DOCKETED	
Docket Number:	00-AFC-01C
Project Title:	Contra Costa Power Plant Project Compliance
TN #:	232518
Document Title:	ACR RY 2019 for GGS_3of4 parts
Description:	N/A
Filer:	Angel B. Espiritu
Organization:	PG&E Gateway Generating Station
Submitter Role:	Applicant Representative
Submission Date:	3/24/2020 11:54:37 AM
Docketed Date:	3/24/2020

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Compan	y: PG&E	Gate	way Gene	erating St	ation	1								-			s)	CBs)	isted													
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Sampler	Signature		Inska	Env	iro	nmer	ta	1	يەخ	mp	lig	5	4		eate ing)	rgani	atile	hlori	ppen													
		mposite	SAMP	LING		S	Ma		МЕТ	нон	D PR	ESE	RVE	D	L) (Pretreated with sodium e preserving) by SM 4500 CN-	Volatile O	Semi Volatile Organic Compounds)	- Organoc	Pollutants (see Appendix B analyze only listed													
AMPLE ID	LOCATION / Field Point Name	Sample Type Composite, /Grab	Date	Time	# Containers	Type Containers	Waste Water	Sewer Water	None	H-SO4	NaOH	HCL	HNO	Other	Cyanide (TOTAL) thiosulfate before p ABCE	TTO (USEPA 624-Volatile Organic Compounds)	TTO (USEPA 625-	TTO (USEPA 608 – Organochlorine Pesticides and PCBs)	126 Priority Polluts compounds)													
Figer Pit		G	11/7/18	08:06	1	250 ml poly Amb	X			×	Х			7	X																	
Figer Pit		G	11/7/18	08:06	1	250 ml poly	X		3	X				2	x																	
ource		G	11/7/18		1	250 ml poly	X			×	Х			2	X																	
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Sample Receipt Checklist

Client Name: Project:	PG&E Gateway Ger Resample 2 (11/7/18	-			Date and Time Received Date Logged: Received by:	11/7/2018 09:45 11/7/2018 Jena Alfaro
WorkOrder №: Carrier:	1811249 <u>Client Drop-In</u>	Matrix: <u>Water</u>			Logged by:	Agustina Venegas
		Chain of C	ustody	(COC) Infor	mation	
Chain of custody	present?		Yes		No 🗌	
Chain of custody	signed when relinquis	hed and received?	Yes		No 🗌	
Chain of custody	agrees with sample la	bels?	Yes		No 🗌	
Sample IDs note	d by Client on COC?		Yes		No 🗌	
Date and Time of	f collection noted by C	lient on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?		Yes	✓	No 🗌	
COC agrees with	Quote?		Yes		No 🗌	NA 🗹
		Sampl	e Rece	ipt Informati	<u>on</u>	
Custody seals int	act on shipping contai	ner/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good cond	ition?	Yes		No 🗌	
Samples in prope	er containers/bottles?		Yes		No 🗌	
Sample containe	rs intact?		Yes		No 🗌	
Sufficient sample	volume for indicated	test?	Yes		No 🗌	
		Sample Preservation	on and	<u>Hold Time (I</u>	HT) Information	
All samples recei	ved within holding time	e?	Yes	✓	No 🗌	
Samples Receive	ed on Ice?		Yes	✓	No 🗌	
		(Ісе Туре	e: WE	TICE)		
Sample/Temp Bla	ank temperature			Temp: 5.6	°C	
Water - VOA vial	s have zero headspac	e / no bubbles?	Yes		No 🗌	NA 🖌
Sample labels ch	ecked for correct pres	ervation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2;	522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
		pt (200.8: ≤2; 525.3: ≤4;	Yes		No 🗌	NA 🗸
Free Chlorine t	ested and acceptable	upon receipt (<0.1mg/L)?	Yes		No 🗌	NA 🗸



Friday, November 09, 2018

Angel Espiritu PG&E Gateway Generating Station 3225 Wilbur Ave Antioch, CA 94509

Re Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18) Collected By: MUSKAN ENV. PO/Contract #:

Dear Angel Espiritu:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, November 07, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

CC: Daryl Sattelberg, PG&E Gateway Generating Station

David Hammond, PG&E Gateway Generating Station

Tim Wisdom, PG&E Gateway Generating Station

Enclosures

Project Manager: Eli N. Greenwald

11/9/2018 15:44



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Page 1 of 7



NELAP/ORELAP Certification 4036



SAMPLE SUMMARY

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T110273001	TIGER PIT (NAOH PRESERVED)	Water	11/07/2018 08:06	11/07/2018 09:58
T110273002	TIGER PIT (UNPRESERVED)	Water	11/07/2018 08:06	11/07/2018 09:58

11/9/2018 15:44



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NARRATIVE

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis are not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1

2

Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

The sample was received unpreserved. At the time of the analysis, the measured pH of the sample was 10.



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ANALYTICAL RESULTS

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

Lab ID T110273001 Sample ID TIGER PIT (NAOH PRESERVED)	Date Collected Date Received		/2018 08:06 /2018 09:58	Ν	Matrix Water			
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis Cyanide	Analytical Method: J2.5 ug/L	SM 4 3	4500-CN C/E-9 0.90	99/11 1		Analyzed by: 11/07/18 16:47	BCP WCO 14067	1
Lab ID T110273002 Sample ID TIGER PIT (UNPRESERVED)	Date Collected Date Received		/2018 08:06 /2018 09:58	Ν	Matrix Water			
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis Cyanide	Analytical Method: J1.1 ug/L	SM 4 3	4500-CN C/E-9 0.90	99/11 1		Analyzed by: 11/07/18 16:47	BCP WCO 14067	1,2

11/9/2018 15:44



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QUALITY CONTROL DATA

Lab Order:	T110273
Project ID:	RESAMPLE 2 (11/7/18)

Analysis Description: Analysis Method:	sis Description:Cyanide, Total Analysissis Method:SM 4500-CN C/E-99/11						d:	WCO/14067 SM 4500-CN C/E-99/11				
METHOD BLANK:		851944										
Parameter		Blank Result	Reporting Limi	-	Units	Qualifiers						
Cyanide		ND	:	3 0.9	ug/L							
LABORATORY CONTRO	DL SAMPLE:	851945										
Parameter	U	nits	Spike Conc.	LCS Result	,	LCS % Rec	% REC Limits	; a Qualifier				
Parameter Cyanide		nits	•					Qualifier				
Cyanide	uį	g/L ICATE: 851	20 20 946	20.2	,	% Rec	Limits 80-120	Qualifier		Max		
Parameter Cyanide MATRIX SPIKE & MATRI Parameter	uį	g/L	20 20 946 Spike	Result 20.2 851947 MS	, MSD	% Rec 101 MS	Limits	Qualifier		Max RPD Qualifiers		

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QUALITY CONTROL DATA QUALIFIERS

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

11/9/2018 15:44

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ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order:	T110273
Project ID:	RESAMPLE 2 (11/7/18)

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
T110273001	TIGER PIT (NAOH	SM 4500-CN C/E-99/11	WCO/14067		
T110273002	TIGER PIT (UNPRESERVED)	SM 4500-CN C/E-99/11	WCO/14067		

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Caltest	7885 N. KELLY ROA	D NAPA, CA 94558 (707) 258 SAMPLE CHAIN OF		226-1001			PAGE1 OF1
	PROJECT NAME / PROJECT	NUMBER: 2 (11/7/18)		P.O. NUMBE	ĸ	LAB ORDER #	T10273
CLIENT: PCEE Coloway Generation St MAILING ADDRESS:	ation Ange	L'Espiritu / email. STATE: abey	egge.com	_ LL	YSES REQUESTED	_	1
3225 Niber Ave.			14509	u-ABC			
PHONE NUMBER: (925)522-7838	SAMPLER (PRINT & SIC	nvisonmental Sampling	A	200			
				L S C LO M		DUE DATE:	PV AS RECEIP
	ITAINER AMOUNT** PRESERVATIVE	SAMPLE IDENTIFICATION / SITE	CLIENT COMP. or LAB # GRAB	AS ALL		somples	sent in ICE
11/7/18 08:06 Linste RU	Ma OH Ma OH Mone Perservee	Tiger Pit Tiger Pit	Grab	X			L REPORT PI
2 +1/7/18 08:06 Hoger p	4 perservel	Tiger Pit	Grab	λ	2		OMPANY FIN
						R	
							ATORY YELL
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							W
		а.					

