI1541-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.11	
Styrene	BTI1541-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.13	
Toluene	BTI1541-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BTI1541-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BTI1541-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BTI1541-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BTI1541-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BTI1541-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1541-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BTI1541-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BTI1541-BLK1	ND	ug/L	1.0	0.36	
p- & m-Xylenes	BTI1541-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BTI1541-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BTI1541-BLK1	106	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1541-BLK1	97.3	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1541-BLK1	98.7	%	86 - 115 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1541										
Benzene	BTI1541-BS1	LCS	22.220	25.000	ug/L	88.9		70 - 130		
Bromodichloromethane	BTI1541-BS1	LCS	27.740	25.000	ug/L	111		70 - 130		
Chlorobenzene	BTI1541-BS1	LCS	24.820	25.000	ug/L	99.3		70 - 130		
Chloroethane	BTI1541-BS1	LCS	24.780	25.000	ug/L	99.1		70 - 130		
1,4-Dichlorobenzene	BTI1541-BS1	LCS	26.020	25.000	ug/L	104		70 - 130		
1,1-Dichloroethane	BTI1541-BS1	LCS	26.400	25.000	ug/L	106		70 - 130		
1,1-Dichloroethene	BTI1541-BS1	LCS	25.530	25.000	ug/L	102		70 - 130		
Toluene	BTI1541-BS1	LCS	25.260	25.000	ug/L	101		70 - 130		
Trichloroethene	BTI1541-BS1	LCS	30.630	25.000	ug/L	123		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1541-BS1	LCS	10.080	10.000	ug/L	101		76 - 114		
Toluene-d8 (Surrogate)	BTI1541-BS1	LCS	9.9000	10.000	ug/L	99.0		88 - 110		
4-Bromofluorobenzene (Surrogate)	BTI1541-BS1	LCS	9.7200	10.000	ug/L	97.2		86 - 115		

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1541	Used client sample: N										
Benzene	MS	1013347-08	ND	22.460	25.000	ug/L		89.8		70 - 130	
	MSD	1013347-08	ND	22.810	25.000	ug/L	1.5	91.2	20	70 - 130	
Bromodichloromethane	MS	1013347-08	ND	28.330	25.000	ug/L		113		70 - 130	
	MSD	1013347-08	ND	28.740	25.000	ug/L	1.4	115	20	70 - 130	
Chlorobenzene	MS	1013347-08	ND	27.750	25.000	ug/L		111		70 - 130	
	MSD	1013347-08	ND	25.830	25.000	ug/L	7.2	103	20	70 - 130	
Chloroethane	MS	1013347-08	ND	24.650	25.000	ug/L		98.6		70 - 130	
	MSD	1013347-08	ND	25.390	25.000	ug/L	3.0	102	20	70 - 130	
1,4-Dichlorobenzene	MS	1013347-08	ND	28.490	25.000	ug/L		114		70 - 130	
	MSD	1013347-08	ND	26.940	25.000	ug/L	5.6	108	20	70 - 130	
1,1-Dichloroethane	MS	1013347-08	ND	26.850	25.000	ug/L		107		70 - 130	
	MSD	1013347-08	ND	27.300	25.000	ug/L	1.7	109	20	70 - 130	
1,1-Dichloroethene	MS	1013347-08	ND	26.060	25.000	ug/L		104		70 - 130	
	MSD	1013347-08	ND	26.230	25.000	ug/L	0.7	105	20	70 - 130	
Toluene	MS	1013347-08	ND	25.650	25.000	ug/L		103		70 - 130	
	MSD	1013347-08	ND	26.030	25.000	ug/L	1.5	104	20	70 - 130	
Trichloroethene	MS	1013347-08	ND	26.670	25.000	ug/L		107		70 - 130	
	MSD	1013347-08	ND	27.030	25.000	ug/L	1.3	108	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1013347-08	ND	10.670	10.000	ug/L		107		76 - 114	
	MSD	1013347-08	ND	10.510	10.000	ug/L		105		76 - 114	
Toluene-d8 (Surrogate)	MS	1013347-08	ND	9.9600	10.000	ug/L		99.6		88 - 110	
	MSD	1013347-08	ND	9.8900	10.000	ug/L		98.9		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1013347-08	ND	10.650	10.000	ug/L		106		86 - 115	
	MSD	1013347-08	ND	10.030	10.000	ug/L		100		86 - 115	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1451						
Benzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Bromobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1451-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1451						
trans-1,3-Dichloropropene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
Ethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1451-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1451-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1451-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1451-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1451-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1451-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1451-BLK1	97.8	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1451-BLK1	100	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1451-BLK1	92.2	%	74 - 121 (LCL - UCL)		
QC Batch ID: BTI1565						
Benzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Bromobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Bromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00092	
Bromodichloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00084	
Bromoform	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Bromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
n-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
sec-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
tert-Butylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
Carbon tetrachloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Chlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Chloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Chloroform	BTI1565-BLK1	ND	mg/kg	0.0050	0.00063	
Chloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
2-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
Dibromochloromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00099	
1,2-Dibromo-3-chloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
1,2-Dibromoethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0010	
Dibromomethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0018	
1,2-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,4-Dichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Dichlorodifluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00085	
1,1-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
trans-1,2-Dichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00081	
1,3-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
2,2-Dichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,1-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
cis-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
trans-1,3-Dichloropropene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	

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1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1565						
Ethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Hexachlorobutadiene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0017	
Isopropylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
p-Isopropyltoluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Methylene chloride	BTI1565-BLK1	ND	mg/kg	0.010	0.0024	
Methyl t-butyl ether	BTI1565-BLK1	ND	mg/kg	0.0050	0.00050	
Naphthalene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
n-Propylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Styrene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0014	
1,1,1,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2,2-Tetrachloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Tetrachloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
Toluene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2,3-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0021	
1,2,4-Trichlorobenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0020	
1,1,1-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,1,2-Trichloroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.00077	
Trichloroethene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
Trichlorofluoromethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0011	
1,2,3-Trichloropropane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
1,1,2-Trichloro-1,2,2-trifluoroethane	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,2,4-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0013	
1,3,5-Trimethylbenzene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0015	
Vinyl chloride	BTI1565-BLK1	ND	mg/kg	0.0050	0.0016	
Total Xylenes	BTI1565-BLK1	ND	mg/kg	0.010	0.0034	
p- & m-Xylenes	BTI1565-BLK1	ND	mg/kg	0.0050	0.0022	
o-Xylene	BTI1565-BLK1	ND	mg/kg	0.0050	0.0012	
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BLK1	106	%	70 - 121 (LCL - UCL)		
Toluene-d8 (Surrogate)	BTI1565-BLK1	98.7	%	81 - 117 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BTI1565-BLK1	101	%	74 - 121 (LCL - UCL)		

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Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1451										
Benzene	BTI1451-BS1	LCS	0.13017	0.12500	mg/kg	104		70 - 130		
Bromodichloromethane	BTI1451-BS1	LCS	0.12816	0.12500	mg/kg	103		70 - 130		
Chlorobenzene	BTI1451-BS1	LCS	0.13253	0.12500	mg/kg	106		70 - 130		
Chloroethane	BTI1451-BS1	LCS	0.12878	0.12500	mg/kg	103		70 - 130		
1,4-Dichlorobenzene	BTI1451-BS1	LCS	0.13066	0.12500	mg/kg	105		70 - 130		
1,1-Dichloroethane	BTI1451-BS1	LCS	0.13420	0.12500	mg/kg	107		70 - 130		
1,1-Dichloroethene	BTI1451-BS1	LCS	0.12967	0.12500	mg/kg	104		70 - 130		
Toluene	BTI1451-BS1	LCS	0.13276	0.12500	mg/kg	106		70 - 130		
Trichloroethene	BTI1451-BS1	LCS	0.13307	0.12500	mg/kg	106		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1451-BS1	LCS	0.051475	0.050000	mg/kg	103		70 - 121		
Toluene-d8 (Surrogate)	BTI1451-BS1	LCS	0.049931	0.050000	mg/kg	99.9		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1451-BS1	LCS	0.048854	0.050000	mg/kg	97.7		74 - 121		
QC Batch ID: BTI1565										
Benzene	BTI1565-BS1	LCS	0.14513	0.12500	mg/kg	116		70 - 130		
Bromodichloromethane	BTI1565-BS1	LCS	0.13467	0.12500	mg/kg	108		70 - 130		
Chlorobenzene	BTI1565-BS1	LCS	0.14620	0.12500	mg/kg	117		70 - 130		
Chloroethane	BTI1565-BS1	LCS	0.14475	0.12500	mg/kg	116		70 - 130		
1,4-Dichlorobenzene	BTI1565-BS1	LCS	0.14608	0.12500	mg/kg	117		70 - 130		
1,1-Dichloroethane	BTI1565-BS1	LCS	0.14749	0.12500	mg/kg	118		70 - 130		
1,1-Dichloroethene	BTI1565-BS1	LCS	0.14779	0.12500	mg/kg	118		70 - 130		
Toluene	BTI1565-BS1	LCS	0.14061	0.12500	mg/kg	112		70 - 130		
Trichloroethene	BTI1565-BS1	LCS	0.14409	0.12500	mg/kg	115		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BTI1565-BS1	LCS	0.050604	0.050000	mg/kg	101		70 - 121		
Toluene-d8 (Surrogate)	BTI1565-BS1	LCS	0.048840	0.050000	mg/kg	97.7		81 - 117		
4-Bromofluorobenzene (Surrogate)	BTI1565-BS1	LCS	0.050624	0.050000	mg/kg	101		74 - 121		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1451	Used client sample: N										
Benzene	MS	1011454-84	ND	0.13215	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-84	ND	0.12647	0.12500	mg/kg	4.4	101	20	70 - 130	
Bromodichloromethane	MS	1011454-84	ND	0.12991	0.12500	mg/kg		104		70 - 130	
	MSD	1011454-84	ND	0.12193	0.12500	mg/kg	6.3	97.5	20	70 - 130	
Chlorobenzene	MS	1011454-84	ND	0.13829	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-84	ND	0.13170	0.12500	mg/kg	4.9	105	20	70 - 130	
Chloroethane	MS	1011454-84	ND	0.13126	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-84	ND	0.12805	0.12500	mg/kg	2.5	102	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-84	ND	0.13497	0.12500	mg/kg		108		70 - 130	
	MSD	1011454-84	ND	0.13018	0.12500	mg/kg	3.6	104	20	70 - 130	
1,1-Dichloroethane	MS	1011454-84	ND	0.13486	0.12500	mg/kg		108		70 - 130	
	MSD	1011454-84	ND	0.13065	0.12500	mg/kg	3.2	105	20	70 - 130	
1,1-Dichloroethene	MS	1011454-84	ND	0.13042	0.12500	mg/kg		104		70 - 130	
	MSD	1011454-84	ND	0.12748	0.12500	mg/kg	2.3	102	20	70 - 130	
Toluene	MS	1011454-84	ND	0.13297	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-84	ND	0.12648	0.12500	mg/kg	5.0	101	20	70 - 130	
Trichloroethene	MS	1011454-84	ND	0.13365	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-84	ND	0.13077	0.12500	mg/kg	2.2	105	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-84	ND	0.049706	0.050000	mg/kg		99.4		70 - 121	
	MSD	1011454-84	ND	0.048668	0.050000	mg/kg		97.3		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-84	ND	0.048435	0.050000	mg/kg		96.9		81 - 117	
	MSD	1011454-84	ND	0.049309	0.050000	mg/kg		98.6		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-84	ND	0.049984	0.050000	mg/kg		100		74 - 121	
	MSD	1011454-84	ND	0.049341	0.050000	mg/kg		98.7		74 - 121	
QC Batch ID: BTI1565	Used client sample: N										
Benzene	MS	1011454-85	ND	0.13260	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13418	0.12500	mg/kg	1.2	107	20	70 - 130	
Bromodichloromethane	MS	1011454-85	ND	0.12495	0.12500	mg/kg		100		70 - 130	
	MSD	1011454-85	ND	0.12959	0.12500	mg/kg	3.6	104	20	70 - 130	
Chlorobenzene	MS	1011454-85	ND	0.13786	0.12500	mg/kg		110		70 - 130	
	MSD	1011454-85	ND	0.14235	0.12500	mg/kg	3.2	114	20	70 - 130	
Chloroethane	MS	1011454-85	ND	0.13184	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13647	0.12500	mg/kg	3.4	109	20	70 - 130	
1,4-Dichlorobenzene	MS	1011454-85	ND	0.14577	0.12500	mg/kg		117		70 - 130	
	MSD	1011454-85	ND	0.14256	0.12500	mg/kg	2.2	114	20	70 - 130	
1,1-Dichloroethane	MS	1011454-85	ND	0.13317	0.12500	mg/kg		107		70 - 130	
	MSD	1011454-85	ND	0.13582	0.12500	mg/kg	2.0	109	20	70 - 130	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Volatile Organic Analysis (EPA Method 8260/5035)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1565	Used client sample: N										
1,1-Dichloroethene	MS	1011454-85	ND	0.13304	0.12500	mg/kg		106		70 - 130	
	MSD	1011454-85	ND	0.13641	0.12500	mg/kg	2.5	109	20	70 - 130	
Toluene	MS	1011454-85	ND	0.13065	0.12500	mg/kg		105		70 - 130	
	MSD	1011454-85	ND	0.13658	0.12500	mg/kg	4.4	109	20	70 - 130	
Trichloroethene	MS	1011454-85	ND	0.13874	0.12500	mg/kg		111		70 - 130	
	MSD	1011454-85	ND	0.13883	0.12500	mg/kg	0.1	111	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1011454-85	ND	0.049343	0.050000	mg/kg		98.7		70 - 121	
	MSD	1011454-85	ND	0.048122	0.050000	mg/kg		96.2		70 - 121	
Toluene-d8 (Surrogate)	MS	1011454-85	ND	0.049731	0.050000	mg/kg		99.5		81 - 117	
	MSD	1011454-85	ND	0.049426	0.050000	mg/kg		98.9		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1011454-85	ND	0.049331	0.050000	mg/kg		98.7		74 - 121	
	MSD	1011454-85	ND	0.049105	0.050000	mg/kg		98.2		74 - 121	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1609						
TPH - Light Naptha	BTI1609-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1609-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1609-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1609-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1609-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1609-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1609-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1609-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1609-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1609-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1609-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1609-BLK1	87.3	%	20 - 145 (LCL - UCL)		
QC Batch ID: BTI1613						
TPH - Light Naptha	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Aviation Gas	BTI1613-BLK1	ND	mg/kg	50	20	
TPH - Stoddard Solvent	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Heavy Naptha	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Gasoline	BTI1613-BLK1	ND	mg/kg	20	5.0	
TPH - Jet Fuel (JP4)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Jet Fuel (JP5)	BTI1613-BLK1	ND	mg/kg	10	4.6	
TPH - Jet Fuel (JP8)	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Kerosene	BTI1613-BLK1	ND	mg/kg	10	1.4	
TPH - Diesel (FFP)	BTI1613-BLK1	ND	mg/kg	10	1.2	
TPH - Fuel Oil	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Crude Oil	BTI1613-BLK1	ND	mg/kg	20	2.8	
TPH - Hydraulic Oil / Motor Oil	BTI1613-BLK1	ND	mg/kg	20	6.5	
TPH - WD-40	BTI1613-BLK1	ND	mg/kg	10	5.0	
TPH - Mineral Oil	BTI1613-BLK1	ND	mg/kg	50	20	
Tetracosane (Surrogate)	BTI1613-BLK1	98.9	%	20 - 145 (LCL - UCL)		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1609										
TPH - Diesel (FFP)	BTI1609-BS1	LCS	71.557	83.056	mg/kg	86.2		64 - 124		
Tetracosane (Surrogate)	BTI1609-BS1	LCS	3.0532	3.3223	mg/kg	91.9		20 - 145		
QC Batch ID: BTI1613										
TPH - Diesel (FFP)	BTI1613-BS1	LCS	80.925	82.781	mg/kg	97.8		64 - 124		
Tetracosane (Surrogate)	BTI1613-BS1	LCS	3.5637	3.3113	mg/kg	108		20 - 145		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1609	Used client sample: Y - Description: GP-5-15, 09/23/2010 08:58										
TPH - Diesel (FFP)	MS	1013353-03	ND	62.048	82.508	mg/kg		75.2		52 - 131	
	MSD	1013353-03	ND	64.640	83.056	mg/kg	3.4	77.8	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-03	ND	2.6723	3.3003	mg/kg		81.0		20 - 145	
	MSD	1013353-03	ND	2.7586	3.3223	mg/kg		83.0		20 - 145	
QC Batch ID: BTI1613	Used client sample: Y - Description: GP-20-5, 09/23/2010 15:20										
TPH - Diesel (FFP)	MS	1013353-25	ND	65.153	83.056	mg/kg		78.4		52 - 131	
	MSD	1013353-25	ND	51.755	83.056	mg/kg	22.9	62.3	30	52 - 131	
Tetracosane (Surrogate)	MS	1013353-25	ND	3.3909	3.3223	mg/kg		102		20 - 145	
	MSD	1013353-25	ND	3.0128	3.3223	mg/kg		90.7		20 - 145	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1555						
Mercury	BTI1555-BLK1	ND	mg/kg	0.16	0.012	
QC Batch ID: BTI1566						
Antimony	BTI1566-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1566-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1566-BLK1	ND	mg/kg	0.50	0.077	
Beryllium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1566-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1566-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1566-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1566-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1566-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1566-BLK1	ND	mg/kg	5.0	0.73	
Vanadium	BTI1566-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1566-BLK1	0.35796	mg/kg	2.5	0.25	J
QC Batch ID: BTI1567						
Antimony	BTI1567-BLK1	ND	mg/kg	5.0	0.50	
Arsenic	BTI1567-BLK1	ND	mg/kg	1.0	0.38	
Barium	BTI1567-BLK1	0.079094	mg/kg	0.50	0.077	J
Beryllium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Cadmium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Chromium	BTI1567-BLK1	ND	mg/kg	0.50	0.060	
Cobalt	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Copper	BTI1567-BLK1	ND	mg/kg	1.0	0.12	
Lead	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Molybdenum	BTI1567-BLK1	ND	mg/kg	2.5	0.25	
Nickel	BTI1567-BLK1	ND	mg/kg	0.50	0.058	
Selenium	BTI1567-BLK1	ND	mg/kg	1.0	0.51	
Silver	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Thallium	BTI1567-BLK1	ND	mg/kg	5.0	0.73	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BTI1567						
Vanadium	BTI1567-BLK1	ND	mg/kg	0.50	0.050	
Zinc	BTI1567-BLK1	0.61579	mg/kg	2.5	0.25	J
QC Batch ID: BTI1658						
Mercury	BTI1658-BLK1	ND	mg/kg	0.16	0.012	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1555										
Mercury	BTI1555-BS1	LCS	1.4542	1.5000	mg/kg	96.9		75 - 125		
QC Batch ID: BTI1566										
Antimony	BTI1566-BS1	LCS	100.65	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1566-BS1	LCS	9.8276	10.000	mg/kg	98.3		75 - 125		
Barium	BTI1566-BS1	LCS	102.58	100.00	mg/kg	103		75 - 125		
Beryllium	BTI1566-BS1	LCS	10.399	10.000	mg/kg	104		75 - 125		
Cadmium	BTI1566-BS1	LCS	10.216	10.000	mg/kg	102		75 - 125		
Chromium	BTI1566-BS1	LCS	103.19	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1566-BS1	LCS	104.14	100.00	mg/kg	104		75 - 125		
Copper	BTI1566-BS1	LCS	100.44	100.00	mg/kg	100		75 - 125		
Lead	BTI1566-BS1	LCS	106.62	100.00	mg/kg	107		75 - 125		
Molybdenum	BTI1566-BS1	LCS	102.32	100.00	mg/kg	102		75 - 125		
Nickel	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Selenium	BTI1566-BS1	LCS	9.5899	10.000	mg/kg	95.9		75 - 125		
Silver	BTI1566-BS1	LCS	9.3760	10.000	mg/kg	93.8		75 - 125		
Thallium	BTI1566-BS1	LCS	104.22	100.00	mg/kg	104		75 - 125		
Vanadium	BTI1566-BS1	LCS	108.14	100.00	mg/kg	108		75 - 125		
Zinc	BTI1566-BS1	LCS	103.41	100.00	mg/kg	103		75 - 125		
QC Batch ID: BTI1567										
Antimony	BTI1567-BS1	LCS	101.05	100.00	mg/kg	101		75 - 125		
Arsenic	BTI1567-BS1	LCS	9.8884	10.000	mg/kg	98.9		75 - 125		
Barium	BTI1567-BS1	LCS	104.06	100.00	mg/kg	104		75 - 125		
Beryllium	BTI1567-BS1	LCS	10.515	10.000	mg/kg	105		75 - 125		
Cadmium	BTI1567-BS1	LCS	10.097	10.000	mg/kg	101		75 - 125		
Chromium	BTI1567-BS1	LCS	102.96	100.00	mg/kg	103		75 - 125		
Cobalt	BTI1567-BS1	LCS	103.17	100.00	mg/kg	103		75 - 125		
Copper	BTI1567-BS1	LCS	101.88	100.00	mg/kg	102		75 - 125		
Lead	BTI1567-BS1	LCS	105.49	100.00	mg/kg	105		75 - 125		
Molybdenum	BTI1567-BS1	LCS	101.85	100.00	mg/kg	102		75 - 125		
Nickel	BTI1567-BS1	LCS	103.50	100.00	mg/kg	103		75 - 125		
Selenium	BTI1567-BS1	LCS	9.1315	10.000	mg/kg	91.3		75 - 125		
Silver	BTI1567-BS1	LCS	9.3712	10.000	mg/kg	93.7		75 - 125		
Thallium	BTI1567-BS1	LCS	104.32	100.00	mg/kg	104		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BTI1567										
Vanadium	BTI1567-BS1	LCS	107.87	100.00	mg/kg	108		75 - 125		
Zinc	BTI1567-BS1	LCS	102.43	100.00	mg/kg	102		75 - 125		
QC Batch ID: BTI1658										
Mercury	BTI1658-BS1	LCS	1.4618	1.5000	mg/kg	97.5		75 - 125		