	0	,	RELINQU	ISHED BY		D	ATE/TIME		RECEIVED BY		RELIN	QUISHED BY	DATE/TIME	RECEIVED BY
	L	1	Y			11/7/	\$08:47	1 se	L. m	nie	pl.	Imic	11/7/18/0958	
		C		1			/ ''				*			
	Samples	s: WC	X	MICRO	BIO	AA	sv		pH? Y/N TE	MP:2,4	SEALED:	INTACT: UN		*MATRIX: AQ = Aqueous Nondrinking Water, Digested Metals; FE = Low R.L.s, Aqueous Nondrinking Water,
NLY	BD:	BIO		wc	AA					COMMEN	ITS:			Digested Metals; DW = Drinking Water; SL = Soil Sludge, Solid ; FP = Free Product
USE O	CC:	AA		sv						an Thin				**CONTAINER TYPES: AL = Amber Liter; AHL = 500 ml Amber; PT = Pint (Plastic); QT = Quart (Plastic); HG = Half
3 LAB	SIL:	HP		РТ	QT	VOA			an a					Gallon (Plastic); SJ = Soil Jar; B4 = 4oz. BACT; BT = Brass Tube; VOA = 40mL VOA; OTC - Other Type Container
FOI	W/H	INO3	ear Fi	H ₂ SO ₄		NaOH -	<u>《主任的</u> 》							
	PIL:	HNO			H ₂ SO ₄		NaOH	Н						RPRMF
														10/29/18





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 304800 ANALYTICAL REPORT

Pacific (Gas	&	Electric
4801 Oak	port	- 5	Street
Oakland,	CA	94	1601

Project : STANDARD Location : Resample 2 (11/7/18) Level : II

<u>Sample ID</u>	<u>Lab ID</u>
TIGER PIT	304800-001
TIGER PIT	304800-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>11/08/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 304800 Pacific Gas & Electric Resample 2 (11/7/18) 11/07/18 11/07/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 11/07/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recovery was observed for cyanide in the MS for batch 265268; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Formerty C	alpy Analy Curtis & Tompkins cal Laboratory			CH	A	IN	0	F	C	U	S	T	0	D	Y		C	hain	of	2t		ge)	of	1	-			
	ifth Street														70						ody #	[≠] : Rec		ef		-			1
(510)48	ey, CA 94710 36-0900 Phone 36-0532 Fax			C&T LOGIN # 304800												Î													
Project	t No:]	Samn	lor:	• •	14	r .			11	C	۱	E.	3														l
		ample 2	(1) /7/10	Repo	rt Ta	<u></u> 2: 1	Kan ,	<u>For</u>	<u>ror</u>	mo	JOU		7	ي ا	轩														
Rpt Le	evel: II	Rush		Samp Report Comp Telep Email	hon	e: (a	25)	52 ge.	2- 2- 2-	78.	38	ig	<u>S</u> ladin	- T.	0 0 CN														
Lab		······	Sampli	-		latrix				iem					1450														
No.	Samı	nple ID.	Date	Time	Water	Soil Other	# of Container	HCI	H ₂ SQ4	HNOg	NaOH	None		- Yanide	MS 69														
	Tiger	Pit	11/7/18	08:06	x	┥┤	1	-	+		x		1	F	$\overline{\mathbf{x}}$	┼╌┦		\neg	\neg								$\left - \right $	$ \neg $	
	Tiger Tiger	pit	11/7/18	08:06	X		1					Х			X														
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Notes:	<u> </u>	<u> </u>																								<u> </u>			
NOLES;	Sample On ice	Sent	SAMPLE RE		RE		UISH	ED E	BY:							REC	CEN	VED	BY	' :							•		
conta	iners:		□ Intact □ Col □ On Ice □ Aml			Ď	2	11	1-	he	, /_		-D^		TIME	4	2	X	E Q					[][1/1	8.	-8	:0	1
200	ml poly ml poly		L	\leq	4	2	Il.	_//		1/7	11	~ _					Ŧ			~					7	C	TE/TI	I	
	- 						A			H	-7				TIME	1	A	Ĺ	C	r			()	7	118	16	::5	1	
200	mipuly						2			++	-7					4	A	\leq	l	L					(18	16	, . .	5	/TIME ·S) /TIME

SAMPLE RECEIPT CHECKUST			
Section 1: Login # 304800 Client:GEO		ENT	
Date Received: 1 7 1 Project:			MALE I
Section 2: Samples received in a cooler? Yes, how many?			
If no cooler Sample Temp (°C): 14.9 using IR Gun # \square A, or \square B			
Samples received on ice directly from the field. Cooling process had begun			
If in cooler: Date Opened 11 7/18 By (print) AL (sign)			
		-	
Shipping info (if applicable)			
Are custody seals present? I No, or I Yes. If yes, where? I on cooler, I on samples,	u on pad	ckage	
Date: How many Dignature, Dinitials, None			
Were custody seals intact upon arrival? Yes No HTA Section 3: Important : Notify PM if temperature exclosed			
Section 3: Important : Notify PM if temperature excerned packing in cooler: (if other, describe)	eds 5°C (or arrive	frozen.
🔲 Bubble Wrap, 🗆 Foam blocks, 🗆 Bags, 🗆 None, 🗆 Cloth material, 🗇 Cardboard, 🗅 Styrofoam, 🗖	J Paper to	weis	
Samples received on ice directly from the field. Cooling process had begun			
Type of ice used : Uset, Blue/Gel, None Temperature blank(s) included? Temperature measured using Thermometer ID:, or IR Gun # □ A □ B]Yes, [-No	
Cooler Temp (°C): #1: #2: #3: #4: #5: #6:	47.		
Section 4:	#7: YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable		NO	N/A
Were Method 5035 sampling containers present?	<u> </u>		
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?			
Are there any missing / extra samples?			
Are samples in the appropriate containers for indicated tests?	┟─────┤		an a
Are sample labels present, in good condition and complete?			
Does the container count match the COC?			Se de la desta
Do the sample labels agree with custody papers?		<	in en se prove
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?	\vdash		
Did you change the hold time in LIMS for preserved terracores?			
Are bubbles > 6mm absent in VOA samples?			
Was the client contacted concerning this sample delivery?	<u> </u>		
		\sim	
If YES, who was called? By Date: Section 5:		and an and a second	n / Shinese Market
	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5) Did you check preservatives for all bottles for each sample?			たい言葉機
Did you document your preservative check?	<u>├></u> +		لي در ال القريرة بين المسجد عا م 1977 م مير
11/17:07/		1	
pH strip lot# <u>H(15725</u> , pH strip lot#, pH strip lot#			
City at a second s			
Section 6: on/at			
Explanations/Comments:			
	•		
Date Logged in 1 7 18 By (print) A7 (sign) A			
	<u> </u>		
Date Labeled 11711 By (print) AC (sign) 4-0	\sim		

Enthalpy Sample Preservation for 304800

<u>Sample</u>	pH:	<2	>9	>12	Other
-001a	-	[]	[]		
-002a		[]	[]	[]	

Analyst: Date: ____ Page 1 of 1



Detections Summary for 304800

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 2 (11/7/18)

Client Sample ID : TIGER PIT	Laboratory Sample ID :	304800-001
No Detections		
diant Comple ID . TIGED DIT	Laboratory Comple ID .	204000 002
Client Sample ID : TIGER PIT	Laboratory Sample ID :	304800-002
No Detections		



	Tota	al Cyanide	
Lab #:	304800	Location:	Resample 2 (11/7/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	265268
Field ID:	TIGER PIT	Sampled:	11/07/18
Matrix:	Water	Received:	11/07/18
Units:	mg/L	Prepared:	11/07/18
Diln Fac:	1.000	Analyzed:	11/08/18
Type Lab I	D Result	RL	
SAMPLE 304800-	-001 ND	0.010	
SAMPLE 304800-	-002 ND	0.010	
BLANK QC95475	55 ND	0.010	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide											
Lab #:	304800	Location:	Resample 2 (11/7/18)								
Client:	Pacific Gas & Electric	Prep:	METHOD								
Project#:	STANDARD	Analysis:	SM4500CN-C,E								
Analyte:	Cyanide	Batch#:	265268								
Field ID:	ZZZZZZZZZZ	Sampled:	10/29/18								
MSS Lab ID:	304646-001	Received:	10/30/18								
Matrix:	Water	Prepared:	11/07/18								
Units:	mg/L	Analyzed:	11/08/18								
Diln Fac:	1.000										

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC954756		0.2000	0.1613	81	76-120		
MS	QC954757	<0.01000	0.2000	0.1277	64 *	66-120		
MSD	QC954758		0.2000	0.1492	75	66-120	16	28

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1

Attachment 6

Analytical Report on Resampling #4





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 305544 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Tiger Pit Level : II

Sample	ID	<u>Lab ID</u>
TIGERT	PIT	305544-001
TIGERT	PIT	305544-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>12/06/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 305544 Pacific Gas & Electric Tiger Pit 12/04/18 12/04/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 12/04/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

	alpy Analytical	CH	A	IN		OF	= (CL	JS	ST	0	D	Y					F	⊃ag∈		of	1			
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3 of 7

SAMPLE RECEIPT CHECKLIST		-								
Section 1: Login # 3055444 Client: P6+E Gate Way Germany ENTHALPY Date Received: 12/4/18 Project:										
Date Received: 12/4/12 Project:		ENT	HALPY							
Section 2: Samples received in a cooler? Yes, how many?	ow)									
If no cooler Sample Temp (*C): $\underline{5}$ using IR Gun # \Box A, or \Box B										
Samples received on ice directly from the field. Cooling process had begun	,									
If in cooler: Date Opened 12/4/18 By (print) AC (sign) AC										
Shipping info (if applicable)										
Are custody seals present? 2 No, or 2 Yes. if yes, where? 2 on cooler, 3 on samp	les, 🗆 on pa	ckage								
Date: How many Dignature, Dinitials, Dinoe	•	-								
Were custody seals intact upon arrival? Yes No YA										
Section 3: Important : Notify PM if temperature	exceeds 6°C	or arrive	frozen.							
Packing in cooler: (if other, describe)										
□ Bubble Wrap, □ Foam blocks, □ Bags, □ None, □ Cloth material, □ Cardboard, □ Styrofoa	n. 🖾 Paper t	owels								
Samples received on ice directly from the field. Cooling process had begun										
Type of ice used : Wet, Blue/Gel, None Temperature blank(s) included	17 🗂 Yes i									
Temperature measured using Thermometer ID:, or IR Gun # A B										
Cooler Temp (°C): #1: #2:, #3: #4: #5: #6:	. #7:									
Section 4:	YES	NO	N/A							
Were custody papers dry, filled out properly, and the project identifiable										
Were Method 5035 sampling containers present?										
If YES, what time were they transferred to freezer?		·								
Did all bottles arrive unbroken/unopened?		-								
Are there any missing / extra samples?										
Are samples in the appropriate containers for indicated tests?										
Are sample labels present, in good condition and complete?										
Does the container count match the COC?										
Do the sample labels agree with custody papers?										
Was sufficient amount of sample sent for tests requested?										
Did you change the hold time in LIMS for unpreserved VOAs?										
Did you change the hold time in LIMS for preserved terracores?			-							
Are bubbles > 6mm absent in VOA samples?										
Was the client contacted concerning this sample delivery?		_	en aan in g							
If YES, who was called?ByDate:										
Section 5:	YES	NO	N/A							
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)										
Did you check preservatives for all bottles for each sample?	·	/								
Did you document your preservative check?										
pH strip lot# <u>H(131225</u> , pH strip lot#, pH strip lot#,										
Preservative added:										
H2SO4 lot# added to samples or	/at									
	/at 👘									
	/at									
NaOH lot# added to samples or	/at									
Section 6: Explanations/Comments:		÷.								
	1 1	,								
Date Logged in (2/4/18 By (print) A (sign) A	U11	$\overline{}$								
Date Labeled 12/1/1/2 By (print) A(11									

÷



TOTAL 1.000 SM4500CN-C, E METHOD

Detections Summary for 305544

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Tiger Pit

0.032

Client Sam	ient Sample ID : TIGERT PIT Laboratory Sample ID :											
Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method				
Cyanide	0.030		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD				
Client Sam	nple ID :	TIGERT	PIT	Lal	borator	y Samp]	le ID :	305544-002				
Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method				

0.010 mg/L

Cyanide



Total Cyanide										
Lab #:	305544	Location:	Tiger Pit							
Client:	Pacific Gas & Electric	Prep:	METHOD							
Project#:	STANDARD	Analysis:	SM4500CN-C,E							
Analyte:	Cyanide	Batch#:	265928							
Field ID:	TIGERT PIT	Sampled:	12/04/18							
Matrix:	Water	Received:	12/04/18							
Units:	mg/L	Analyzed:	12/05/18							
Diln Fac:	1.000									
Type Lab 1	ID Result	RL								
SAMPLE 305544-	-001 0.030	0.010								
SAMPLE 305544-	-002 0.032	0.010								

0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1

BLANK QC957389

ND



Batch QC Report

7] .	205544			
Lab #:	305544	Location:	Tiger Pit	
Client:	Pacific Gas & Electric	Prep:	METHOD	
Project#:	STANDARD	Analysis:	SM4500CN-C,E	
Analyte:	Cyanide	Diln Fac:	1.000	
Field ID:	TIGERT PIT	Batch#:	265928	
MSS Lab ID:	305544-001	Sampled:	12/04/18	
Matrix:	Water	Received:	12/04/18	
Units:	mg/L	Analyzed:	12/05/18	

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC957390		0.2000	0.1831	92	76-120		
MS	QC957391	0.02970	0.2000	0.2115	91	66-120		
MSD	QC957392		0.2000	0.2052	88	66-120	3	28

Attachment 7

Analytical Report on Resampling #5





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 305713 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 5 (12/11/18) Level : II

Sample ID	<u>Lab ID</u>
TIGER PIT	305713-001
TIGER PIT	305713-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>12/12/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 305713 Pacific Gas & Electric Resample 5 (12/11/18) 12/11/18 12/11/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 12/11/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

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	cal Laboratory Since 1878 ifth Street											Г			(Chair A	n of (Cust lyti	ody cal	# : Re	que	est		<u></u>	<u></u>		
(510)48	ey, CA 94710 36-0900 Phone 36-0532 Fax	C&T LOGIN # <u>395713</u>											(Ritrassa)														
Project Project	t No: t Name: Resample 5 (12	Sampler: Muskan Environmental Dampling &																									
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		Sampli	ing	Ma	atrix	7	P	Ch Pres	emi erv				Jusoide V														
Lab No.	Sample ID.	Date	Time	Water	Other	# of Container	Ρ	H _S Q4	[©] NH	NaOH	None	(Yanida	Sedinter by Sry 4														
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Notes:	Sample sent	SAMPLE RE	CEIPT	REL	INQ	UISHE	DB	Y:						R	ECE	IVE	D B'	Y:					,	1			Am
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SAMPLE RECEIPT CHECKLIST		r ø	
Section 1: Login # 305 713 Client: PG & E			
Date Received: 12-11-18 Project: PEGAMPIE 5 (12/11/18)		ENT	HALPY
Section 2: Samples received in a cooler? Yes, how many? X (skip Section 3 below)			· · · ·
If no cooler Sample Temp (°C): <u>4.1</u> using IR Gun #			
If in cooler: Date Opened 12-11-18 By (print) SH(sign) V SA			
Shipping info (if applicable)			
Are custody seals present? XNo, or \Box Yes. If yes, where? \Box on cooler, \Box on samples,	on pa	ckage	
Date: How many Signature, I Initials, None			
Were custody seals intact upon arrival? Yes No XN/A			
Section 3: Important : Notify PM if temperature exe	eeds 6°C:	or arrive	frozen.
Packing in cooler: (if other, describe)			
🗆 🗆 Bubble Wrap, 🗆 Foam blocks, 🗆 Bags, 🖾 None, 🗆 Cloth material, 🗆 Cardboard, 🗔 Styrofoam, 🗎	□ Paper t	owels	
Samples received on ice directly from the field. Cooling process had begun			
Type of ice used : Wet, Blue/Gel, None Temperature blank(s) included?	🗌 Yes, [] No	
Type of ice used : Wet, Blue/Gel, None Temperature blank(s) included? Temperature measured using Thermometer ID:			
Cooler Temp (°C): #1:, #2:, #3:, #4:, #5:, #6:	, #7:		
Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	\sim		anad . A hadden a
Were Method 5035 sampling containers present?			
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?			
Are there any missing / extra samples?			
Are sar ples in the appropriate containers for indicated tests?			
Are sample labels present, in good condition and complete?			Miles i f
Does the container count match the COC?			
Do the sample labels agree with custody papers?	\sim		e and an New Joint P
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?			
Did you change the hold time in LIMS for preserved terracores?			
Are bubbles > 6mm absent in VOA samples?			
Was the client contacted concerning this sample delivery?			
If YES, who was called?ByByDate:		92. 2. S. I	
Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check?			A State of the second sec
pH strip lot#H(647776, pH strip lot#, pH strip lot#, pH strip lot#			
Preservative added:			
H2SO4 lot# added to samples on/at			
HCL lot# added to samples on/at on/at	••••••		
HNO3 lot# added to samples			
□ NaOH lot# added to samples on/at			
Section 6:			
Explanations/Comments:			ľ
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Date Logged in $2 \cdot 1 - 18$ By (print) $1 \cdot 16$ (sign)	\bigcirc		
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Date Labeled $(2 - (1 - 1))$ By (print) (sign) (sign)	$\overline{\mathbf{V}}$		
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Enthalpy Sample Preservation for 305713