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1555	Used client sample: Y - Description: SS-6, 09/23/2010 17:00										
Mercury	DUP	1013352-05	0.012059	0.015000		mg/kg	21.7		20		J,A02
	MS	1013352-05	0.012059	0.73838	0.73529	mg/kg		98.8		85 - 115	
	MSD	1013352-05	0.012059	0.73985	0.73529	mg/kg	0.2	99.0	20	85 - 115	
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Antimony	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	29.026	100.00	mg/kg		29.0		16 - 119	
	MSD	1013288-01	ND	29.067	100.00	mg/kg	0.1	29.1	20	16 - 119	
Arsenic	DUP	1013288-01	6.5056	6.6557		mg/kg	2.3		20		
	MS	1013288-01	6.5056	16.108	10.000	mg/kg		96.0		75 - 125	
	MSD	1013288-01	6.5056	15.541	10.000	mg/kg	6.1	90.4	20	75 - 125	
Barium	DUP	1013288-01	147.86	143.51		mg/kg	3.0		20		
	MS	1013288-01	147.86	240.61	100.00	mg/kg		92.8		75 - 125	
	MSD	1013288-01	147.86	241.18	100.00	mg/kg	0.6	93.3	20	75 - 125	
Beryllium	DUP	1013288-01	0.89421	0.88155		mg/kg	1.4		20		
	MS	1013288-01	0.89421	10.702	10.000	mg/kg		98.1		75 - 125	
	MSD	1013288-01	0.89421	10.457	10.000	mg/kg	2.5	95.6	20	75 - 125	
Cadmium	DUP	1013288-01	0.33235	0.29947		mg/kg	10.4		20		J
	MS	1013288-01	0.33235	9.8579	10.000	mg/kg		95.3		75 - 125	
	MSD	1013288-01	0.33235	9.6586	10.000	mg/kg	2.1	93.3	20	75 - 125	
Chromium	DUP	1013288-01	20.175	20.542		mg/kg	1.8		20		
	MS	1013288-01	20.175	115.10	100.00	mg/kg		94.9		75 - 125	
	MSD	1013288-01	20.175	112.86	100.00	mg/kg	2.4	92.7	20	75 - 125	
Cobalt	DUP	1013288-01	7.6614	7.5462		mg/kg	1.5		20		
	MS	1013288-01	7.6614	99.201	100.00	mg/kg		91.5		75 - 125	
	MSD	1013288-01	7.6614	97.365	100.00	mg/kg	2.0	89.7	20	75 - 125	
Copper	DUP	1013288-01	19.628	19.377		mg/kg	1.3		20		
	MS	1013288-01	19.628	115.66	100.00	mg/kg		96.0		75 - 125	
	MSD	1013288-01	19.628	113.30	100.00	mg/kg	2.5	93.7	20	75 - 125	
Lead	DUP	1013288-01	7.2603	7.1235		mg/kg	1.9		20		
	MS	1013288-01	7.2603	100.72	100.00	mg/kg		93.5		75 - 125	
	MSD	1013288-01	7.2603	99.382	100.00	mg/kg	1.4	92.1	20	75 - 125	
Molybdenum	DUP	1013288-01	1.1281	1.1938		mg/kg	5.7		20		J
	MS	1013288-01	1.1281	84.626	100.00	mg/kg		83.5		75 - 125	
	MSD	1013288-01	1.1281	82.470	100.00	mg/kg	2.6	81.3	20	75 - 125	
Nickel	DUP	1013288-01	14.944	14.876		mg/kg	0.5		20		
	MS	1013288-01	14.944	109.43	100.00	mg/kg		94.5		75 - 125	
	MSD	1013288-01	14.944	107.64	100.00	mg/kg	1.9	92.7	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1566	Used client sample: Y - Description: SC-6-A, 09/22/2010 08:46										
Selenium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	7.6892	10.000	mg/kg		76.9		75 - 125	
	MSD	1013288-01	ND	8.7582	10.000	mg/kg	13.0	87.6	20	75 - 125	
Silver	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	8.5742	10.000	mg/kg		85.7		75 - 125	
	MSD	1013288-01	ND	8.3853	10.000	mg/kg	2.2	83.9	20	75 - 125	
Thallium	DUP	1013288-01	ND	ND		mg/kg			20		
	MS	1013288-01	ND	91.857	100.00	mg/kg		91.9		75 - 125	
	MSD	1013288-01	ND	89.610	100.00	mg/kg	2.5	89.6	20	75 - 125	
Vanadium	DUP	1013288-01	51.833	51.455		mg/kg	0.7		20		
	MS	1013288-01	51.833	154.17	100.00	mg/kg		102		75 - 125	
	MSD	1013288-01	51.833	151.40	100.00	mg/kg	2.7	99.6	20	75 - 125	
Zinc	DUP	1013288-01	85.886	84.545		mg/kg	1.6		20		
	MS	1013288-01	85.886	177.25	100.00	mg/kg		91.4		75 - 125	
	MSD	1013288-01	85.886	174.57	100.00	mg/kg	3.0	88.7	20	75 - 125	
QC Batch ID: BTI1567	Used client sample: Y - Description: GP-2-15, 09/23/2010 10:55										
Antimony	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	49.482	100.00	mg/kg		49.5		16 - 119	
	MSD	1013353-10	ND	50.149	100.00	mg/kg	1.3	50.1	20	16 - 119	
Arsenic	DUP	1013353-10	16.376	13.639		mg/kg	18.2		20		
	MS	1013353-10	16.376	28.843	10.000	mg/kg		125		75 - 125	
	MSD	1013353-10	16.376	28.011	10.000	mg/kg	6.9	116	20	75 - 125	
Barium	DUP	1013353-10	34.339	34.224		mg/kg	0.3		20		
	MS	1013353-10	34.339	137.84	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	34.339	133.59	100.00	mg/kg	4.2	99.2	20	75 - 125	
Beryllium	DUP	1013353-10	0.49662	0.46754		mg/kg	6.0		20		J
	MS	1013353-10	0.49662	11.174	10.000	mg/kg		107		75 - 125	
	MSD	1013353-10	0.49662	10.865	10.000	mg/kg	2.9	104	20	75 - 125	
Cadmium	DUP	1013353-10	0.094980	0.091620		mg/kg	3.6		20		J
	MS	1013353-10	0.094980	10.482	10.000	mg/kg		104		75 - 125	
	MSD	1013353-10	0.094980	10.158	10.000	mg/kg	3.2	101	20	75 - 125	
Chromium	DUP	1013353-10	4.6239	4.2109		mg/kg	9.3		20		
	MS	1013353-10	4.6239	108.13	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	4.6239	104.75	100.00	mg/kg	3.3	100	20	75 - 125	
Cobalt	DUP	1013353-10	2.9719	2.8861		mg/kg	2.9		20		
	MS	1013353-10	2.9719	105.19	100.00	mg/kg		102		75 - 125	
	MSD	1013353-10	2.9719	102.44	100.00	mg/kg	2.7	99.5	20	75 - 125	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Total Concentrations (TTLC)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BTI1567	Used client sample: Y - Description: GP-2-15, 09/23/2010 10:55										
Copper	DUP	1013353-10	4.4165	4.1525		mg/kg	6.2		20		
	MS	1013353-10	4.4165	111.92	100.00	mg/kg		108		75 - 125	
	MSD	1013353-10	4.4165	108.98	100.00	mg/kg	2.8	105	20	75 - 125	
Lead	DUP	1013353-10	1.3142	0.64177		mg/kg	68.8		20		J,A02
	MS	1013353-10	1.3142	106.02	100.00	mg/kg		105		75 - 125	
	MSD	1013353-10	1.3142	102.83	100.00	mg/kg	3.1	102	20	75 - 125	
Molybdenum	DUP	1013353-10	6.4675	5.8465		mg/kg	10.1		20		
	MS	1013353-10	6.4675	110.49	100.00	mg/kg		104		75 - 125	
	MSD	1013353-10	6.4675	107.15	100.00	mg/kg	3.3	101	20	75 - 125	
Nickel	DUP	1013353-10	2.1588	1.9962		mg/kg	7.8		20		
	MS	1013353-10	2.1588	103.93	100.00	mg/kg		102		75 - 125	
	MSD	1013353-10	2.1588	100.79	100.00	mg/kg	3.1	98.6	20	75 - 125	
Selenium	DUP	1013353-10	0.98389	ND		mg/kg			20		
	MS	1013353-10	0.98389	10.345	10.000	mg/kg		93.6		75 - 125	
	MSD	1013353-10	0.98389	10.030	10.000	mg/kg	3.4	90.5	20	75 - 125	
Silver	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	9.6761	10.000	mg/kg		96.8		75 - 125	
	MSD	1013353-10	ND	9.3123	10.000	mg/kg	3.8	93.1	20	75 - 125	
Thallium	DUP	1013353-10	ND	ND		mg/kg			20		
	MS	1013353-10	ND	103.45	100.00	mg/kg		103		75 - 125	
	MSD	1013353-10	ND	101.46	100.00	mg/kg	1.9	101	20	75 - 125	
Vanadium	DUP	1013353-10	31.430	29.960		mg/kg	4.8		20		
	MS	1013353-10	31.430	146.13	100.00	mg/kg		115		75 - 125	
	MSD	1013353-10	31.430	141.72	100.00	mg/kg	3.9	110	20	75 - 125	
Zinc	DUP	1013353-10	25.094	24.721		mg/kg	1.5		20		
	MS	1013353-10	25.094	126.46	100.00	mg/kg		101		75 - 125	
	MSD	1013353-10	25.094	126.07	100.00	mg/kg	0.4	101	20	75 - 125	
QC Batch ID: BTI1658	Used client sample: N										
Mercury	DUP	1013284-01	0.015645	ND		mg/kg			20		
	MS	1013284-01	0.015645	0.78145	0.80645	mg/kg		95.0		85 - 115	
	MSD	1013284-01	0.015645	0.81081	0.80645	mg/kg	3.8	98.6	20	85 - 115	

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AECOM
1220 Avenida Acaso
Camarillo, CA 93012

Reported: 09/28/2010 13:45
Project: Hydrogen Energy California
Project Number: [none]
Project Manager: Chad Roper

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
A09	PQL's were raised due to high concentration of target analytes requiring sample dilution.
A10	PQL's and MDL's were raised due to matrix interference.
A17	Surrogate not reportable due to sample dilution.
Q03	Matrix spike recovery(s) is(are) not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

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**Results of 2010 Review of
Kern County Environmental Health Services
Department Records**

Port Organics

INSPECTION REPORT

Dates:	April 12, 2005
Facility Name:	Port Organic Products LTD
Facility Address:	7361 Adhor Road, Buttonwillow
Haz Mat Specialists:	Dan STARKEY / Donna FENTON
EPA ID #:	None
Facility I.D. #:	(NEW) FA0005811/ Seed 1074
	Inspection photographs

At approximately 0830 on April 12, 2005, Donna FENTON, and I, met with Jim ZABEN, General Manager of Port Organic Products LTD. Ken NELSON Jr. the owner was scheduled to meet with us but failed to make the appointment. We asked ZABEN for permission to complete an inspection and take photographs. I asked if Port had filed a Business Plan with our Department. ZABEN stated that the business had been at this location for ten years and to his knowledge has never had a business plan. ZABEN gave permission for the inspection. We asked ZABEN to describe his business. He stated that they blend and provide organic fertilizers to their customers.