Sample	pH:	<2	2	> 2)	>1	12	Other
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-002a		L	J	L]	[1	

Analyst: Date: _____ Page 1 of 1



Detections Summary for 305713

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 5 (12/11/18)

Client Sample ID :	TIGER PIT	Laboratory	Sample ID :	305713-001
Analyte Result	Flags RL	Units Basis	IDF Method	d Prep Method
Cyanide 0.013	0.010) mg/L TOTAL	1.000 SM4500CN	-C,E METHOD
Client Sample ID :	TIGER PIT	Laboratory	Sample ID :	305713-002
Analvte Result	Flags RL	Units Basis	IDF Method	d Prep Method

Analyte	Result	Flags	КL	UNILLS	Basis	LDF	Method	Prep Method
Cyanide	0.018		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD



	Tota	al Cyanide	
Lab #:	305713	Location:	Resample 5 (12/11/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266103
Field ID:	TIGER PIT	Sampled:	12/11/18
Matrix:	Water	Received:	12/11/18
Units:	mg/L	Analyzed:	12/12/18
Diln Fac:	1.000		
•			
Type Lab II	Result	RL	
SAMPLE 305713-0	0.013	0.010	
SAMPLE 305713-0	0.018	0.010	

0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1

BLANK QC958095

ND



Batch QC Report

	Тс	otal Cyanide					
Lab #:	305713	Location:	Resampl	e 5 (12/11/18)	
Client:	Pacific Gas & Electric	Prep:	METHOD				
Project#:	STANDARD	Analysis:	SM4500C	N-C,E			
Analyte:	Cyanide	Diln Fac:	1.000				
Field ID:	TIGER PIT	Batch#:	266103				
MSS Lab ID:	305713-001	Sampled:	12/11/1	8			
Matrix:	Water	Received:	12/11/1	8			
Units:	mg/L	Analyzed:	12/12/1	8			
		_					
Type Lab I	D MSS Result	Spiked	Result	%REC	Limits	RPD	Lim

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC958096		0.2000	0.1850	93	76-120		
MS	QC958097	0.01250	0.2000	0.1922	90	66-120		
MSD	QC958098		0.2000	0.1538	71	66-120	22	28

Attachment 8

Analytical Report on Resampling #6





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 305805 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601

Project : STANDARD Location : Resample 6 (12/14/18)Level : II

<u>Sample ID</u>	<u>Lab ID</u>
TIGER PIT-P	305805-001
TIGER PIT-UP	305805-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

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Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>12/17/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 305805 Pacific Gas & Electric Resample 6 (12/14/18) 12/14/18 12/14/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 12/14/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

Formerly C Analyti 2323 F Berkele (510)48	alpy Analytical Curtis & Tompkins ical Laboratory Since 1878 Fifth Street ey, CA 94710 86-0900 Phone 86-0532 Fax		C&T								S	T	0	F	Y			Chair A			tody	; #:		of					
Projec			Samp	oler:	Mus	Ka	En.			.1 <	Sa		\$																
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No.	Sample ID.	Date	Time	Water	Other		# of Container		H _{SO4}	T	Т	T		yanide tota	h ws hq														
	Tiger Pit - P	12/14/18	08:35				1			<u> </u>	X		1	F	k									-+	\rightarrow	-+-	+-	+-	{
	Tiger Pit - DP	12/14/18	0835	X		\square	1					X		\square	K									4	4		\mp	1	
				H																				_			\pm		
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			<u> </u>		┼┤	-+											-				\neg			\neg			Ţ	\square	
Notes:	- wind it sound	SAMPLE RE		REI			9 HE	DB	ЦЦ] Ү:			L	L	L		REG	CEI	VED	B	 /:		l			L		 /	<u> </u>	A,
	on <u>ice</u>	□ intact □ Co □ On ice □ Am		ļ			\geq	12	2/1	1/1	8	0G.	.પર DA1	2 ГЕ/Т	IME	Ø	a	t_{-}	_	1/2	n	nf	ál	/	z/i ⁄	<i>4 </i> D	•	69; TIME	10
P014 P014	250ml 250ml								·				DAT	TE/T	ME							<i>V</i>		/		D	ATE/	TIME	
													DAT	re/Ti	ME											D	ATE/	TIME	

SAMPLE RECEIPT CHECKLIST		. س	
Section 1: Login # 305 805 Client: PGEE Cate way		· .	201
Section 1: Login # 305 805 Date Received: 12/1418 Client: PGEE Cate way Project: Lesemple. 6 (12/14/18)	5	EN	THALP
Section 2: Samples received in a cooler? Yes, how many? X No (skip Section 3 be	()		
If no cooler Sample Temp (°C): 4^{-2} using IR Gun # A , or \Box B	iowj		
Samples received on ice directly from the field. Cooling process had begun			
If in cooler: Date Opened By (print) (sign) (sign)			
Shipping info (if applicable)			
Are custody seals present?	oles, Li on pa	ickage	
Date: How many Dignature, Dinitials, Dinone			
Were custody seals intact upon arrival? Yes No N/A Section 3:			
Section 3: Important : Notify PM if temperature Packing in cooler: (if other, describe)	exceeds 6°C	or arriv	e frozer
□ Bubble Wrap, □ Foam blocks, □ Bags, □ None, □ Cloth material, □ Cardboard, □ Styrofoa □ Samples received on ice directly from the field. Cooling process had begun	m, 🗆 Paper i	towels	
Type of ice used : Li Wet, Li Blue/Gel, Li None Temperature blank(s) include Temperature measured using II Thermometer ID:, or IR Gun # II A II B	d? 🗌 Yes,	🗆 No	
Cooler Temp (*C): #1: #2:, #3:, #4:, #5:, #6:			
Section 4:			
Were custody papers dry, filled out properly, and the project identifiable	YES	NO	N/A
Were Method 5035 sampling containers present?	$- \times$		
If YES, what time were they transferred to freezer?		X	
Did all bottles arrive unbroken/unopened?			p. n. ja in
Are there any missing / extra samples?	\rightarrow		
Are samples in the appropriate containers for indicated tests?		$ \times $	
Are sample labels present, in good condition and complete?	+2		
Does the container count match the COC?			1
Do the sample labels agree with custody papers?			
Was sufficient amount of sample sent for tests requested?			
Did you change the hold time in LIMS for unpreserved VOAs?			
Did you change the hold time in LIMS for preserved terracores?			
Are bubbles > 6mm absent in VOA samples?			\rightarrow
Nas the client contacted concerning this sample delivery?		$\overline{\mathbf{v}}$	
If YES, who was called? By Date:			
ection 5:	YES	NO	N/A
re the samples appropriately preserved? (if N/A, skip the rest of section 5)			
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check?			
pH strip lot# 4 G 5 1770 pH strip lot#, pH strip lot#, pH strip lot#			ه رجر و هرد در
reservative added:			
H2SO4 lot#added to sampleson	/at		
HCL lot# added to samples on, HNO3 lot# added to samples on,	/at		
On On	/at		
I NaOH lot# added to samples on, ection 6:	/at		
xplanations/Comments:			
Date Logged in 12/14/15 By (print) V(2 (sign)			
	<u>0</u>	·····	
Date Labeled By (print) (sign)	-		



Detections Summary for 305805

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 6 (12/14/18)

Client Sample ID : TIGER PIT-P Laboratory Sample ID : 305805-001 No Detections

Client Sample ID : TIGER PIT-UP Laboratory Sample ID : 305805-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.020		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD



	Tota	al Cyanide	
Lab #:	305805	Location:	Resample 6 (12/14/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Sampled:	12/14/18
Matrix:	Water	Received:	12/14/18
Units:	mg/L	Prepared:	12/14/18
Diln Fac:	1.000	Analyzed:	12/17/18
Batch#:	266229		
Field I	D Type Lab ID	Result	RL

	Field ID	Type	Lab ID	Result	RL
TIGER	PIT-P	SAMPLE	305805-001	ND	0.010
TIGER	PIT-UP	SAMPLE	305805-002	0.020	0.010
		BLANK	QC958630	ND	0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

	Tota	al Cyanide	
Lab #:	305805	Location:	Resample 6 (12/14/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266229
Field ID:	TIGER PIT-P	Sampled:	12/14/18
MSS Lab ID:	305805-001	Received:	12/14/18
Matrix:	Water	Prepared:	12/14/18
Units:	mg/L	Analyzed:	12/17/18
Diln Fac:	1.000		

Туре	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC958631		0.2000	0.1687	84	76-120		
MS	QC958632	<0.01000	0.2000	0.1396	70	66-120		
MSD	QC958633		0.2000	0.1404	70	66-120	1	28

Attachment 9

Analytical Report on Resampling #7





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 305902 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 7 (1218/18) Level : II

<u>Sample ID</u>	<u>Lab ID</u>
TIGER PIT-P	305902-001
TIGER PIT-UP	305902-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>12/19/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 305902 Pacific Gas & Electric Resample 7 (1218/18) 12/18/18 12/18/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 12/18/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recoveries were observed for cyanide in the MS/MSD of TIGER PIT-P (lab # 305902-001); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Formerly C Analyti 2323 F Berkele (510)4	Curtis & Tompkins ical Laboratory Since 1878 Fifth Street ey, CA 94710 86-0900 Phone 86-0532 Fax		C&T L						_		T	וס ז				C				ody #	:	of st				
Rpt Le	et No: <u>et Name: Resample 7 (1</u> evel: II round Time: Standard Rush	2/18/18)	Samp Repor Comp Telep Email	rt To any hon	<u>): Ar</u> : PC e: (a	<u>yel</u> 8E 25)5	Esp hate	isi Sva T	40 4 Ge 183	mer		01	A Creteneded	00 CN-ABC												
Lab		Sampli			atrix		F	Ch Pres	iem serv	ativ	'e	-	24040 4 (4)	745												
No.	Sample ID.	Date	Time	Water	Other	# of Container	HCI	H₂SQ₄	NNO	NaOH	None		Clanide tot	hy SM												
	Tiger Pit-P Tiger Pit-UP	12/18/18	07:55								X															
Notes: (ent poly poly	Sample scut on ICE Winer 250m1 250m1	SAMPLE REG □ Intact □ Colo 1 On Ice □ Amb	ł	REI		JISHE	і DВ 12/,		/18	<u> </u>		DAT		IME IME	REO		/ED	BY:	/	3	n	<u>/</u> 2	D	DATE/	/TIME /TIME	٢

SAMPLE RECEIPT CHECKLIST			
		- J	20
Section 1: Login # Client: Clien:	•	ENT	HALP
Section 2: Samples received in a cooler? Yes, how many? No (skip Section 3 belo		· · ·	
If no cooler Sample Temp (°C): Using IR Gun # Dr A, or D B	W)		
Samples received on ice directly from the field. Cooling process had begun			
Shipping info (if applicable)			
Are custody seals present? AND, or Yes. If yes, where? on cooler, on sample	es, 🗋 on p	ackage	
🗆 Date: How many 🗆 Signature, 🗆 Initials, 🗋 None			
Were custody seals intact upon arrival? 🗆 Yes 🗆 No 🖾 N/A			•
Section 3: Important : Notify PM if temperature e	xceeds 6°C	or arriv	e froze
Packing in cooler: (if other, describe)			
🗆 Bubble Wrap, 🗆 Foam blocks, 🗆 Bags, 🗇 None, 🗇 Cloth material, 🗇 Cardboard, 💭 Styrofoam,	Paper	towels	
Samples received on ice directly from the field. Cooling process had begun			
Type of ice used : Wet, Blue/Gel, None Temperature blank(s) included?	🗆 Yes,	🗆 No	
Temperature measured using 🗆 Thermometer ID:, or IR Gun # 🗆 A 🗆 B			
Cooler Temp (°C): #1:, #2:, #3:, #4:, #5:, #6:,	_, #7:		
ection 4:	YES	NO	N/A
Nere custody papers dry, filled out properly, and the project identifiable			
Vere Method 5035 sampling containers present?		\sim	
If YES, what time were they transferred to freezer?			<i>.</i>
Did all bottles arrive unbroken/unopened?			
vre there any missing / extra samples?			1
re samples in the appropriate containers for indicated tests?			
re sample labels present, in good condition and complete?		1	
oes the container count match the COC?		1	
o the sample labels agree with custody papers?			
Vas sufficient amount of sample sent for tests requested?			
Id you change the hold time in LIMS for unpreserved VOAs?			
Id you change the hold time in LIMS for preserved terracores?			1
re bubbles > 6mm absent in VOA samples?			\
Vas the client contacted concerning this sample delivery?			
If YES, who was called?ByDate:			
ection 5:	YES	NO	N/A
re the samples appropriately preserved? (if N/A, skip the rest of section 5)			
id you check preservatives for all bottles for each sample?		/	
id you document your preservative check?			
pH strip lot# <u>HC131225</u> , pH strip lot#, pH strip lot#	······		
reservative added:			
H2SO4 lot#added to sampleson/a			
HCL lot#added to sampleson/a	and the second second second second		
HNO3 lot# added to samples on/a NaOH lot# added to samples on/a			
On/a On/a	t		
ection 6:			
planations/Comments:		·	
			-
Date Logged in 12/18/11 By (print) A (sign)	\sim		

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Enthalpy Sample Preservation for 305902

<u>Sample</u>	pH:	<2	2	>\$	€	>2	12	Other
-001a		[]	[]	Į	1	
-002a		[]	[]	[]	

Analyst: Date: ____ Page 1 of 1



TOTAL 1.000 SM4500CN-C,E METHOD

Detections Summary for 305902

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 7 (1218/18)

0.028

Client Sar	mple ID :	TIGER	PIT-P	La	borator	y Sampl	le ID :	305902-001
Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.028		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD
Client Sar	mple ID :	TIGER	PIT-UP	L	aborato	ry Sam <u>r</u>	ple ID :	305902-002
Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method

0.010 mg/L

Cyanide



	Tota	al Cyanide	
Lab #:	305902	Location:	Resample 7 (1218/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Sampled:	12/18/18
Matrix:	Water	Received:	12/18/18
Units:	mg/L	Prepared:	12/18/18
Diln Fac:	1.000	Analyzed:	12/19/18
Batch#:	266298	_	
Field I	D Type Lab ID	Result	RL
	CAMDIE 205000 001	0 0 2 9	0.010

Fi	ield ID	Type	Lab ID	Result	RL
TIGER PI	IT-P	SAMPLE	305902-001	0.028	0.010
TIGER PI	IT-UP	SAMPLE	305902-002	0.028	0.010
	1	BLANK	QC958894	ND	0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

		al Cyanide	
Lab #:	305902	Location:	Resample 7 (1218/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266298
Field ID:	TIGER PIT-P	Sampled:	12/18/18
MSS Lab ID:	305902-001	Received:	12/18/18
Matrix:	Water	Prepared:	12/18/18
Units:	mg/L	Analyzed:	12/19/18
Diln Fac:	1.000		

Туре	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC958895		0.2000	0.1834	92	76-120		
MS	QC958896	0.02790	0.2000	0.1537	63 *	66-120		
MSD	QC958897		0.2000	0.1539	63 *	66-120	0	28

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1

Attachment 10

Analytical Report on Resampling #8





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 306316 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 8-DW-01102019 Level : II

<u>Sample ID</u> TIGER PIT-UP-DW SOURCE-UP-DW <u>Lab ID</u> 306316-001 306316-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>01/11/2019</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 306316 Pacific Gas & Electric Resample 8-DW-01102019 01/10/19 01/10/19

This data package contains sample and QC results for two water samples, requested for the above referenced project on 01/10/19. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

CHAIN OF CUSTODY

	Form 2323 F	ENTHANALY T nerly Curtis & Tomp ifth Street ey, CA 94710	kins Labs Phone (51			c	C&T LC	DGIN	#	<u>20</u>	31	()			ANA			n of (RE	Custo	dy #	of _/	/
	EDD For	/	Sar <u>0110 2019</u> Reg <u>Co</u> <u>III I IV</u> Tele Standard Em	npler: Do port To: An mpany: A pphone: (ail: ABE	ngei 64E 933 46	5] 5) PG	22- E.C	78 CON	<u>38</u>) - Cyanide(tətil) 💥	CE .									
	Lab No.	Sample ID. Tiger Pit - UP- DW Source - UP- DW	SAMPL Date Collected 01/10/2019 01/10/2019	Time Collected				PR	ESER			1 1 2 2 W 4500	APIC APIC									
* All	Notes Samp Godin Sent	bles pretreated of um thiosulfate. Gamples on ice.	SAMPLE RECEIPT Cold On Ice	- Ch		REL	INQU	<u>h</u>		1/19 - 10	:: ! ((<u></u>	Í Í	RE	CEI	- · · ·		1	 092	