The inspection started in the tank farm area. I asked FENTON to photograph the facility as we completed the inspection. There were numerous tanks of varying sizes, some were located inside the concrete secondary containment. I noted the secondary containment structure in poor condition. It was in a deteriorating condition and the leaking tanks and chemically etched concrete provided evidence that previous releases had occurred. The aboveground poly tanks contained: Phosphoric Acid, Sulfuric Acid, Aqua Ammonia 20%, Potash, blended fertilizers, and fish liquids. There is processing equipment that consists of mixing tanks, pumps and blending equipment. During the inspection of the tank farm we observed numerous violations. It was evident that the facility should have filed a Business Plan and CalARP with our Department. I advised ZABEN that the amount of chemicals stored exceeded the threshold quantity for both the Business Plan and CalARP regulations. We observed that all tanks lacked labels identifying the chemical contents. I explained to ZABEN the hazards of not knowing what chemicals are in specific tanks. One tank used to store aqua ammonia 20% was labeled "Fire Water". I informed ZABEN that if the aqua ammonia tank was used as fire water by fireman there could be serious consequences. While walking through the tank farm area FENTON, ZABEN and I were exposed to low levels of ammonia gas from the aqua ammonia storage tanks.

We asked about the material dumped in the soil east of the tank farm. ZABEN stated that the dirt area is the location where solid waste residue collected from the batch processing of fertilizer has been dumped. We advised that the waste could be hazardous and asked if they had analytical information for the waste. ZABEN stated that he had analyzed for the constituents of nitrogen, phosphorus & potassium (NPK) and based on that information some farmers have used the waste as fertilizer. I advised that the solid material looks like a waste and appears to be treated as a waste by being dumped on the ground adjacent to a canal. I informed ZABEN that he is required to test the waste material to determine if it is a hazardous waste.

We then inspected the covered warehouse located west of the tank farm which contained numerous pallets of potash, pallets of bat/bird guano, solid fish parts, totes containing fish liquid, diesel fuel, and 55 gallon drums. There are numerous totes around the warehouse some contained fish liquid, and others were empty. There were empty drums, poly tanks, and totes in deteriorated condition. ZABEN stated that he was trying to get the manufacture to take the totes back, and dispose of the damaged tanks and totes. Waste oil was found in two locations in the yard. It was stored in open unlabeled drums that had been cut in half.

I completed the inspection forms and discussed the violations with ZABEN. I informed him that there were serious violations observed during the inspection and that this Department would be seeking fines through the administrative process.

REPORT OF VIOLATIONS

1. The Respondent violated Health and Safety Code (HSC) Chapter 6.95, Section 25503.5 (a) Failure to file a Hazardous Materials Business Plan with this Department.

   (a) Any business that handles a hazardous material or a mixture containing a hazardous material that has a quantity at any one time during the reporting year equal to, or greater than, a total weight of 500 pounds, or a total volume of 55 gallons, or 200 cubic feet at standard temperature and pressure for compressed gas, that is handled in quantities for which an emergency plan is required to be adopted pursuant to Part 30 (commencing with Section 30.1), Part 40 (commencing with Section 40.1), or Part 70 (commencing with Section 70.1), of Chapter 10 of Title 10 of the Code of Federal Regulations (54 Federal Register 14051), or pursuant to any regulations adopted by the state in accordance with those regulations, shall establish and implement a business plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503.

   Port Organic Products LTD has stored and processed chemicals at the 7361 Adhor Road facility for 10 years. They failed to file a Hazardous Materials Business Plan for the hazardous materials stored at this facility.

2. The Respondent violated California Code of Regulations (CCR) Title 19, Section 2745.1 (a) (d) failure to file a California Accidental Release Prevention Program (CalARP) Risk Management Plan (RMP).

(a) *The owner or operator of a stationary source, which handles more than a threshold quantity of a regulated substance in a process, shall determine the applicability of this chapter as set forth in Section 2735.4(a) and shall submit a single RMP to the AA. The RMP shall include the information required by Sections 2745.3 through 2745.9*

(b) *If a determination is made pursuant to section 2735.4 (a)(2) that an existing stationary source must comply with this chapter, the owner or operator shall submit an RMP to the AA after the owner or operator has received a notice from the AA requesting submission of an RMP. The AA shall, in consultation with the owner or operator of a stationary source, establish an RMP submittal date. The AA shall not require submission of the RMP earlier than 12 months or later than 3 years after the notice has been issued to the owner or operator*

This Department set the CalARP Risk Management Plan submittal deadline for all Table 3 Threshold Quantity facilities as January 31, 2002. Port Organic Products failed to register with this Department and submit a CalARP, Risk Management Plan.

3. Respondent violated CCR, Title 19, Division 4, Chapter 4, Article 4, Section 2732, Failure to properly train employees on how to handle hazardous materials.

a) *The business plan shall include a training program which is reasonable and appropriate for the size of the business and the nature of the hazardous materials handled. The training program shall take into consideration the responsibilities of the employees to be trained. The training program shall, at a minimum, include:*
1) methods for safe handling of hazardous materials;
2) procedures for coordination with local emergency response organizations;
3) use of emergency response equipment and supplies under the control of the handler, and
4) all procedures required by Section 2731 of this Article

b) *The business plan shall include provisions for ensuring that appropriate personnel receive initial and refresher training.*

Port Organics Products LTD employees have not been trained how to recognize and handle hazardous materials as evidenced by discussions with Jim Zaben, General Manager.

4. The Respondent violated 22 CCR Section 66265.31, Failure to operate a facility to minimize the possibility of the release of hazardous waste to the environment which could threaten human health.

Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

The chemical storage tanks used at the facility are not labeled properly. A 6000-gallon poly aqua ammonia (20%) tank is labeled "Fire Water". All tanks lack labels identifying the chemical contents. This violation poses a significant risk to human health and the possibility of mixing incompatible chemicals.

CORRECTIVE ACTIONS

1. Complete a hazardous materials business plan as specified in HSC section 25504 within 14 days of receipt of inspection report dated April 12, 2005.

2. All tanks and containers must be labeled. Tanks are required to be labeled with minimum four inch lettering in a contrasting color placed on opposite sides of the tanks. This requirement shall be completed immediately.

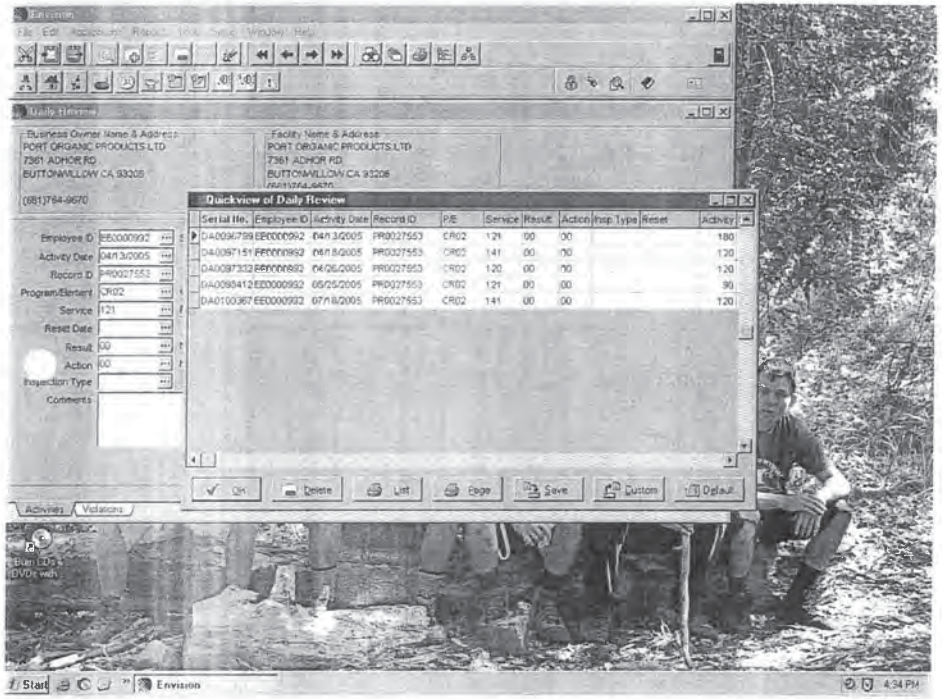
3. The CalARP Risk Management Plan (RMP) registration form shall be submitted within 14 days of receipt of the inspection report dated April 12, 2005.

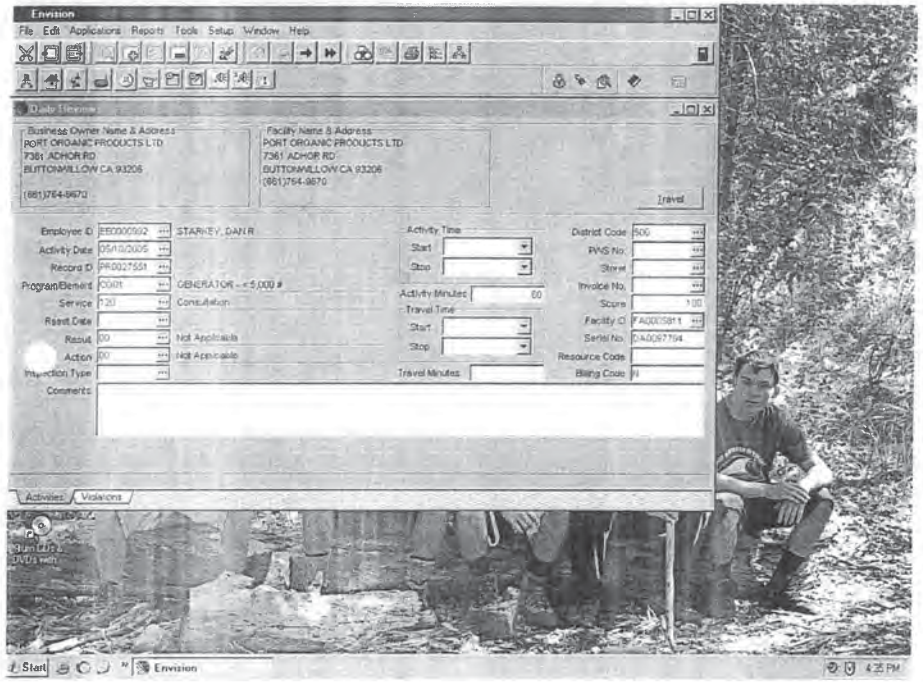
4. The CalARP (RMP) document must be submitted within 90 days of receipt of this Notice of Violation. The RMP Submit format must be used. This requires a hard copy and data disk be submitted to this Department only. All Program 2 prevention documentation shall be included at that time.

5. Properly label, handle and dispose of all hazardous waste stored at 7361 Ádhor Road within 14 days.

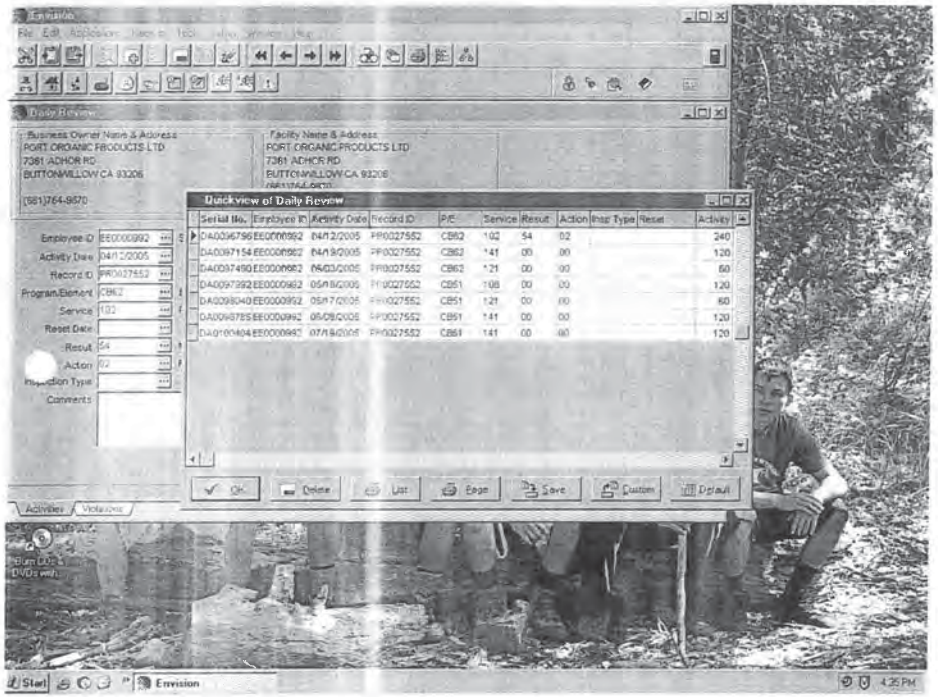
6. Within six (6) months of receipt of this notice, one (1) employee involved in the management of hazardous waste must attend California Compliance School training for hazardous waste generators. The completion certificates must be provided to this Department by November 1, 2005.

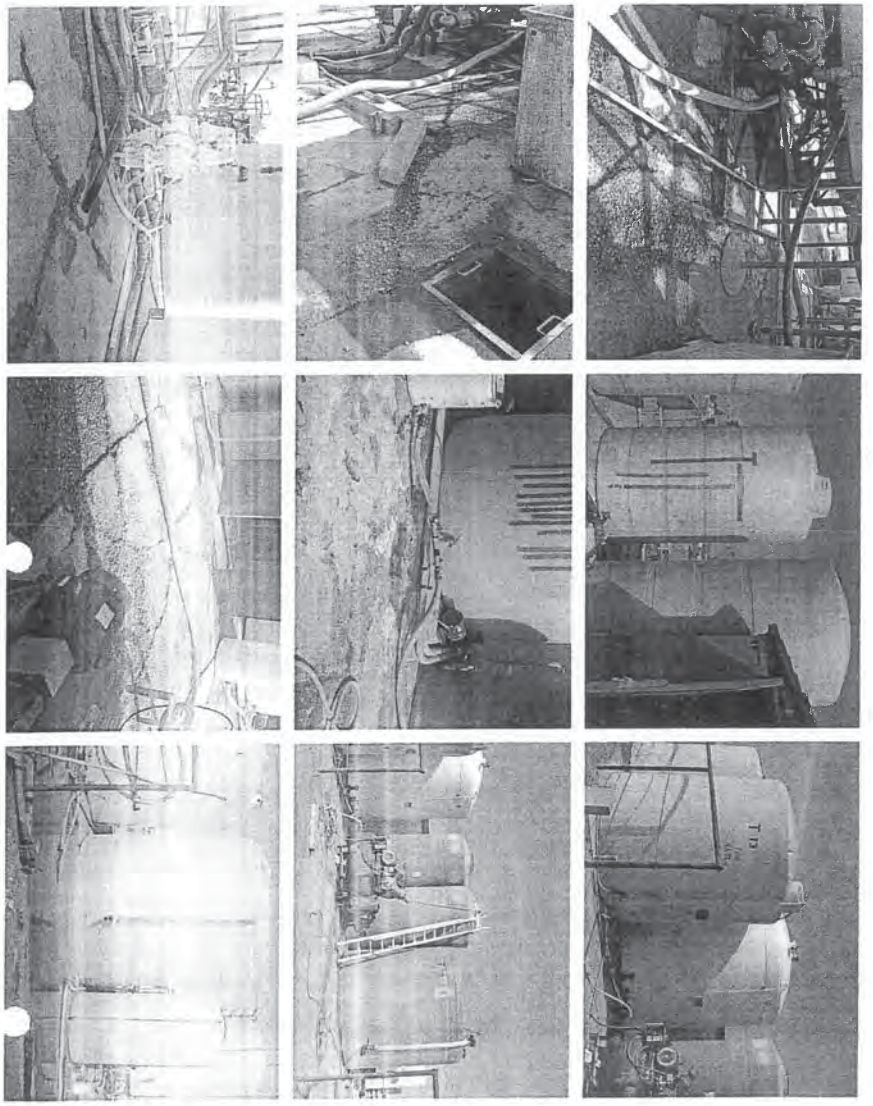
cc: File





Thursday, Jul 21, 2005 04:35 PM


Business Owner Name & Address
PORT ORGANIC PRODUCTS LTD
7361 ADHOR RD
BUTTONWILLOW CA 93206
(661)764-9570
Facility Name & Address
PORT ORGANIC PRODUCTS LTD
7361 ADHOR RD
BUTTONWILLOW CA 93206
Quickview of Daily Review
Serial No.
Employee ID
Activity Date
Record ID
Program/Element
Service
Reset Date
Result
Action
Inspection Type
Comments
OK
Delete
List
Page
Save
Custom
Default
Activities
Violations
Start
Envision
4:25 PM



ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

CERTIFIED UNIFIED PROGRAM AGENCY INSPECTION REPORT

Date: 4-12-05

Type of Inspection: ☒ Routine ☐ Re-inspection ☐ Complaint

Programs Inspected: ☒ Business Plan/UFC Article 80 ☒ HW Generator ☐ UST ☐ AST ☒ Cal ARP

Envision Facility ID #: New Facility Business Plan #: 1077

Facility Name: Port Organic Products LTD

Facility Location: 7361 Adohr Rd 93206 City: Buttonwillow

C - Compliant NA - Not Applicable I - Class I Violation II - Class II Violation M - Minor Violation

C	NA	Code	GENERAL REQUIREMENTS	I	II	M	COMMENTS
			TRAINING				
		TR01	Facility has training program appropriate for size of business and nature of hazardous materials handled (Title 19, §2732).	✓			
		TR02	Training documentation is maintained for current personnel (Title 19, §2732).		✓		
			CONTINGENCY/EMERGENCY PLAN				
		ER01	Contingency plan is complete, updated and maintained on site (HSC 6.95, §25504, Title 19 CCR, §2731, Title 22 CCR, §66265.53-54).	✓			
		ER02	Maintains and operates facility to minimize a release of hazardous waste to the environment which could threaten human health (Title 22 CCR, §66265.31).	✓			
		ER03	Maintains all required or appropriate equipment (Title 22 CCR, §66265.32-.34).	✓			
			BUSINESS PLAN				
		BP01	Inventory of hazardous materials is complete (HSC 6.67, §25504, Title 19 CCR §2729).	✓			
		BP02	Site layout/facility maps are accurate (HSC 6.67, §25504, Title 19 CCR §2729).	✓			
			ABOVE GROUND STORAGE TANKS				
			# of Tanks: 425 Total Volume: _____ bbls or gal Product Stored: ☑ Diesel ☐ Gasoline ☐ Crude Oil ☑ Waste				
		AT01	SPCC Plan prepared as required (HSC 6.67, §25270)				

Re-inspection Required: ☐ No ☑ Yes ☑ Business Plan/UFC ☑ HW Generator ☐ UST ☐ AST ☑ Cal ARP

CONSENT: Consent to conduct inspection, which may involve obtaining photographs, review and copying of records, and sampling to determine compliance with the Certified Unified Program Agency requirements.

Facility Rep Signature _____ Title _____ Inspector Signature _____

POST INSPECTION INSTRUCTIONS:

- Within five days of correcting all violations, sign and return to the above Agency address. Attention: _____

_____ / / Signature (Violations have been corrected as noted) Date

COMMENTS PAGE
(Optional)

Envision Facility ID #: _____ BP #: _____

Violation Code #	COMMENTS/NOTES
TR01	Provide information on training program written
TR02	Show documentation of training for haz comm & hazardous waste
ER01	Complete a contingency plan for the entire facility
ER01	Waste dumped on the ground must be characterized.
BR01	Provide a complete inventory of all chemicals 14 days.
BP02	Provide a completed site map.
GR00	Port has not complied with hazardous waste regs & laws.
GR02	Waste solids must be analized to determine if they meet the hazardous waste determination. (metals, fish-bioassay)
	All containers must be labeled min 4" lettering
	Complete the Cal ARP Registration Form & submit a paper copy & disk of RMP Submit with in 14 days.
	All leaking tanks/containers must be repaired or placed out of service.

Violations were observed/discovered as listed above. All violations must be corrected by implementing the action listed by each violation. If you disagree with any of the violations or proposed action, please inform KCEHSD in writing.

All minor violations must be corrected within **30** days or as specified. KCEHSD must be informed in writing, certifying that the violations have been corrected. A false statement that the violations have been corrected is a violation of the law and is punishable by a fine of not less that $2,000 or more than $25,000 for each violation. Your facility may be reinspected at any time.

You may request a meeting with the KCEHSD Program Manager to discuss the inspection findings and/or proposed corrective actions. The issuance of this Inspection Report does not preclude KCEHSD from taking administrative, civil, or criminal action as a result of the violations or that have not been corrected within the time specified.

Facility Rep Signature _____ Title _____ Inspector Signature _____ Date 4.12.05

4-1235

HAZARDOUS WASTE GENERATOR

Waste Type	Amount	Lbs/Gal	Month/Year
Oil			
Antifreeze			
Filters			
Solvent			
Sludge			

BP # _____

EPA ID #: _____

Tiered Permit: ☐ CESW ☐ CESQT ☐ CA ☐ PBR

C - Compliant NA - Not Applicable I - Class I Violation II - Class II Violation M - Minor Violation

C	NA	Code	HAZARDOUS WASTE REQUIREMENTS	I	II	M	COMMENTS
			Recordkeeping/Documentation				
		GR01	Generator has an EPA ID number	✓			
		GR02	Hazardous waste determination made for all wastes ☐ Analysis ☐ Generator knowledge ☐ Other	✓			
		GR03	Facility personnel demonstrates training/awareness	✓			
		GR04	Manifests/LDR complete/retained for three years				
		GR05	TSDF signed copy of manifest available within 35 days of waste shipment				
		GR06	Bills of lading/receipts available				
		GR07	On-site recycling reported using Recyclable Materials Report				
			Container/Tank Management				
		GC01	Containers are in good condition		✓		
		GC02	Containers are closed except when adding/removing	✓			
		GC03	Containers inspected and documented weekly	✓			
		GC04	Tanks inspected and documented daily				
		GC05	Tanks have appropriate secondary containment	✓			
	✓	GC06	Satellite containers at or near point of generation				
	✓	GC07	Satellite wastes managed as required				
			Accumulation Time Limits				
		GA01	Waste is accumulated less than 90/180/270 days				
		GA02	Empty containers managed within one year				
		GA03	Universal waste accumulated less than one year				
		GA04	Used oil filters off site within 180 days (1 year if <1 ton)				
		GA05	Lead-acid batteries off site within 180 days (1 year if <1 ton)				
			Labeling/Marking				
		GL01	Containers are properly labeled	✓			
		GL02	Excluded recyclable materials marked properly				
		GL03	Universal waste container properly labeled				
		GL04	Used oil filters marked "drained used oil filters"				
		GL05	Date written on spent lead-acid batteries				
		GL06	"Used oil" marked on all used oil tanks containers				
		GL07	Empty containers are marked properly				
			Treatment, Transport and Disposal				
		GT01	Treatment conducted with authorization/permit				
		GT02	Waste sent with authorized transport (gen. eligible)				
		GT03	Waste disposed of to authorized point/party				

POST INSPECTION INSTRUCTIONS:

- Refer to the back of this inspection report for regulatory citations and corrective actions
- Within five days of correcting all violations, sign and return to the Agency at: Kern Co. Environmental Health Services Dept., 2700 "M" Street, Suite 300, Bakersfield, CA 93301, Attention: _____

_____
Signature (Violations have been corrected as noted)

_____
Date

Kern County Environmental Health Services Department
HAZARDOUS MATERIALS MANAGEMENT PROGRAM
CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM
2700 M Street, Suite 300, Bakersfield, CA 93301 * (661) 862-8700, Fax (661) 862-8701

CALARP INSPECTION REPORT

Facility ID: FA0005811 **File #: 001074**

Facility Name: PORT ORGANIC PRODUCTS LTD Inspection Date: 1-25-2007

Street Address: 7361 ADOHR RD EPA ID No: _____

City: BUTTONWILLOW, CA Zip Code: 93206 Number of Employees: _____

Facility Contact: JIM ZABEN Phone No. (661) 764-9670 E-Mail: _____

Refer to Title 19 of the California Code of Regulations (CCR) and Chapter 6.95 of the Health and Safety Code (CHSC). Section 112(r) of the Clean Air Act. The following risk factors are either Present (Y), not Present (N), or not addressed/unknown (N/A)

SURROUNDING POPULATIONS	Y	N	N/A	DOCUMENT REVIEW	Y	N	N/A
On-site Vulnerable Populations		x		Business Plan Current and Accurate	x		
School within 1 mile		x		Emergency Response Plan	x		
Non-industrial Neighboring Uses: Farming							
				Process Hazard Analysis			
				Process Safety Management Elements: Safety Information, Hazard Review	x		
Immediate Neighbors: Farming				Operating Procedures			
				Training Records			
DETECTION AND MONITORING	**Y**	**N**	**N/A**	**MITIGATION EQUIPMENT**	**Y**	**N**	**N/A**
				Site Security: Fenced, Gated			

Inspection Narrative:

Process Description:

Port Organic Products is involved in the manufacture of liquid organic fertilizers. Liquid fish, phosphoric and sulfuric acids, UN32, potassium hydroxide, aqua ammonia and molasses are stored in tanks at ambient temperature. Fish, sulfate of potash, ammonia sulfate, xantham gum, are stored in a covered warehouse. During the manufacturing the temperatures range from 110' F to 135' F in the batch tanks. All materials are utilized without any waste except for undigested fish solids which is transferred to a waste area for sale as compost.

Recommendations

Recalculate the quantity released and the release rate for the Worst Case Scenario and the Alternate Release Scenario in your RMP Submit. The correct data does not significantly alter the distance to endpoint.

Deficiencies / Violations

Operating Procedures must be more detailed outlining the specific valves and switches that are involved for each procedure.

☐ **NOTICE OF VIOLATION: THE VIOLATIONS NOTED ABOVE MUST BE CORRECTED WITHIN _____ DAYS. FAILURE TO COMPLY MAY RESULT IN LEGAL ACTION. THE CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED WITHIN THE TIME PERIOD NOTED ABOVE.**

Inspector: KEVIN BEAHM Report Date: 1-25-2007 Received by: MAILED Title: _____

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

January 25, 2007

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
HAZARDOUS MATERIAL INSPECTION FORM

Date: 01/25/2007 Facility ID: FA0005811 File #: 001074

Facility Name: PORT ORGANIC PRODUCTS LTD	**Inspection Type**
Site Address: 7361 ADHOR RD BUTTONWILLOW, CA 93206	☒ Routine ☐ Reinspection ☐ Complaint
Phone: (661)764-9670	

PROGRAMS INSPECTED:	☒ Business Plan	☒ HW Generator	☐ UST	☐ AGT	☒ CalARP
REINSPECTION REQUIRED:	☐ Business Plan	☐ HW Generator	☐ UST	☐ AGT	☐ CalARP

VIOLATION

YES	NO/NA	VIOL. #	BUSINESS PLAN REQUIREMENTS
☐	☒	BP01	Inventory of hazardous materials is accurate, up to date, and complete [HSC 6.95, 25504, Title 19 CCR 2729].
☐	☒	BP02	Site layout/facility maps are accurate [HSC 6.95,25504; Title 19 CCR 2729].
☐	☒	BP03	Hazardous materials are stored in properly labeled and non-detoriated containers [HSC 25124(b)(3)(A & B)].
☐	☒	ER01	Contingency Plan is complete, updated, and maintained on site [HSC 6.95, 25504;Title 19 CCR 2731 Title 22 CCR 66265.53-54].
☐	☒	ER02	Facility is operated and maintained to prevent/mitigate fire, explosion, or releases of hazardous material or waste which could threaten human health or the environment [Title 22 CCR 66265.31; Title 19 CCR 2731].
☐	☒	ER03	Business has equipment required to, or appropriate for, safely handling hazardous materials [Title 22 CCR 66265.32 & .34].
☐	☒	TR01	Facility has a training program appropriate for the size and complexity of business and nature of hazardous materials handled [Title 19 CCR 2732; Title 22 CCR 66265.16].
☐	☒	TR02	Training documentation is maintained on site for current personnel. [Title 19 CCR 2732;22 CCR 66265.16].