3 of 7

SAMPLE R									27
Section 1:	Login # 4 4 5 0	Client	: 1175 E						
	Date Received: 1.10.10	Projec						ENT	HALPY
Section 2:	Samples received in a cooler?	'es, how ma	any?	🗆 No (skip S	ection 3 b	elow)			
	Sample Temp (°C):/			un # 🗖 A, or	ПB				
	Samples received on ice directly	from the fi	eld. Cooling pro	ess had begun	\cap				
If in cooler:	Date Opened 1 10 19 By (print			(sign)					
	Shipping info (if applicable)	7							
	Are custody seals present? V No,	or 🗍 Ves	If yes where?			nles [lonna		
	Date: Ho						on pa	enabe	
	Were custody seals intact u				зу ш но пе				
Section 3:	Were custouy seats mact u			Notify PM if t		0 07000	de C°C	or arriv	frozor
	:ooler: (if other, describe)		important		emperatur	CONCER			; 110261
	ble Wrap, 🗆 Foam blocks, 🗆 Bags,		7 Cloth material				Danart	owolc	
	· · · · · · · · · · · · · · · · · · ·				LI Styroio	am, Li	raperi	OMGIZ	
	received on ice directly from the file	_	•		total to ato at		V	-	
	used : Wet, 🛛 Blue/Gel, 🗆		le	nperature blan		ear 🗀	Yes, [XDio	
	re measured using Thermometer			, or IR Gun # 1			-		
	p (°C): #1: <u>ろ. ク</u> , #2:,	#3:	, #4:	<u>, #5:</u>	, #6:	 #;			
Section 4:							YES	NO	N/A
	dy papers dry, filled out properly, a		ect identifiable						
	od 5035 sampling containers preser								
	what time were they transferred to	o treezer?			· · · · · · · · · · · · · · · · · · ·				
	es arrive unbroken/unopened?								n An Cold an C
	ny missing / extra samples?	- disated to							•
	s in the appropriate containers for in							 	• • • • •
	labels present, in good condition ar	na complete	er					Ļ <u></u>	
	ntainer count match the COC?								
	ple labels agree with custody papers								
	nt amount of sample sent for tests nge the hold time in LIMS for unpre	· · · · · · · · · · · · · · · · · · ·							ale de la
	nge the hold time in LIMS for prese								
	> 6mm absent in VOA samples?	veu terraci	Ulest						
	ent contacted concerning this sample	o dolivoru Z			·····				a se su a l sec
		e uenveryr							· river view
	who was called?		Ву		ate:				
Section 5:		C					YES	NO	N/A
			the rest of section	n 5)					
	ck preservatives for all bottles for e	ach sample	۲		·····				
	ument your preservative check?					L			i i i
	p lot# pH strip lo			_, pH strip lot#		·····	······································		
Preservative		- 1							
						on/at_			
HCL lot#	· · · · · · · · · · · · · · · · · · ·					on/at _		· · · · ·	
HNO3 lo	······································			·····		on/at			
		Jies				on/at			
Section 6: Explanation	s/Comments:	, 					<u>.</u>		
Date Log	ged in 11019 By (pr	int)	M	(sig	A A	n			
				13.12	1. L	1			
Date La									

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Detections Summary for 306316

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 8-DW-01102019

Client Sample ID : TIGER PIT-UP-DW Laboratory Sample ID : 306316-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.055		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD

Client Sample ID : SOURCE-UP-DW Laboratory Sample ID : 306316-002

No Detections



Total Cyanide										
Lab #:	306316	Location:	Resample 8-DW-01102019							
Client:	Pacific Gas & Electric	Prep:	METHOD							
Project#:	STANDARD	Analysis:	SM4500CN-C,E							
Analyte:	Cyanide	Sampled:	01/10/19							
Matrix:	Water	Received:	01/10/19							
Units:	mg/L	Prepared:	01/10/19							
Diln Fac:	1.000	Analyzed:	01/11/19							
Batch#:	266844									
Field I	D Type Lab ID	Result	RL							
יתודרים משריים		0 055	0 010							

Field ID	Type Lab ID	Result	RL	
TIGER PIT-UP-DW	SAMPLE 306316-001	0.055	0.010	
SOURCE-UP-DW	SAMPLE 306316-002	ND	0.010	
	BLANK QC960973	ND	0.010	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

	1000	al Cyanide	
Lab #:	306316	Location:	Resample 8-DW-01102019
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266844
Field ID:	ZZZZZZZZZZ	Sampled:	01/07/19
MSS Lab ID:	306233-001	Received:	01/07/19
Matrix:	Water	Prepared:	01/10/19
Units:	mg/L	Analyzed:	01/11/19
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC960974		0.2000	0.1686	84	75-120		
MS	QC960975	<0.01000	0.2000	0.1710	86	56-120		
MSD	QC960976		0.2000	0.1580	79	56-120	8	25





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 306317 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 8-ENT-01102019 Level : II

<u>Sample ID</u> TIGER PIT-UP <u>Lab ID</u> 306317-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>01/11/2019</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 306317 Pacific Gas & Electric Resample 8-ENT-01102019 01/10/19 01/10/19

This data package contains sample and QC results for one water sample, requested for the above referenced project on 01/10/19. The sample was received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

CHAIN OF CUSTODY

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Form	nerly Curtis & Tompl	kins Labs	, ,		С	S&T LC	DGIN	2 \#	D(3	Tk	e)	\		Δ	NAL									
2323 F Berkele	ifth Street əy, CA 94710	Phone (51 Fax (51		532						.	<u> </u>	Janide (fo						CAL							
Project Project	No:: Name: <u>Re50 mple8 - ENT</u> P. O. No: mat: Report Level [] [npler: -	Jac	F	170	i L	1				Ga													
Project	P. O. No:	Co	mogny: D	YU	6	ر بر الم رول	11	$\frac{\alpha}{\alpha}$	~	4	Z.)													
EDD For	mat: Report Level 🗌 11		ephone: (95) 5	22-	7	<u>6</u> 83 <i>k</i>	<u>, (-</u>	10	170	06													
Turnarou		Standard Em	ail: ABE	=4	01	062	5.0	COM	1			\mathcal{F}													
Lab	Sample ID.	SAMPL	ING	MAI	RIX	Containers	PI	CHEN	IICA VATI	L VE	27203	ND ac													
No.		Date Collected	Time Collected	Water Solid		# of Co	HCI	H2SO4	NaOH	None		SM 4500													
<u> </u>	Tiger Pit-UP	oi/io/2ag		4						V	1	$\mathbf{\Sigma}$													
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Notes:		SAMPLE			RELII	NQUI	SHE	D BY:						l			RE	CEI	IVED) BY				-	┷╼┥
* 30	emple pretheated 'sodium thiosulfoth. mple Sent on O.	RECEIPT	A	_				DATE	1-10	TIM	e://0	2		K	\mathcal{V}	~				DA		0 0	Ìmi	E: 12	:00
San	mple gent on		/			••••••		DATE:		TIME	E:									DA	TE:		TIME	<u>:</u>	
	θ.	On Ice						DATE:		TIME	E:					·				DA	.TE:		TIME	<u>::</u>	

				•
SAMPLE RECEIPT CHECKLIST				
Section 1: Login # 35631 Client: 493 F				
Date Received: 1, 10.19 Project:			ENT	HALPY
Section 2: Samples received in a cooler? (Ves, how many?	No (skip Section 3 below)			
If no cooler Sample Temp (°C): using IR	Sun # 🛛 A, or 🗔 B			
Samples received on ice directly from the field. Cooling pro				
If in cooler: Date Opened 1 10 19 By (print)	(sign) 8			
Shipping info (if applicable)			_	
Are custody seals present? 🔽 No, or 🗆 Yes. If yes, where		🗆 on pa	ckage	
🗋 Date: How many 🗆 Sig	nature, 🖾 Initials, 🖾 None			
	No BON/A		·	• •
Section 3: Importan	Notify PM if temperature exc	eeds 6°C	or arrive	frozer
Packing in cooler: (if other, describe)			•	
🗆 Bubble Wrap, 🖾 Foam blocks, 🖾 Bags, 🕅 None, 🖾 Cloth materia	I, 🗆 Cardboard, 🗆 Styrofoam, I] Paper to	owels	
Samples received on ice directly from the field. Cooling process had be		•		
Type of ice used : 💭 Wet, 🛛 Blue/Gel, 🖾 None 🌱	nperature blank(s) included? []Yes, Y	No	
Temperature measured using 🖾 Thermometer ID:	, or IR Gun # 🛱 🗖 🛛 B	•	\sim	
Cooler Temp (°C): #1: 3.7 , #2:, #3:, #4:	, #5:, #6:,	#7:		
Section 4:		YES	NO	N/A
Were custody papers dry, filled out property, and the project identifiable				
Were Method 5035 sampling containers present?				
If YES, what time were they transferred to freezer?				
Did all bottles arrive unbroken/unopened?				
Are there any missing / extra samples?				
Are samples in the appropriate containers for indicated tests?				
Are sample labels present, in good condition and complete?				
Does the container count match the COC?				
Do the sample labels agree with custody papers?				
Was sufficient amount of sample sent for tests requested?				
Did you change the hold time in LIMS for unpreserved VOAs?	1	 		
Did you change the hold time in LIMS for preserved terracores?		┨		
Are bubbles > 6mm absent in VOA samples? Was the client contacted concerning this sample delivery?		↓		_
			_	
If YES, who was called?By_By	Date:			
Section 5: Are the samples appropriately preserved? (If N/A, skip the rest of secti		YES	NO	<u>N/A</u>
Are the samples appropriately preserved? (If N/A, skip the rest of section Did you check preservatives for all bottles for each sample?	on oj	╞───┤		
Did you check preservatives for all bottles for each sample r		┟────┤		
pH strip lot#, pH strip lot#	nLi eteln latif	L		
Preservative added:	_, pH strip lot#	· · · · · · · · · · · · · · · · · · ·		
H2SO4 lot# added: added to samples	· /			
Image: Contract of the second seco	on/at on/at			
U HNO3 lot# added to samples	on/at			
NaOH lot# added to samples	on/at			······
Section 6: Explanations/Comments:				
Date Logged in 110[[0] By (print) A((sign) Ar			
Date Labeled 1110 19 By (print) A((sign) //-			
• •				