COMMENTS: Go to http://www.co.kern.ca.us/eh/cupaprogram.asp for forms and information.
GPS Coordinates: Latitude: **Longtitude:**

INSPECTOR: KEVIN E BEAHM **DATE:** 01/25/2007

FACILITY NAME: PORT ORGA[illegible]C PRODUCTS LTD **ADDRESS:** 7361 ADHOR RD BUTTONWILLOW, CA 93206 **FA ID:** FA0005811 **FILE ID:** 001074

HAZARDOUS WASTE GENERATOR

EPA ID NUMBER:

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GR01	Generator has an EPA Identification number to treat, store, dispose, transport, or transfer hazardous waste [Title 22, CCR 66262.12].
☐	☒	GR02	The facility has made an appropriate waste determination for hazardous based on own knowledge or analysis or other [Title 22, CCR 66262.11]
☐	☒	GR03	Facility Personnel demonstrate awareness of proper(legal) hazardous-waste handling procedures. [Title 22, CCR, 66262.34(d)(2)].
☐	☒	GA01	Hazardous waste has not accumulated for more than 90/180/270 days(depending upon volume/circumstances) without the facility having a hazardous waste storage permit [Title 22,CCR, 66262.34(a).]
☐	☒	GA02	Empty containers or inner liners greater than 5 gallons have dates when emptied and are managed properly within one year of date emptied [Title 22, CCR, 66261.7(f)].
☐	☒	GA03	Universal waste is not accumulated at facility for more than one year [Title 22, CCR, 66273.15(a);66273.35(a)].
☐	☒	GA04	The facility disposes used oil filters within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66266.130(c)(4)].
☐	☒	GA05	The facility disposes lead-acid batteries within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66268.81(a)(6)]
☐	☒	GC01	Hazardous waste storage containers are in good condition [Title 22, CCR, 66262.34(a)(1)(A)].
☐	☒	GC02	Containers holding hazardous waste are closed/sealed except when adding/removing waste [Title 22, CCR, 66262.34(a)(1)(A)].]
☐	☒	GC03	The facility documents weekly inspections of hazardous waste storage area/containers [Title 22, CCR, 66265.15(d) and 66262.34(a)(1)(A)].
☐	☒	GC04	The facility documents daily inspections of tanks where hazardous waste is stored [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC05	The facility has adequate secondary containment for hazardous waste tank systems [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC06	Containers utilizing satellite accumulation rules are at or near the point of generation [Title 22, CCR 66262.34(e)(1)(A)].
☐	☒	GC07	Satellite wastes are managed according to the regulations (complete labeling, accumulation times, 55-gallon or 1 quart volume limits, etc.). [Title 22, CCR, 66262.34(e)].
☐	☒	GR04	Manifests or LDRs are properly completed and/or retained by generator for 3 years [Title 22, CCR 66262.23(a)(1); 66263.42;66263.24;66262.34(a)(4)].
☐	☒	GR05	The facility filed an exception report to DTSC after not receiving the signed TSDF copy of a manifest within 35 days [Title 22, CCR, 66262.42].
☐	☒	GR06	The facility has copies of bills of lading or receipts for removal of hazardous wastes [HSC 25160.2-Consolidated manifests/ 66266.81(a)(6)(B)-lead acid batteries/66266.130- oil filters]. The facility shall maintain copies of receipts for at least three years.
☐	☒	GR07	The facility submitted a hazardous waste recycling report [HSC 25143.10]
☐	☒	GT01	The facility is conducting on-site treatment of hazardous waste with a tiered permit [HSC 25189.5(d)]
☐	☒	GT02	Authorized, licensed, and certified hazardous waste haulers are used to transport hazardous waste to appropriate facilities [H&S Code Chapter 6.5 Section 25163].
☐	☒	GT03	Hazardous wastes are sent to authorized disposal facilities [HSC 25189.5].
☐	☒	GT04	Hazardous waste is not disposed to ground, water, or air [HSC 25189.5].

INSPECTOR: KEVIN E BEAHM **DATE:** 01/25/2007

FACILITY NAME: PORT ORGA `C PRODUCTS LTD ADDRESS: 7361 ADHO' `D BUTTONWILLOW, CA 9..6 FA ID: FA0005811 FILE ID: 001074

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GL01	Containers of hazardous waste are properly labeled (includes appropriate accumulation date, the words "HAZARDOUS WASTE," the waste composition/physical state, the hazardous properties, and name/address of generator) [Title 22, CCR, 66262.34(f)].
☐	☒	GL02	Containers of excluded recyclable materials are properly labeled [HSC 25143.9(a)].
☐	☒	GL03	Containers of universal waste are properly labeled. [Title 22, CCR, 66273.14 for SQH or 66273.34 for LQH].
☐	☒	GL04	Containers of drained used oil filters are labeled with the words "DRAINED USED OIL FILTERS" [Title 22, CCR, 66266.130(c)(3)].
☐	☒	GL05	Accumulation dates are marked on spent lead-acid batteries [22CCR 66266.81]
☐	☒	GL06	Tanks/containers of used oil destined for recycling are clearly marked with the words "USED OIL" [HSC 25143.9(a)].
☐	☒	GL07	Empty contaminated containers are clearly marked with the date they were emptied [Title 22, CCR, 66261.7(f)].

INSPECTOR: KEVIN E BEAHM DATE: 01/25/2007

FACILITY NAME: PORT ORGA `C PRODUCTS LTD ADDRESS: 7361 ADHO `D BUTTONWILLOW, CA 93206 FA ID: FA0005811 FILE ID: 001074

SUMMARY OF OBSERVATIONS/VIOLATIONS

☒ No violations of underground storage tank, hazardous materials, or hazardous waste laws/regulations were discovered. KERN CUPA greatly appreciates your efforts to comply with all the laws and regulations

☐ Violations were observed/discovered as listed below. All violations must be corrected by implementing the corrective action listed by each violation. If you disagree with any of the violations or corrective actions required, please inform the CUPA in writing.

ALL VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED. CUPA must be informed in writing with a certification that compliance has been achieved. A false statement that compliance has been achieved is a violation of the law and punishable by a fine of not less than $2,000 or more than $25,000 for each violation. Your facility may be reinspected any time during normal business hours. If a second reinspection becomes necessary due to non compliance, a reinspection charge of $85.00 per hour may be charged to the facility.

You may request a meeting with the Program Manager to discuss the inspection findings and/or the proposed corrective actions. The issuance of this Summary of Violations does not preclude the CUPA from taking administrative, civil, or criminal action.

FACILITY NAME: PORT ORGANIC PRODUCTS LTD ADDRESS: 7361 ADHOR RD BUTTONWILLOW, CA 93206 FA ID: FA0005811 FILE ID: 001074

VIOLATIONS

VIOL. NO	VIOL. TYPE	CORRECTIVE ACTION REQUIRED

INSPECTION COMMENTS:

INSPECTOR: KEVIN E BEAHM
DATE: 01/25/2007

SIGNATURE OF FACILITY REP:

Certification: I certify under penalty of perjury that this facility has complied with the corrective actions listed on this inspection form.
Signature of Owner/Operator: _____ Title: Manager 3/29/07 Date:

ENVIRONMENTAL HEALTH S VICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
Web: www.co.kern.ca.us/eh
E-mail: ehd@co.kern.ca.us

RESO RCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Animal Control Department
Community and Economic Development Department
Engineering and Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

November 12, 2008

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
HAZARDOUS MATERIAL INSPECTION FORM

Date: 11/12/2008 Facility ID: FA0001390 File #: 001398

Facility Name: CAUZZA AG PARTNERS - PALM RANCH				Inspection Type: ☒ Routine ☐ Reinspection ☐ Complaint	
Site Address: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206					
Phone: (661)764-5523					
PROGRAMS INSPECTED:	☒ Business Plan	☒ HW Generator	☐ UST	☒ AGT	☐ CalARP
REINSPECTION REQUIRED:	☒ Business Plan	☐ HW Generator	☐ UST	☐ AGT	☐ CalARP

VIOLATION

YES	NO/NA	VIOL. #	BUSINESS PLAN REQUIREMENTS
☒	☐	BP01	Inventory of hazardous materials is accurate, up to date, and complete [HSC 6.95, 25504, Title 19 CCR 2729].
☐	☒	BP02	Site layout/facility maps are accurate [HSC 6.95,25504; Title 19 CCR 2729].
☐	☒	BP03	Hazardous materials are stored in properly labeled and non-detoriated containers [HSC 25124(b)(3)(A & B)].
☒	☐	BP04	The hazardous materials inventory shall be submitted annually on or before March 1 [Title 19 CCR 2729.4(b)].
☐	☒	ER01	Contingency Plan is complete, updated, and maintained on site [HSC 6.95, 25504;Title 19 CCR 2731 Title 22 CCR 66265.53-54].
☐	☒	ER02	Facility is operated and maintained to prevent/mitigate fire, explosion, or releases of hazardous material or waste which could threaten human health or the environment [Title 22 CCR 66265.31; Title 19 CCR 2731].
☐	☒	ER03	Business has equipment required to, or appropriate for, safely handling hazardous materials [Title 22 CCR 66265.32 & .34].
☐	☒	TR01	Facility has a training program appropriate for the size and complexity of business and nature of hazardous materials handled [Title 19 CCR 2732; Title 22 CCR 66265.16].
☐	☒	TR02	Training documentation is maintained on site for current personnel. [Title 19 CCR 2732; Title 22 CCR 66265.16].

VIOLATION

			ABOVE GROUND STORAGE TANKS
☒	☐	AT01	SPCC Plan prepared, reviewed, and certified by a registered engineer within last 5 years [HSC 6.67 S25270].

COMMENTS: Go to http://www.co.kern.ca.us/eh/cupaprogram.asp for forms and information.
GPS Coordinates: Latitude: Longtitude:

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

HAZARDOUS WASTE GENERATOR

EPA ID NUMBER:

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GR01	Generator has an EPA identification number to treat, store, dispose, transport, or transfer hazardous waste [Title 22, CCR 66262.12].
☐	☒	GR02	The facility has made an appropriate waste determination for hazardous based on own knowledge or analysis or other [Title 22, CCR 66262.11]
☐	☒	GR03	Facility Personnel demonstrate awareness of proper(legal) hazardous-waste handling procedures. [Title 22, CCR, 66262.34(d)(2)].
☐	☒	GA01	Hazardous waste has not accumulated for more than 90/180/270 days(depending upon volume/circumstances) without the facility having a hazardous waste storage permit [Title 22,CCR, 66262.34(a).]
☐	☒	GA02	Empty containers or inner liners greater than 5 gallons have dates when emptied and are managed properly within one year of date emptied [Title 22, CCR, 66261.7(f)].
☐	☒	GA03	Universal waste is not accumulated at facility for more than one year [Title 22, CCR, 66273.15(a);66273.35(a)].
☐	☒	GA04	The facility disposes used oil filters within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66266.130(c)(4)].
☐	☒	GA05	The facility disposes lead-acid batteries within 180 days of generation (or one year if less than 1 ton are accumulated) [Title 22, CCR, 66268.81(a)(6)]
☐	☒	GC01	Hazardous waste storage containers are in good condition [Title 22, CCR, 66262.34(a)(1)(A)].
☐	☒	GC02	Containers holding hazardous waste are closed/sealed except when adding/removing waste [Title 22, CCR, 66262.34(a)(1)(A)].]
☐	☒	GC03	The facility documents weekly inspections of hazardous waste storage area/containers [Title 22, CCR, 66265.15(d) and 66262.34(a)(1)(A)].
☐	☒	GC04	The facility documents daily inspections of tanks where hazardous waste is stored [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC05	The facility has adequate secondary containment for hazardous waste tank systems [Title 22, CCR 66262.34(a)(1)(A)].
☐	☒	GC06	Containers utilizing satellite accumulation rules are at or near the point of generation [Title 22, CCR 66262.34(e)(1)(A)].
☐	☒	GC07	Satellite wastes are managed according to the regulations (complete labeling, accumulation times, 55-gallon or 1 quart volume limits, etc.). [Title 22, CCR, 66262.34(e)].
☐	☒	GR04	Manifests or LDRs are properly completed and/or retained by generator for 3 years [Title 22, CCR 66262.23(a)(1); 66263.42;66263.24;66262.34(a)(4)].
☐	☒	GR05	The facility filed an exception report to DTSC after not receiving the signed TSDF copy of a manifest within 35 days [Title 22, CCR, 66262.42].
☐	☒	GR06	The facility has copies of bills of lading or receipts for removal of hazardous wastes [HSC 25160.2-Consolidated manifests/ 66266.81(a)(6)(B)-lead acid batteries/66266.130- oil filters]. The facility shall maintain copies of receipts for at least three years.
☐	☒	GR07	The facility submitted a hazardous waste recycling report [HSC 25143.10]
☐	☒	GT01	The facility is conducting on-site treatment of hazardous waste with a tiered permit [HSC 25189.5(d)]
☐	☒	GT02	Authorized, licensed, and certified hazardous waste haulers are used to transport hazardous waste to appropriate facilities [H&S Code Chapter 6.5 Section 25163].
☐	☒	GT03	Hazardous wastes are sent to authorized disposal facilities [HSC 25189.5].
☐	☒	GT04	Hazardous waste is not disposed to ground, water, or air [HSC 25189.5].

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

VIOLATIONS

YES	NO/NA	VIOL. #	GENERATOR REQUIREMENTS
☐	☒	GL01	Containers of hazardous waste are properly labeled (includes appropriate accumulation date, the words "HAZARDOUS WASTE," the waste composition/physical state, the hazardous properties, and name/address of generator) [Title 22, CCR, 66262.34(f)].
☐	☒	GL02	Containers of excluded recyclable materials are properly labeled [HSC 25143.9(a)].
☐	☒	GL03	Containers of universal waste are properly labeled. [Title 22, CCR, 66273.14 for SQH or 66273.34 for LQH].
☐	☒	GL04	Containers of drained used oil filters are labeled with the words "DRAINED USED OIL FILTERS" [Title 22, CCR, 66266.130(c)(3)].
☐	☒	GL05	Accumulation dates are marked on spent lead-acid batteries [22CCR 66266.81]
☐	☒	GL06	Tanks/containers of used oil destined for recycling are clearly marked with the words "USED OIL" [HSC 25143.9(a)].
☐	☒	GL07	Empty contaminated containers are clearly marked with the date they were emptied [Title 22, CCR, 66261.7(f)].

INSPECTOR: LAUREL D FUNK DATE: 11/12/2008

FACILITY NAME: CAUZZA AG PARTNERS - PALM RANCH
ADDRESS: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206
FA ID: FA0001390
FILE ID: 001398

SUMMARY OF OBSERVATIONS/VIOLATIONS

☐ No violations of underground storage tank, hazardous materials, or hazardous waste laws/regulations were discovered. KERN CUPA greatly appreciates your efforts to comply with all the laws and regulations

☒ Violations were observed/discovered as listed below. All violations must be corrected by implementing the corrective action listed by each violation. If you disagree with any of the violations or corrective actions required, please inform the CUPA in writing.

ALL VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED. CUPA must be informed in writing with a certification that compliance has been achieved. A false statement that compliance has been achieved is a violation of the law and punishable by a fine of not less than $2,000 or more than $25,000 for each violation. Your facility may be reinspected any time during normal business hours. If a second reinspection becomes necessary due to non compliance, a reinspection charge of $85.00 per hour may be charged to the facility.

You may request a meeting with the Program Manager to discuss the inspection findings and/or the proposed corrective actions. The issuance of this Summary of Violations does not preclude the CUPA from taking administrative, civil, or criminal action.

FACILITY NAME: CAUZZA AG PARTNERS - PALM RANCH
ADDRESS: ADOHR AND DAIRY RD BUTTONWILLOW, CA 93206
FA ID: FA0001390
FILE ID: 001398

VIOLATIONS

VIOL. NO	VIOL. TYPE	CORRECTIVE ACTION REQUIRED
BP01	CLASS I VIOLATION	Update inventory of hazardous materials.
BP04	MINOR VIOLATION	The inventory shall be reviewed and updated within 30 days.
AT01	CLASS II VIOLATION	Develop a Spill Prevention Control and Countermeasure (SPCC) plan, if appropriate, as required by law. Keep signed copy of plan on premesis.

INSPECTION COMMENTS:

INSPECTOR: LAUREL D FUNK
DATE: 11/12/2008

SIGNATURE OF FACILITY REP:

Certification: I certify under penalty of perjury that this facility has complied with the corrective actions listed on this inspection form.
Signature of Owner/Operator: _____ Title: _____ Date:

BUSINESS OWNER/OPERATOR IDENTIFICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

I. IDENTIFICATION

FACILITY ID# FA0005811	BEGINNING DATE 02/28/2008	ENDING DATE 02/28/2009	
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As): PORT ORGANIC PRODUCTS LTD		BUSINESS PHONE (661) 764-9670	
BUSINESS SITE ADDRESS: 7361 ADHOR RD		BUSINESS FAX	
BUSINESS CITY: BUTTONWILLOW	CA	ZIP CODE: 93206	COUNTY: Kern County
DUN & BRADSTREET		PRIMARY SIC: 2873	PRIMARY NAICS: None specified
BUSINESS MAILING ADDRESS: 5060 CALIFORNIA AVE STE 650			
BUSINESS MAILING CITY: BAKERSFIELD	STATE: CA	ZIP CODE: 93309	
BUSINESS OPERATOR NAME: SHINAULT BAKER AND CO CPAs		BUSINESS OPERATOR PHONE	

II. BUSINESS OWNER

OWNER NAME: PORT ORGANIC PRODUCTS LTD		OWNER PHONE: (661) 764-9670	
OWNER MAILING ADDRESS: 5060 CALIFORNIA AVE #650			
OWNER MAILING CITY: BAKERSFIELD	STATE: CA	ZIP CODE: 93206	

III. ENVIRONMENTAL CONTACT

CONTACT NAME: Jim Zaben		CONTACT PHONE: (661) 764-9670	
CONTACT MAILING ADDRESS: 7361 Adohr Rd.		CONTACT EMAIL: jzaben@bak.rr.com	
CITY: Buttonwillow	STATE: CA	ZIP CODE: 93206	

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME: Kenneth N. Nelson Jr.	NAME: Roy T. Carroll
TITLE: Owner	TITLE: General Manager
BUSINESS PHONE: (661) 764-9670	BUSINESS PHONE: (661) 764-9670
24-HOUR PHONE: (661) 667-3460	24-HOUR PHONE: (561) 201-1185
PAGER #: ( ) -	PAGER #: ( ) -

ADDITIONAL LOCALLY COLLECTED INFORMATION:
APN: 15904018

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	DATE	NAME OF DOCUMENT PREPARER
[signature]	04/24/2008	
NAME OF SIGNER (print): Jim Zaben	TITLE OF SIGNER	

CONSOLIDATED CONTINGENCY PLAN

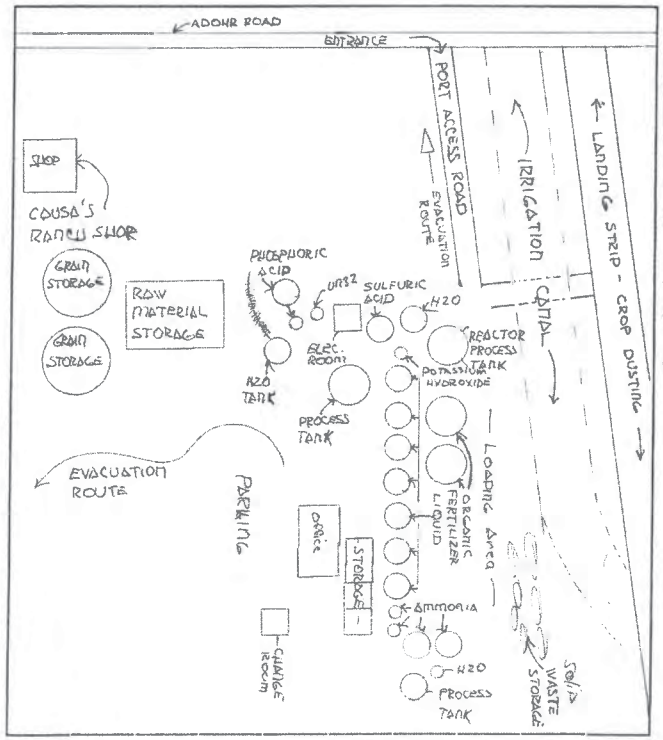
KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
2700 M STREET, SUITE 300
BAKERSFIELD, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Form
SITE MAP

Page ___ of ___

I. FACILITY IDENTIFICATION

FACILITY ID # FA 0000 5811		EPA ID # (Hazardous Waste Only)	
BUSINESS NAME (Same as Facility Name of DBA-Doing Business As): PORT ORGANIC PRODUCTS LTD			
SITE ADDRESS: 7361 ADOHR ROAD	CITY: BUTTONWILLOW	ZIP CODE: 93206	
DATE MAP DRAWN: 04-16-05	MAP #	SUB-FACILITY # (if needed)	



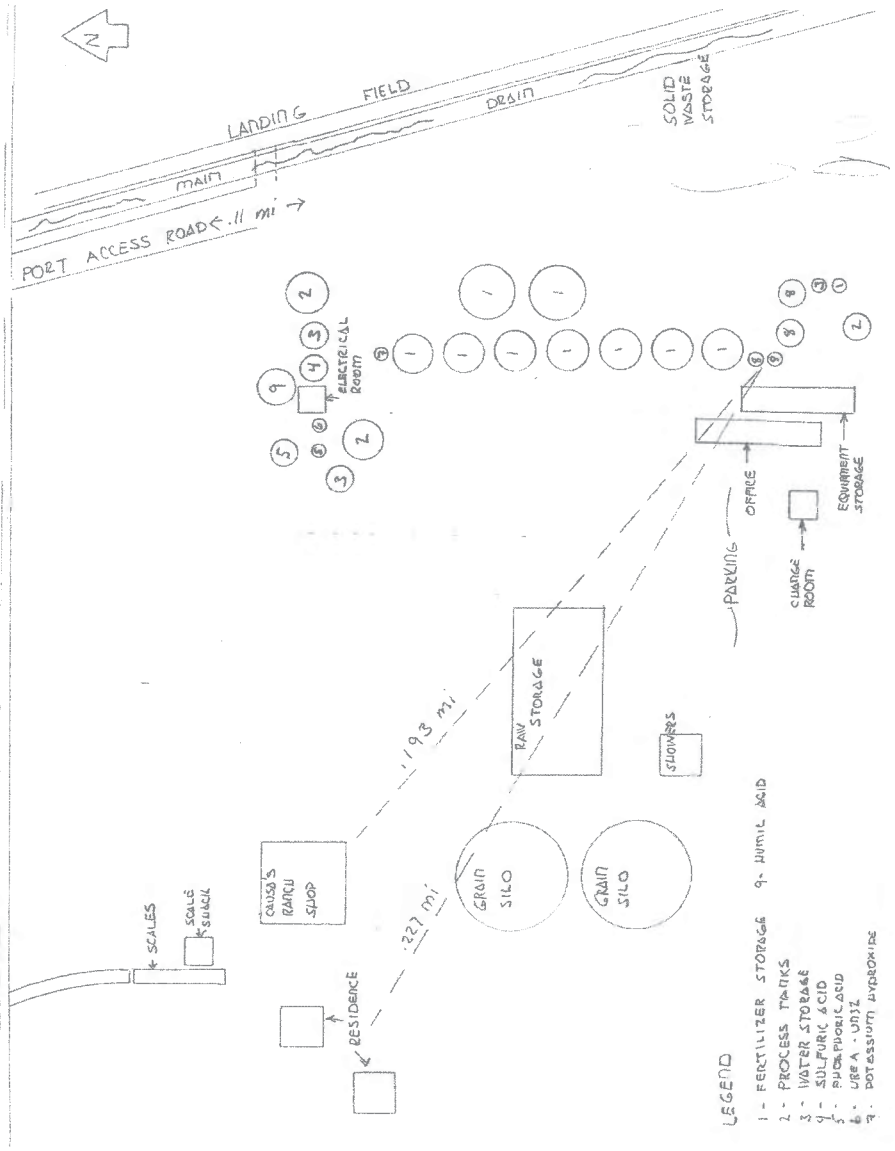
For Site Map

- Loading Areas
- Parking Lots
- Internal Roads
- Storm and Sewer Drains
- Adjacent Property Use
- Locations and Names of Adjacent Streets and Alleys
- Entrance and Exit Points and Roads
- Evacuation Routes

For Storage Map

- Location of Each Storage Area
- Location of Each Hazardous Material Handling Area
- Location of Emergency Response Equipment

NORTH



ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
STEVE McCALLEY, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Phone: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: ehs@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

June 28, 2005

Ken Nelson Jr.
Port Organic Products LLT
P O Box 5203
Buttonwillow, CA 93388

Docket No.DS00009/06-28
Facility ID No. FA0005811

NOTIFICATION OF POTENTIAL FILING OF ADMINISTRATIVE ENFORCEMENT ORDER

On April 12, 2005, representatives from Kern County Environmental Health Services Department, Certified Unified Program Agency (CUPA), conducted an inspection at Port Organic Products LLT, located at 7361 Adhor Road in Buttonwillow. Based on information obtained during the inspection the CUPA is preparing to bring an administrative action against Port Organic Products LLT, pursuant to Section 25187 of the California Health and Safety Code (HSC). The administrative action being considered includes violations of the HSC, Sections 25503.5 (a) and California Code of Regulations (CCR) Title 19, Section 2745.1 (a) (b), 2732, and Title 22, CCR, Section 66262.31. A copy of the Notice of Violations including photographs has previously been sent. Enclosed is a copy of the current penalty regulations.

Prior to assessing penalties against Port Organic Products LLT and issuing the order, the Agency would like to offer you an opportunity to advise us of any information that should be considered on your behalf and initiate settlement discussions. If you have any information relating to the alleged violations, please direct them to:

Joe Canas
Kern County Environmental Health Services Department
2700 "M" Street, Ste. 300
Bakersfield, CA 93301

Please be advised that it is our intention to file an Administrative Enforcement Order against you within the next two weeks, unless you first advise us of substantial reasons not to proceed as planned. Any penalty proposed for violations of HWCL and its implementing regulations will be calculated pursuant to 22CCR, Sections 66272.60 – 66272.69.

Thank you for your prompt attention to this matter. If you have any questions, please feel free tc contact Dan Starkey of our staff at (661) 862-8757.

Sincerely,

Joe Canas
Hazardous Materials Specialist IV
Hazardous Materials Management Program

DS:

Enclosures

cc: (DTSC Statewide Compliance Division Regional Branch Chief)
(DTSC State Regulatory Programs Division Liaison)

ds\PortOrganicProductsLLT...ShowCause.Ltr.06.28.05.doc

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

02/06/2008 Page 1 of 2

FACILITY INFORMATION: Site ID: 001074

Facility Name: PORT ORGANIC PRODUCTS LTD, FA0005811
Physical Location: 7361 ADHOR RD
City: BUTTONWILLOW, CA
Facility Phone: (661) 764-9670

OWNER INFORMATION FOR MAILING CORRESPONDENCE ONLY:

Name: PORT ORGANIC PRODUCTS LTD
In Care of: SHINAULT BAKER AND CO CPAs
Address: 5060 CALIFORNIA AVE #650
City, State, Zip: BAKERSFIELD, CA 93309
Contact's Phone: (661) 764-9670
Environmental Contact's E-Mail Address: izaben@bak.rr.com

BILLING INFORMATION ONLY:

Name: PORT ORGANIC PRODUCTS LTD
In Care of: SHINAULT BAKER AND CO CPAs
Address: 5060 CALIFORNIA AVE STE 650
City, State, Zip: BAKERSFIELD, CA 93309
Contact's Phone:

EMERGENCY CONTACT INFORMATION:

NAME: TITLE: NAME: TITLE:

Day Phone: Day Phone:
24 hr Phone: 24 hr Phone:

REGULATED ACTIVITIES AT THIS FACILITY:

Hazardous Material Business Plan
Hazardous Waste Generator, Less than 5,000 #/year EPA ID #:
CAL-ARP COMPLEX SINGLE CATEGORY MODERATE RISK

CERTIFICATION:

PLEASE CHECK ALL THAT APPLY:

☐ The most recently submitted hazardous materials business plan and inventory are complete, accurate and current. There have been no changes in the quantity or any hazardous materials as previously reported. No hazardous materials subject to the inventory requirements are being handled that are not currently listed.

☐ I have enclosed a business plan and inventory for the facility described above.

☐ Other:

I certify, under penalty of perjury, that the information provided above is correct.

Printed Name Title

Signature Date

Report # 7600

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS BUSINESS PLAN CERTIFICATION

AMMONIA AQUA	12,336.00	LBS (POUNDS)	L
SULFURIC ACID	90,600.00	LBS (POUNDS)	L
POTASSIUM HYDROXIDE	12,800.00	LBS (POUNDS)	L
UN 32	16,605.00	LBS (POUNDS)	L
PHOSPHORIC ACID	32,097.00	LBS (POUNDS)	L
Ammonium Sulfate 21-0-0-24	100,000.00	LBS (POUNDS)	S
Sulfate of Potash	200,000.00	LBS (POUNDS)	S
Jenner 8 (Humic Substance)	6,000.00	GALLONS	L
Agrolizer (6-2-0) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Marizyme Fishilizer (4-2-2) Liquid Organic Fertilizer	12,000.00	GALLONS	L
Marizyme Fishilizer (7-1-1) Liquid Organic Fertilizer	6,500.00	GALLONS	L
Marizyme Fishilizer (8-5-2) Liquid Organic Fertilizer	10,000.00	GALLONS	L
Liquid Fish Base	40,000.00	GALLONS	L

Tank and Pump Description List
for Port Organic Products Ltd., Inc.

The following are descriptions and uses of the equipment identified on the attached Plot Plan (see Sheet 2).

Note #1: This was a hole that was dug to insert a secondary containment system. The secondary containment system's purpose was to contain a fiber glass tank. The purpose of placing the tank inside of the secondary containment system was for insulation. Port was doing some testing, for a non organic product, using a conventional agricultural nitrogen source that would flash off nitrogen in the form of ammonia at temperatures above 80 degrees Fahrenheit. The goal was to prevent this loss of nitrogen by keeping the product cool via the insulating effects of below ground storage. The Department of Environmental Health Services informed Port that the system that Port had developed was in their opinion a buried tank. Environmental Health Services then explained the requirements needed to have a buried tank and Port decided that the costs were too great to justify that system. The issue was mitigated with the Department of Environmental Health Services, the equipment was removed and the hole has been filled.

Note #2: (R-2) This is a 6,000 gallon poly crosslink cone bottom tank, used to hydrolyze protein.

Note #3: (R-3) This is a 6,000 gallon poly crosslink cone bottom tank, identical to the one in note #2. It's used to stabilize material and occasionally for hydrolyzing.

Note #4: This is an approximately 4,500 gallon poly crosslink tank that contains 3 inch stainless steel coils. This tank is used to hold water that is preheated (the coils loop through the hot water heater) to be used in the hydrolyzation process.

Note #5: This tank, approximately 5,500 gallons, is made of poly crosslink and is used as an inventory tank for sulfuric acid.

Note #6: This is a 6,000 gallon poly crosslink tank that is used to inventory Humic Acid.

Note #7: This is a 3,000 gallon poly crosslink tank that is used to inventory phosphoric acid.

Note #8: This tank is a 1,300 gallon measuring tank.

Note #9: This tank is a 1,300 gallon measuring tank.

Note #10: This is a 500 gallon tank that has been taken out of service for future use.

Note #11: These are air operated diaphragm pumps, used to load cone bottom tank R-1 (Note #22).

Note #12: This is a 500 gallon measuring tank.

Note #13: This is a vibrating shaker screen that is used to screen the material coming out of cone bottom tank R-2 (Note #2).

Note #14: Scowl to collect tailings generated by cone bottom tank R-2 (Note #2).

Note #15: Air operated diaphragm pump used to inject either phosphoric or sulfuric acid into cone bottom tank R-2 (Note #2) to stabilize hydrolyzed product.

Note #16: Electrically driven centrifugal pump used to circulate cone bottom tank R-2 (Note #2).

Note #17: Wooden form to pour small cement pad. This plan has been abandoned and the forms will be removed.

Note #18: Electrically driven centrifugal pump used to circulate water inside water storage tank #20. This pump is also used to pump water from the water storage tank.

Note #19: Electrically driven centrifugal pump used to circulate water in cooling tower.