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Detections Summary for 306317

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 8-ENT-01102019

Client Sample ID : TIGER PIT-UP Laboratory Sample ID : 306317-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.051		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD



	Tota	al Cyanide	
Lab #:	306317	Location:	Resample 8-ENT-01102019
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266844
Field ID:	TIGER PIT-UP	Sampled:	01/10/19
Matrix:	Water	Received:	01/10/19
Units:	mg/L	Prepared:	01/10/19
Diln Fac:	1.000	Analyzed:	01/11/19
Type Lab I	ID Result	RL	
SAMPLE 306317-	-001 0.051	0.010	
BLANK QC96097	73 ND	0.010	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

	Tota	al Cyanide	
Lab #:	306317	Location:	Resample 8-ENT-01102019
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266844
Field ID:	ZZZZZZZZZ	Sampled:	01/07/19
MSS Lab ID:	306233-001	Received:	01/07/19
Matrix:	Water	Prepared:	01/10/19
Units:	mg/L	Analyzed:	01/11/19
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC960974		0.2000	0.1686	84	75-120		
MS	QC960975	<0.01000	0.2000	0.1710	86	56-120		
MSD	QC960976		0.2000	0.1580	79	56-120	8	25

Attachment 11

Analytical Report on Resampling #9





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 306446 ANALYTICAL REPORT

Pacific Gas & Electric	Project : STANDARD
—	Location : Resample 9 (1/16/19)
Oakland, CA 94601	Level : II

<u>Sample ID</u>	<u>Lab ID</u>
UP TIGER PIT	306446-001
UP HRSG IP A	306446-002
UP HRSG IP B	306446-003
UP PHOSPHATE	306446-004
UP CC COOLING WATER	306446-005
UP AMINE	306446-006
UP E-006	306446-007
UP HAMMOND TANK	306446-008
UP OWS	306446-009
UP AMMONIA SUMP	306446-010
UP SERVICE WATER	306446-011
UP SOURCE WATER	306446-012

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: 01/17/2019



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 306446 Pacific Gas & Electric Resample 9 (1/16/19) 01/16/19 01/16/19

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 01/16/19. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recoveries were observed for cyanide in the MS/MSD of UP TIGER PIT (lab # 306446-001); the LCS was within limits. No other analytical problems were encountered.

	halpy Analytical		CHA		N (OF	= (CL	JS	T	C	Dł	ð						c	of	1		
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	eley, CA 94710					20	51	11	lla.		_	Ē	\mathbf{u}				1						
)486-0900 Phone		C&T LC	GIN	\#_	P	N	14	(Ψ		_	اق- 🖁	J										
(510)486-0532 Fax											ĽД	R										
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La	b annulu ID			T				T			1	10	N										
No	Sample ID.	Date	Time		Other	fof f	ΡŶ	H _{SQ}	ŐNH	None		32											
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3 of 8

SAMPLE RECEIPT CHECKLIST				
Section 1: Login # 2 CALL	$Client: \underline{VG + E}$		· • •	271
Date Received: 111/10	Project:		ENT	HALFY
Section 2: Samples received in a cooler? -ET	Yes, how many? [] No (skip Section 3 below	•		
		,		
Samples received on ice direct	using IR Gun # 🗆 A, or 🗔 B ly from the field. Cooling process had begun	•		
If in cooler: Date Opened 1/14/19 By (pri				
Shipping info (if applicable)	nt)(sign)(A			
	o, or 🗆 Yes. If yes, where? 🖾 on cooler, 🗆 on samples,	171		
	iow many 🗆 Signature, 🗋 Initials, 🗹 None	, Li on pa	ackage	
Ware custody seals intact	upon arrival? 🗆 Yes 🗆 No 💭 N/A			
Section 3:		na a da CRI		-
Packing in cooler: (if other, describe)	important : Notify PM if temperature eac	1005 6-C	or army	a trozen
	, 🗇 None, 🗇 Cloth material, 🗇 Cardboard, 🗇 Styrofoam, I		kennet-	
Samples received on ice directly from the fit	eld Cooling process had begin	Li raper i	cowers	
Type of ice used : 12 Wet, 1 Blue/Gel,	Kone Temperature blank(s) included?			
Temperature measured using 🗆 Thermometri		LI ICE,		
Cooler Temp (*C); #1: #2:		#7:		
Section 4:		¥7: YES	NO	N/A
Were custody papers dry, filled out property, a	and the project identifiable	+===		
Were Method 5035 sampling containers press		+		
if YES, what time were they transferred t	o freezer?			
Did all bottles arrive unbroken/unopened?	· · · · · · · · · · · · · · · · · · ·			
Are there any missing / extra samples?				
Are samples in the appropriate containers for	indicated tests?			
Are sample labels present, in good condition a	nd complete?			
Does the container count match the COC?				
Do the sample labels agree with custody paper				
Was sufficient amount of sample sent for tests Did you change the hold time in LIMS for unpr				
Did you change the hold time in LIMS for unpr				
Are bubbles > 6mm absent in VOA samples?	a vect tel (ecores)			
Was the client contacted concerning this samp	la delhan 2			-
If YES, who was called?		L		
iection 5:	ByDate:			
	MA de altra de a contra de la c	YES	NO	N/A
Did you check preservatives for all bottles for e	if N/A, skip the rest of section 5)	┟────┤		
Did you document your preservative check?		┠───┨		
pH strip lot#, pH strip l	ot#, pH strip iot#	L]		
Preservative added:		· ·		
H2SO4 lot#added to sam	pleson/at	•		
CI HCL lot#added to sam				
🗆 HNO3 lot#added to sam			·	
NaOH lotif added to sam		<u> </u>		
ection 6: xplanations/Comments:				
Date Logged in 1/16/17 By (pr	int)A((sign) A(~	J
		<u> </u>		
Date Labeled 111(/19 By (pr	int)A((sign)/t]_	(



Detections Summary for 306446

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 9 (1/16/19) Client Sample ID : UP TIGER PIT Laboratory Sample ID : 306446-001 No Detections Client Sample ID : UP HRSG IP A Laboratory Sample ID : 306446-002 No Detections Client Sample ID : UP HRSG IP B Laboratory Sample ID : 306446-003 No Detections Client Sample ID : UP PHOSPHATE Laboratory Sample ID : 306446-004 No Detections Client Sample ID : UP CC COOLING WATER Laboratory Sample ID : 306446-005 No Detections Client Sample ID : UP AMINE Laboratory Sample ID : 306446-006 No Detections Client Sample ID : UP E-006 Laboratory Sample ID : 306446-007 No Detections Client Sample ID : UP HAMMOND TANK Laboratory Sample ID : 306446-008 Units Basis Analyte Result Flags RL IDF Method Prep Method

Cyanide

0.026

0.010

mg/L

TOTAL

1.000 SM4500CN-C, E METHOD



Client Sample ID : UP OWS	Laboratory Sample ID :	306446-009
No Detections		
Client Sample ID : UP AMMONIA SUMP No Detections	Laboratory Sample ID :	306446-010
Client Sample ID : UP SERVICE WATER No Detections	Laboratory Sample ID :	306446-011
Client Sample ID : UP SOURCE WATER No Detections	Laboratory Sample ID :	306446-012



	Tota	al Cyanide	
Lab #:	306446	Location:	Resample 9 (1/16/19)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Sampled:	01/16/19
Matrix:	Water	Received:	01/16/19
Units:	mg/L	Prepared:	01/16/19
Diln Fac:	1.000	Analyzed:	01/17/19
Batch#:	266990		