Note #20: Poly crosslink water storage tank, capacity approximately 4,500 gallons.

Note #21: Electrically driven centrifugal pump used to circulate cone bottom tank R-1 (Note #22).

Note #22: Cone bottom tank R-1. This is the tank where the final inputs are added and the final screening is done and that product is sent to its designated product storage tank.

Note #23: Scowl used to collect tailings generated from cone bottom tank R-1 (Note #22) shaker screen.

Note #24: Vibrating shaker screen used to clean final product coming out of cone bottom tank R-1 (Note #22).

Note #25: 300 gallon resonance tank, used to collect screened product from cone bottom tank shaker screen (Note #22). The contents of this tank are pumped away to its final product inventory storage tank.

Note #26: Electrically driven centrifugal pump, used to pump finished product from cone bottom tank R-1 (Note #22) resonance tank (Note #25) and to final product inventory tank.

Note #27: Concrete cellar, about 4ft x 4ft x 4ft. This cellar is used to collect rinse water from the concrete pad.

Note #28: 300 gallon resonance tank used to collect cleaned material fro cone bottom tank R-2 (Note #2) and R-3 (Note #3).

Note #29: Electrically driven centrifugal pump, used to transfer product from cone bottom tanks R-2 (Note #2) and R-3 (Note #3) resonance tank to primary inventory storage tank.

Note #30: 1,200 gallon poly crosslink tank, used to store potash.

Note #31: Electrically driven centrifugal pump, used to circulate T-1 (Note #35) and to transfer product from T-1 (Note #35) into tanker truck for delivery.

Note #32: Concrete cellar, 4ft x 4ft x 4ft, used to collect rinse water from the concrete pad.

Note #33: 1,000 cone bottom mix tank, used on infrequent occasions to mix dry inputs with specialty finished products.

Note #34: Electrically driven centrifugal pump used to circulate T-2 (Note #36) and transfer finished product to tanker truck for delivery.

Note #35: (T-1) 10,500 gallon fiberglass finished product inventory tank.

Note #36: (T-2) 10,500 gallon fiberglass finished product inventory tank.

Note #37: (T-3) 10,500 gallon fiberglass finished product inventory tank.

Note #38: (T-4) 6,500 gallon poly crosslink finished product inventory tank.

Note #39: (T-5) 10,500 gallon fiberglass finished product inventory tank.

Note #40: (T-6) 11,500 gallon poly crosslink finished product inventory tank.

Note #41: (T-7) 7,200 gallon poly crosslink finished product inventory tank.

Note #42: (T-8) 14,000 gallon fiberglass finished product inventory tank.

Note #43: (T-9) 5,500 gallon fiberglass finished product inventory tank.

Note #44: (T-14) 20,000 gallon fiberglass primary product inventory tank.

Note #45: (T-15) 20,000 gallon fiberglass primary product inventory tank.

Note #46: Electrically driven centrifugal pump used to circulate and transfer T-14 (Note #44).

Note #47: Electrically driven centrifugal pump used to circulate and transfer T-2 (Note #36).

Note #48 Electrically driven centrifugal pump used to circulate and transfer T-3 (Note #37).

Note #49: Electrically driven centrifugal pump used to circulate and transfer T-4 (Note #38).

Note #50: Electrically driven centrifugal pump used to circulate and transfer T-5 (Note #39).

Note #51: Electrically driven centrifugal pump used to circulate and transfer T-15 (Note #45).

Note #52: Electrically driven centrifugal pump used to circulate and transfer T-6 (Note #40).

Note #53: Electrically driven centrifugal pump used to circulate and transfer T-7 (Note #42).

Note #54: Portable standby air operated diaphragm pump.

Note #55: Electrically driven centrifugal pump used to circulate and transfer T-8 (Note #41).

Note #56: Electrically driven centrifugal pump used to circulate and transfer T-9 (Note #42).

Note #57 & 58 omitted

Note #59: Concrete cellar used to contain rinse water from pad.

Note #60: 6,500 gallon poly crosslink tank used to store micronutrient enhanced water.

Note #61: Stainless steel container, 4ft x 4ft x 4ft, to be used to contain rinse water from future unit that has been put on hold. Planned completion date undetermined.

Note #62: Poly crosslink cone bottom tank 3,200 gallons to be used for hydrolyzing and mixing of product in above future unit.

Note #63: 25 hp. electrically driven air compressor.

Note #64: Sea train containers that are welded and sealed together. They are used to store and secure tools and fittings.

Note #65: Electrically driven centrifugal pump. This pump is not in use.

Note #66: This is a concrete pad that is used to repair pumps and equipment. The poles located on the pad will be used to support a cover for shade and protection from rain.

Note 67: 3,000 gallon horizontal poly crosslink tank, used for temporary portable storage.

Note 68: 3,000 gallon horizontal poly crosslink tank, used for temporary portable storage.

Note 69: (T-10) 11,500 gallon poly crosslink tank that is used to store concentrated liquid fish. This concentrate is a potential input currently being used in tests that will determine its economic. When T-10 is not holding the concentrate it is used to inventory finished product.

Note #70: (T-11) is a fiberglass cone bottom tank that is used to inventory liquid molasses.

Note #71: This is a 1,500 gallon cone bottom crosslink tank that is used to temporarily store test products.

Note #72: This tank is a 1,500 gallon cone bottom poly crosslink tank that is used to temporarily store test products.

Note #73: This is a 6,500 gallon portable poly crosslink tank that is used to inventory agricultural grade phosphoric acid.

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
MATTHEW CONSTANTINE, R.E.H.S., Director
2700 "M" STREET, SUITE 300
BAKERSFIELD, CA 93301-2370
Voice: (661) 862-8700
Fax: (661) 862-8701
TTY Relay: (800) 735-2929
e-mail: eh@co.kern.ca.us

RESOURCE MANAGEMENT AGENCY
DAVID PRICE III, RMA DIRECTOR
Community and Economic Development Department
Engineering & Survey Services Department
Environmental Health Services Department
Planning Department
Roads Department

ck 1074 file

March 18, 2008

Mr. Kenneth Nelson
Port Organic Products LTD
c/o SHINAULT BAKER AND CO CPAs
5060 California Avenue, Suite 650
Bakersfield, CA 93309

SUBJECT: SETTLEMENT AGREEMENT FOR PORT ORGANIC PRODUCTS, LTD (MA 004-09-07)

Dear Mr. Nelson:

This Department has completed the evaluation of all factors associated with the settlement of the administrative enforcement action being considered. Included with this correspondence is a settlement agreement entitled "Consent Order," which was previously discussed.

You have been provided with two signed Consent Order documents. One document is to be countersigned and mailed back to this office with the agreed settlement amount of $9,238.50. The other document is your copy.

If you have any questions, please contact the undersigned at (661) 862-8756.

Sincerely,

Joe Cañas, R.E.H.S.
Hazardous Materials Specialist IV
Unified Hazardous Materials/Waste Program

Enclosures

cc: File

KERN COUNTY ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
HAZARDOUS MATERIALS MANAGEMENT PROGRAM

CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)

In the Matter of: Port Organic Products LTD 7361 Adhor Rd Buttonwillow CA 93206 Facility ID No. FA0005811 Respondent	) Docket No. BH 001-03-08)) **CONSENT ORDER**)))) Health and Safety Code) Section 25404.1.1)

The Kern County Environmental Health Services Department, Certified Unified Program Agency (Agency), and Port Organic Products LTD (Respondent) enter into this Consent Order (Order) and agree as follows:

1.0 Respondent handles and/or stores hazardous materials and operates and/or operated an Underground Storage Tank (UST) at 7361 Adhor Rd in Buttonwillow, California (Site).

2.0 The Agency inspected and/or investigated the Site on September 25, 2007.

3.0 The Agency alleges the following violations:

3.1 Respondent violated Health and Safety Code (HSC) Section 25284 (a)(1), failure to obtain a permit from the Agency to own or operate an underground storage tank.

3.2 The Respondent violated HSC Section 25503.5 (a)(1), failure to provide an accurate, up to date, and complete hazardous materials inventory.

3.3 The Respondent violated HSC Section 25509, failure to provide an accurate site layout/facility map.

4.0 A dispute exists regarding the alleged violations.

5.0 The parties wish to avoid the expense of litigation and to ensure prompt compliance.

6.0 Jurisdiction exists pursuant to HSC Section 25404.1.1.

7.0 Respondent waives any right to additional hearings in this matter.

8.0 This Consent Order shall constitute full settlement of the violations alleged above but does not limit the Agency from taking appropriate enforcement action concerning other violations.

SCHEDULE FOR COMPLIANCE

9.0 The following summarizes the schedule for compliance with this Consent Order:

9.1 The Department acknowledges that compliance with the following items has been achieved within the time frames specified:

9.1.2 Immediately discontinue the use of the unpermitted underground storage tank and arrange for proper removal.

9.1.2 Within 30 days update Port Organic Products LTD hazardous materials inventory to reflect all hazardous materials above regulatory threshold quantities stored at the Site. The Department acknowledges receipt of the updated chemical inventory within the prescribed deadline.

9.1.3 Within 10 days provide an accurate site layout/facility map which discloses where hazardous materials are stored and handled at the Site. The Department acknowledges receipt of the site map within the prescribed compliance deadline.

9. 2 All submittals pursuant to this Consent Order shall be sent to:

Mrs. Barbara Houghton
Kern County Environmental Health Services Department

Certified Unified Program Agency
2700 "M" Street, Suite 300
Bakersfield, CA 93301

9.3 Communications: All communications from Agency shall be communicated to Respondent in writing by the Manager of the Kern County Environmental Health Services Department, Certified Unified Program Agency, or his/her designee. No informal advice, guidance, suggestions, or comments by the Agency regarding reports, plans, specifications, schedules, or any other writings by Respondent shall be construed to relieve Respondent of its obligation to obtain such formal approvals as may be required.

9.4 Compliance with Applicable Laws: Respondent shall carry out this Order in compliance with all local, State, and federal requirements, including but not limited to requirements to obtain permits and to assure worker safety.

9.5 Liability: Nothing in this Consent Order shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations of Respondent, except as provided in this Consent Order. Notwithstanding compliance with the terms of this Consent Order, Respondent may be required to take further actions as are necessary to protect public health or welfare or the environment.

9.6 Government Liabilities: The Kern County Environmental Health Services Department shall not be held liable for injuries or damages to persons or property resulting from acts or omissions by Respondent or related parties in carrying out activities pursuant to this Consent Order, nor shall the County of Kern be held as a party to any contract entered into by Respondent or its agents in carrying out activities pursuant to this Consent Order.

9.7 Extension Requests: If Respondent is unable to perform any activity or submit any document within the time required under this Consent Order, the Respondent may, prior to expiration of the time, request an extension of time in writing. The extension request shall include a justification for the delay.

9.8 Extension Approvals: If the Agency determines that good cause exists for an extension, it will grant the request and specify in writing a new compliance schedule.

PAYMENT

10.0 Respondent shall pay the Agency a total of $9238.50*, of which $5,200 is penalty, $4,037.50 is reimbursement of this Agency's costs. Payment is due within 30 days from the effective date of this Consent Order. Respondent's checks shall be made payable to the Kern County Environmental Health Services Department and be delivered to:

Kern County Environmental Health Services Department
2700 "M" Street, Suite 300
Bakersfield, CA 93301

If Respondent fails to make payment as provided above, Respondent agrees to pay interest at the rate established pursuant to HSC Section 25360.1 and to pay all costs incurred by the Agency in pursuing collection, including attorney's fees.

OTHER PROVISIONS

11.0 Additional Enforcement Actions: By agreeing to this Consent Order, the Agency does not waive the right to take further enforcement actions, except to the extent provided in this Consent Order.

* Amount reflects previous payment by RP of $297.50

11.1 Penalties for Noncompliance: Failure to comply with the terms of this Consent Order may subject Respondent to civil penalties and/or punitive damages for any costs incurred by the Agency or other government agencies as a result of such failure, as provided by HSC Section 25188 and other applicable provisions of law.

11.2 Parties Bound: This Consent Order shall apply to and be binding upon Respondent and its officers, directors, agents, receivers, trustees, employees, contractors, consultants, successors, and assignees, including, but not limited to, individuals, partners, subsidiary and parent corporations, and upon the Agency and any successor Agency that may have responsibility for and jurisdiction over the subject matter of this Consent Order.

11.3 Effective Date: The effective date of this Consent Order is the date it is signed by the Agency.

11.4. Integration: This agreement constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except as provided in this agreement.

11.5 Compliance with Waste Discharge Requirements: Respondent shall comply with all applicable waste discharge requirements issued by the State Water Resources Control Board or the California Regional Water Quality Control Board.

Dated: 3/20/08

Signature of Respondent's Representative

Typed or Printed Name and Title of Respondent's Representative

Dated: 3/20/08

Matthew Constantine, Director
Kern County Environmental Health Services Department

Results of 2010 Review of
Kern County Environmental Health Services Department Records

Palm Farms

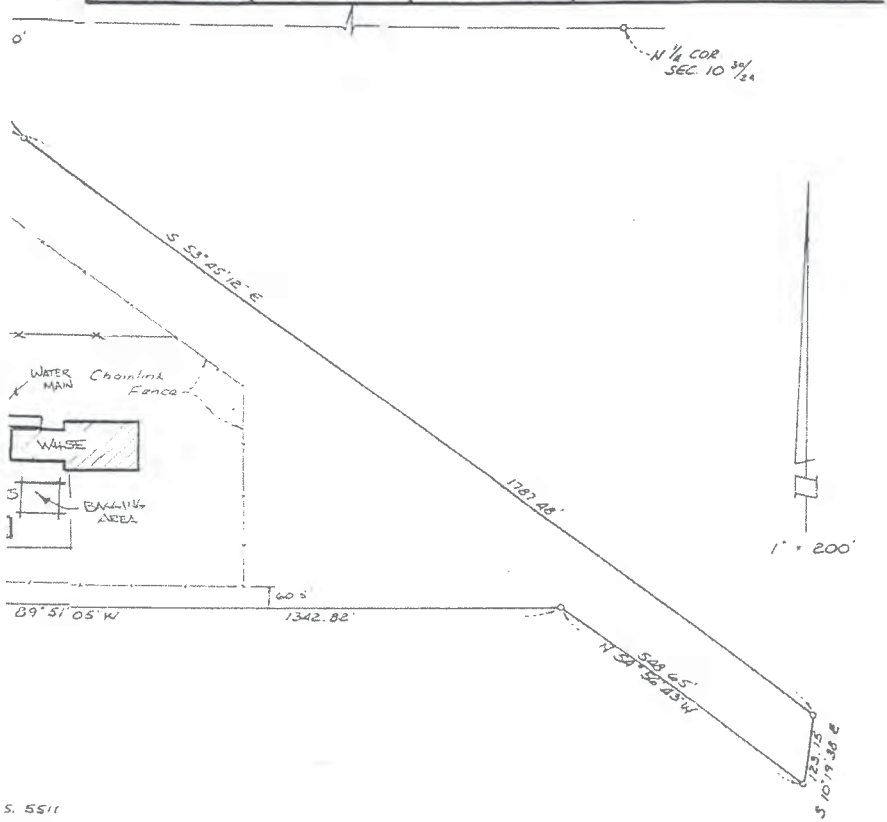
9-91

PREPARED FOR: BANDUCCI ENTERPRISES

DESCRIPTION: PALM FARMS SURVEY
SEC. 9 & 10, T. 30S., R. 24E., MDM.

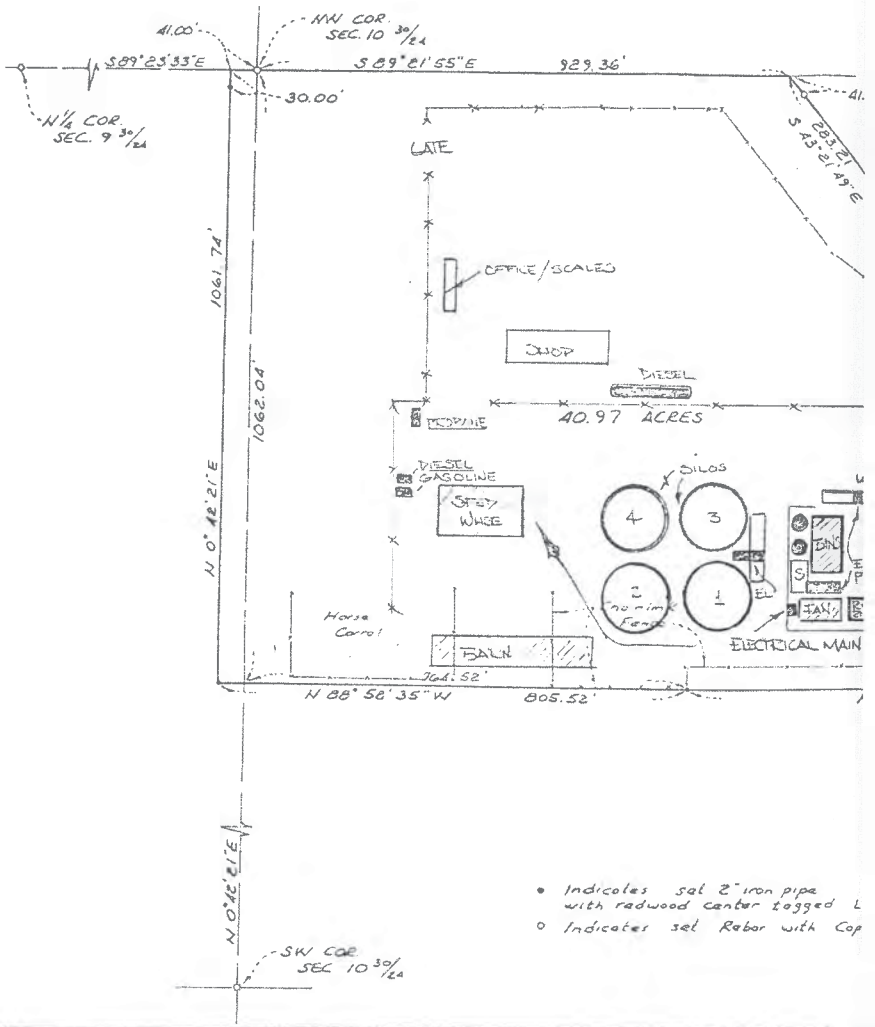
DATE: 8/30/89 | DWN. BY: B. Smith | JOB NO.: 89-1839

BOB J. SMITH / GREGORY J. SMITH
PROFESSIONAL LAND SURVEYORS
P.O. Box 464 • Bakersfield, CA 93302-0464
(805) 326-8883



S. 5511
L.S. 5511

REVISED 1-



• Indicates set 2" iron pipe with redwood center tagged L
o Indicates set Rebar with Cap

BUSINESS OWNER/OPERATOR IDENTIFICATION

Kern County Environmental Health Services Department
2700 M Street, Suite 300
Bakersfield, CA 93301
(661) 862-8700 Fax (661) 862-8701

Unified Program Consolidated Form (UPCF)
FACILITY INFORMATION

I. IDENTIFICATION

FACILITY ID# FA0001390	15-010-000139-8	BEGINNING DATE 02/16/2009	ENDING DATE 02/16/2010
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) CAUZZA AG PARTNERS - PALM RANCH		BUSINESS PHONE (661) 764-5523	
BUSINESS SITE ADDRESS ADOHR AND DAIRY RD		BUSINESS FAX	
BUSINESS CITY BUTTONWILLOW	CA	ZIP CODE 93206	COUNTY Kern County
DUN & BRADSTREET		PRIMARY SIC 0131	PRIMARY NAICS None specified
BUSINESS MAILING ADDRESS 1600 CORN CAMP RD			
BUSINESS MAILING CITY BUTTONWILLOW	STATE CA	ZIP CODE 93206-9729	
BUSINESS OPERATOR NAME JOHN CAUZZA		BUSINESS OPERATOR PHONE	

II. BUSINESS OWNER

OWNER NAME CAUZZA JOHN & LAURA	OWNER PHONE (661) 764-5523	
OWNER MAILING ADDRESS 1600 CORN CAMP RD		
OWNER MAILING CITY BUTTONWILLOW	STATE CA	ZIP CODE 93206-9729

III. ENVIRONMENTAL CONTACT

CONTACT NAME RON CAUZZA	CONTACT PHONE (661) 764-5523	
CONTACT MAILING ADDRESS 1600 CORN CAMP RD	CONTACT EMAIL sarah@cstesafety.com	
CITY BUTTONWILLOW	STATE CA	ZIP CODE 93206

IV. EMERGENCY CONTACTS

-PRIMARY-	-SECONDARY-
NAME JOHN CAUZZA	NAME RON CAUZZA
TITLE RANCH MANAGER	TITLE RANCH MANAGER
BUSINESS PHONE (661) 764-5523	BUSINESS PHONE (661) 764-5523
24-HOUR PHONE (661) 332-2801	24-HOUR PHONE (661) 589-2269
PAGER # () -	PAGER # () -

ADDITIONAL LOCALLY COLLECTED INFORMATION:
APN: 104 90 12

Certification: Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.

SIGNATURE OF OWNER/OPERATOR OR DESIGNATED REPRESENTATIVE	DATE	NAME OF DOCUMENT PREPARER
Doug Patrick	02/17/2009	
NAME OF SIGNER (print) DOUG PATRICK RSO	TITLE OF SIGNER	

UNIFIED PROGRAM CONSOLIDATED FORM

FACILITY INFORMATION

BUSINESS ACTIVITIES

I. FACILITY IDENTIFICATION

FACILITY ID # 15-010-000139-8	EPA ID # (Hazardous Waste Only) CAL000080053

BUSINESS NAME (Same as Facility Name of DBA-Doing Business As)
CAUZZA BROTHERS FARMING – PALM RANCH

II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page (OES Form 2730).

Does your facility...	If Yes, please complete these pages of the UPCF...	
A. HAZARDOUS MATERIALS Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	☒ YES ☐ NO 4	HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION (OES 2731)
B. UNDERGROUND STORAGE TANKS (USTs)		UST FACILITY (Formerly SWRCB Form A)
1. Own or operate underground storage tanks?	☐ YES ☒ NO 5	UST TANK (one page per tank) (Formerly Form B)
2. Intend to upgrade existing or install new USTs?	☐ YES ☒ NO 6	UST FACILITY UST TANK (one per tank) UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank) (Formerly Form C)
3. Need to report closing a UST?	☐ YES ☒ NO 7	UST TANK (closure portion -one page per tank)
C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs) Own or operate ASTs above these thresholds: ---any tank capacity is greater than 660 gallons, or ---the total capacity for the facility is greater than 1,320 gallons?	☒ YES ☐ NO 8	NO FORM REQUIRED TO CUPAs
D. HAZARDOUS WASTE		
1. Generate hazardous waste?	☒ YES ☐ NO 9	EPA ID NUMBER – provide at the top of this page
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC 25143.2)?	☐ YES ☒ NO 10	RECYCLABLE MATERIALS REPORT (one per recycler)
3. Treat hazardous waste on site?	☐ YES ☒ NO 11	ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Forms 1772) ONSITE HAZARDOUS WASTE TREATMENT – UNIT (one page per unit) (Formerly DTSC Forms 1772 A,B,C,D and L)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Conditional Authorization)?	☐ YES ☒ NO 12	CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
5. Consolidate hazardous waste generated at a remote site?	☐ YES ☒ NO 13	REMOTE WASTE / CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)
6. Need to report the closure/removal of a tank that was classified as hazardous waste and cleaned onsite?	☐ YES ☒ NO 14	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)

E. LOCAL REQUIREMENTS
(You may also be required to provide additional information by your CUPA or local agency.)

CAUZZA BROTHERS
PALM RANCH
APRIL 2004
NORTH
Not to Scale
Legend:
= Acid Storage
= Air Compressor
= Ammonia Storage
= Battery Storage
= Boiler
= Break Room
= Chemical Storage
= Compressed Gasses
= Diesel Storage
= Door or Gate
= Electrical Shutoff
= Emergency Eyewash/Shower
= Evacuation Area
= Evacuation Route
= Fence-Line
= Fire Alarm
= Fire Extinguisher
= Fire Hydrant
= Fire Sprinkler
= First Aid Kit
= Gasoline Storage
= Gas or Propane Shutoff
= Generator
= High Pressure Washer
= Janitorial Supplies
= Oil Storage
= Pay Telephone
= Propane Storage
= Restroom
= S.C.B.A.
= Stairs
= Sump
= Transformer
= Waste Oil
= Water Pump
= Water Shutoff
= Storage
= Shop
= Laundry Facilities
= Employee Showers
= Irrigation Storage
= Fire Hose
= Office
= Dwelling
= Garage
Sullivan Road
Wasco Way
Highway 58
Dairy Road
Adohr Road
Tupman Road
West Side Canal

CAUZZA BROTHER FARMING
ADOHR & DAIRY ROAD, BUTTONWILLOW CA
FEBRUARY 2009
DAIRY ROAD
ADOHR ROAD
NORTH
Not to scale
LEGEND:
= Compressed Gasses
= Diesel Storage
= Door or Gate
= Dwelling
= Electrical Shutoff
= Evacuation Area
= Evacuation Route
= Fence-Line
= Garage
= Propane Shutoff
= Office
= Storage
= Shop
= Waste Oil
Shade is available inside the building.
La sombra está disponible dentro del edificio.
The diesel tanks shown below are alongside the Westside Canal, approximately 1/2 mile south of the facility shown above.

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 5 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 1
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHWEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
HYDRAULIC OIL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
HYDRAULIC OIL

EHS* ☐ Yes ☒ No 208

CAS# 209
N/A

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 500 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
250	500	500	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 365 222

STORAGE CONTAINER
☐ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 0-100 226	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC 227	☐ Yes ☒ No 228	64742-54-7 229
2 0-20 230	RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED 231	☐ Yes ☒ No 232	64742-01-4 233
3 0-10 234	PROPRIETARY INGREDIENTS 235	☐ Yes ☒ No 236	PROPRIETARY MIXTURE 237
4 0-5 238	ZINC ALKYLDITHIOPHOSPHATE 239	☐ Yes ☒ No 240	68649-42-3 241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 7 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 1
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHWEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
MOTOR OIL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
MOTOR OIL

EHS* ☐ Yes ☒ No 208

CAS# 209
N/A

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 500 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
250	500	500	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.

DAYS ON SITE: 365 222

STORAGE CONTAINER
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON 223

STORAGE PRESSURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT 224

STORAGE TEMPERATURE ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC 225

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 0-100 226	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY PARAFFINIC 227	☐ Yes ☒ No 228	64742-54-7 229
2 0-90 230	DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC 231	☐ Yes ☒ No 232	64741-88-4 233
3 0-20 234	RESIDUAL OILS, PETROLEUM, SOLVENT-REFINED 231	☐ Yes ☒ No 232	64742-01-4 237
4 0-10 238	PROPRIETARY INGREDIENTS 235	☐ Yes ☒ No 236	PROPRIETARY MIXTURE 241
5 0-5 242	ZINC ALKYLDITHIOPHOSPHATE 239	☐ Yes ☒ No 240	68649-42-3 245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA, Please Sign Here

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ ADD ☐ DELETE ☐ REVISE 2005 Page 8 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF STORAGE SHED

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
PROPANE

TRADE SECRET ☐ Yes ☒ No CAR 206

COMMON NAME 207
PROPANE

EHS* ☐ Yes ☒ No 208

CAS# 209
74-98-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☐ a. PURE ☒ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 10,000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☒ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
5,000	10,000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE 224 ☐ a. AMBIENT ☒ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ ADD ☐ DELETE ☐ REVISE 2005 Page 9 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
WEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # 1

MAP# (optional) 203
1

GRID# (optional) 204

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No CAR 206

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211

RADIOACTIVE ☐ Yes ☒ No 212

CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214

LARGEST CONTAINER 5000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
2500	5000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds

DAYS ON SITE 222
365

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE 224 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

UPCF (1/99) OES Form 2731

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 10 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
WEST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # | MAP# (optional) 203 | GRID# (optional) 204
1

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 5000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
2500	5000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds
DAYS ON SITE: 365 222

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE 224 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1 226	227	☐ Yes ☒ No 228	229
2 230	231	☐ Yes ☒ No 232	233
3 234	235	☐ Yes ☒ No 236	237
4 238	239	☐ Yes ☒ No 240	241
5 242	243	☐ Yes ☒ No 244	245

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

ADDITIONAL LOCALLY COLLECTED INFORMATION 246

If EPCRA 4, Diesel Gen Use

UNIFIED PROGRAM CONSOLIDATED FORM

HAZARDOUS MATERIALS

HAZARDOUS MATERIALS INVENTORY – CHEMICAL DESCRIPTION

(one page per material per building or area)

☐ADD ☐DELETE ☐REVISE 2005 Page 11 of 18

I. FACILITY INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) 3
CAUZZA BROTHERS

CHEMICAL LOCATION 201
SOUTHEAST OF OFFICE

CHEMICAL LOCATION CONFIDENTIAL EPCRA 202
☐ YES ☒ NO

FACILITY ID # | MAP# (optional) 203 | GRID# (optional) 204
1

II. CHEMICAL INFORMATION

CHEMICAL NAME 205
DIESEL

TRADE SECRET ☐ Yes ☒ No 206
CAR

COMMON NAME 207
DIESEL

EHS* ☐ Yes ☒ No 208

CAS# 209
68476-34-6

*If EHS is "Yes", all amounts below must be in lbs.

FIRE CODE HAZARD CLASSES (Complete if required by CUPA) 210

HAZARDOUS MATERIAL TYPE (Check one item only) ☒ a. PURE ☐ b. MIXTURE ☐ c. WASTE 211 | RADIOACTIVE ☐ Yes ☒ No 212 | CURIES 213

PHYSICAL STATE (Check one item only) ☐ a. SOLID ☒ b. LIQUID ☐ c. GAS 214 | LARGEST CONTAINER 1000 215

FED HAZARD CATEGORIES (Check all that apply) ☒ a. FIRE ☐ b. REACTIVE ☐ c. PRESSURE RELEASE ☐ d. ACUTE HEALTH ☐ e. CHRONIC HEALTH 216

AVERAGE DAILY AMOUNT 217	MAXIMUM DAILY AMOUNT 218	ANNUAL WASTE AMOUNT 219	STATE WASTE CODE 220
500	1000	0	

UNITS* (Check one item only) ☒ a. GALLONS ☐ b. CUBIC FEET ☐ c. POUNDS ☐ d. TONS 221
* If EHS, amount must be in pounds.
DAYS ON SITE: 365 222

STORAGE CONTAINER 223
☒ a. ABOVE GROUND TANK ☐ e. PLASTIC/NONMETALLIC DRUM ☐ i. FIBER DRUM ☐ m. GLASS BOTTLE ☐ q. RAIL CAR
☐ b. UNDERGROUND TANK ☐ f. CAN ☐ j. BAG ☐ n. PLASTIC BOTTLE ☐ r. OTHER
☐ c. TANK INSIDE BUILDING ☐ g. CARBOY ☐ k. BOX ☐ o. TOTE BIN
☐ d. STEEL DRUM ☐ h. SILO ☐ l. CYLINDER ☐ p. TANK WAGON

STORAGE PRESSURE 224 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT

STORAGE TEMPERATURE 225 ☒ a. AMBIENT ☐ b. ABOVE AMBIENT ☐ c. BELOW AMBIENT ☐ d. CRYOGENIC

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