Field ID	Type	Lab ID	Resu	lt RL
UP TIGER PIT	SAMPLE	306446-001	ND	0.010
UP HRSG IP A	SAMPLE	306446-002	ND	0.010
UP HRSG IP B	SAMPLE	306446-003	ND	0.010
UP PHOSPHATE	SAMPLE	306446-004	ND	0.010
UP CC COOLING WATER	SAMPLE	306446-005	ND	0.010
UP AMINE	SAMPLE	306446-006	ND	0.010
UP E-006	SAMPLE	306446-007	ND	0.010
UP HAMMOND TANK	SAMPLE	306446-008		0.026 0.010
UP OWS	SAMPLE	306446-009	ND	0.010
UP AMMONIA SUMP	SAMPLE	306446-010	ND	0.010
UP SERVICE WATER	SAMPLE	306446-011	ND	0.010
UP SOURCE WATER	SAMPLE	306446-012	ND	0.010
	BLANK	QC961536	ND	0.010
L		~		

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

	1012	al Cyanide	
Lab #:	306446	Location:	Resample 9 (1/16/19)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	266990
Field ID:	UP TIGER PIT	Sampled:	01/16/19
MSS Lab ID:	306446-001	Received:	01/16/19
Matrix:	Water	Prepared:	01/16/19
Units:	mg/L	Analyzed:	01/17/19
Diln Fac:	1.000		

Туре	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD Lim
LCS	QC961537		0.2000	0.1742	87	75-120	
MS	QC961538	<0.01000	0.2000	<0.01000	0 *	56-120	
MSD	QC961539		0.2000	<0.01000	0 *	56-120	NC 25

*= Value outside of QC limits; see narrative NC= Not Calculated RPD= Relative Percent Difference Page 1 of 1

Attachment 12

Analytical Report on Resampling #10





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 307019 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 10 (2/7/19) Level : II

<u>Sample ID</u>	<u>Lab ID</u>
HAMMOND TANK	307019-001
TIGER PIT	307019-002
SOURCE WATER	307019-003
	HAMMOND TANK TIGER PIT

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Haley Campbell Project Manager haley.campbell@enthalpy.com

Date: <u>02/08/2019</u>

CA ELAP# 2896, NELAP# 4044-001



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 307019 Pacific Gas & Electric Resample 10 (2/7/19) 02/07/19 02/07/19

This data package contains sample and QC results for three water samples, requested for the above referenced project on 02/07/19. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

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	36-0900 Phone		C&IL	OG	IN	#	$\underline{\sim}$		$\underline{\bigcirc}$	1	١			1	Ł J	5													
(510)40	36-0532 Fax											,				LA A													
Project	t No:		Samp Repor Comp Telepl	ler:	M	us k	هم	En	àa	daa.	ata	5	and	ling T	Ę	-													
Project	Name: Resample 10 (2	(7/19)	Repor	t To	o: (Ang	el	Ē	spi	ìci	tu			0	K C	5													
Rpt Le			Comp	any	<u>/:</u>	Ph	t E	Gat	CLIC	ay (م مربعہ	eret	کے ہوڈ	-lahian	L														
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		Sampli	na]	Г		Che				3												1			
Lab		Campi	1.9 1	N	lat	rix	ļ			res	erv	<u>ativ</u>	'e				}												
No.	Sample ID.	Dete	Time	fer		ē	5	Container	5	H _S SQ4	õ	NaOH	None	•	אמינית ב יארי כיי	4	1												
		Date	Time	Water	ŏ	5	#	g	Ť	Ŧ	Ŧ	Na	Ž		2	2													
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	1P Tiger Pit 1P Source Hater	2/7/19	09:35	X									へ		\geq	×	<u> </u>										\rightarrow		
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Notes:	sot to TCE	SAMPLE RE	ECEIPT	RE	ELI	NQL	ISI	HED) B'	Y :							RE	CE	IYE	DB	Y:								
some	le sout on ICE	□ Intact □ Col				ΓÇ	_	_			A		10	5.3	2			ł]]	\mathcal{D}_{r}	. /		Ċ.			~		0:7	
63	ntainers	D-On ice D Am	bient	4		<u> </u>	4	2		2/	7/	q) 3. DA	TE/	ΓΙΜΕ	- /	$\overline{\mathbb{N}}$	M	00	$\frac{1}{2}$		2	-7	-1	9]	DATI	E/TIME
containers [200n ice □ Ambient 500 ml poly			DATE/TIME						V	l			<u> </u>						[e/Time								
														DA	TE/	TIME											1	DAT	
L		······································									ana a Main																		

SAMPLE RECEIPT CHECKLIST			12	
Section 1: Login # 257019 Client: TAPEO Date Received: 21719 Project:				
Date Received: 2719 Project:			ENC	MALPY NTSAI
Section 2: Samples received in a cooler? [] Yes, how many? [] No (sign Section	8 helow		· · · · · ·	
If no cooler Sample Temp (°C): 2.5 using IR Gun # E A. or E B				
Samples received on ice directly from the field. Cooling process had begun	. :	•		
If in cooler: Date Opened 2714 By (print) (sign)	I			
	<u>II</u>			•
Shipping info (if applicable)			 	
Are custody seals present? INo, or Ves. If yes, where? on cooler, on		Lion pa	ckage	
Date: How many Signature, D initials, D N	one			
Were custody seals intact upon arrival? Yes No N/A				•
Section 3: Important : Notify PM If temper	ature exci	eds 6°C	or arrive	frozen.
Packing in cooler: (if other, describe)	_	_		
🗆 🖬 Bubble Wrap, 🖾 Foam blocks, 🖾 Bags, 🖾 None, 🖾 Cloth material, 🖾 Cardboard, 🖾 Sty	rofoam, 🗆	l Paper t	oweis	
Samples received on ice directly from the field. Cooling process had begun		•	_	
Type of ice used : 🖾 Wet, 🖾 Blue/Gel, 🖾 None Temperature blank(s) in] Yes, [] No	
Temperature measured using 🛛 Thermometer ID:, or IR Gun # 🖾 A 🛛	⊐ B			
Cooler Temp (°C): #1:, #2:, #3:, #4:, #5:, #6:,		ŧ7:		
Section 4:		YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable				
Were Method 5035 sampling containers present?				
If YES, what time were they transferred to freezer?				
Did all bottles arrive unbroken/unopened?				
Are there any missing / extra samples?				
Are samples in the appropriate containers for indicated tests?			_	
Are sample labels present, in good condition and complete?			-	
Does the container count match the COC?				
Do the sample labels agree with custody papers?				
Was sufficient amount of sample sent for tests requested?				
Did you change the hold time in LIMS for unpreserved VQAs? Did you change the hold time in LIMS for preserved terracores?				
Are bubbles > 6mm absent in VOA samples?				
Was the client contacted concerning this samples r				٠
If YES, who was called?ByDate;ByDate;ByDate;ByDate;ByDate;ByDate;ByDate;ByDate;ByDate;ByByDate;ByByDate;ByByDate;By_By				
Section 5:		YES	NO ·	N/A
Are the samples appropriately preserved? (If N/A, skip the rest of section 5) Did you check preservatives for all bottles for each sample?				
Did you check preservatives for all bottles for each sample? Did you document your preservative check?				
pH strip lot#, pH strip lot#, pH strip lot#, pH strip lot#		······································		
Added to samples	'on/at			
C HCL lot# added to samples	on/at on/at			······
CI HNO3 lot# added to samples	on/at			
added to samples	On/at			
Section 6:				
Explanations/Comments:				
	<i>r</i>			
Date Logged in 2719 By (print) A (sign)	1x			
Date Labeled 2716 By (print) A((sign)	TA			
contraction KI I				

Rev.15, 02/02/2018



Detections Summary for 307019

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 10 (2/7/19)

Client Sample ID : UP HAMMOND TANK Laboratory Sample ID : 307019-001 No Detections

Client Sample ID : UP TIGER PIT	Laboratory Sample ID :	307019-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.013		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD

Client Sample ID : UP SOURCE WATER Laboratory Sample ID : 307019-003 No Detections

Page 1 of 1



Total Cyanide							
Lab #:	307019	Location:	Resample 10 (2/7/19)				
Client:	Pacific Gas & Electric	Prep:	METHOD				
Project#:	STANDARD	Analysis:	SM4500CN-C,E				
Analyte:	Cyanide	Sampled:	02/07/19				
Matrix:	Water	Received:	02/07/19				
Units:	mg/L	Prepared:	02/07/19				
Diln Fac:	1.000	Analyzed:	02/08/19				
Batch#:	267621						
Field T	D Type Lab ID	Regult	PT.				

Field ID	Туре	Lab ID	Res	ult	RL	
UP HAMMOND TANK	SAMPLE 3	307019-001	ND		0.010	
UP TIGER PIT	SAMPLE 3	307019-002		0.013	0.010	
UP SOURCE WATER	SAMPLE 3	307019-003	ND		0.010	
	BLANK Ç)C964159	ND		0.010	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide						
Lab #:	307019	Location:	Resample 10 (2/7/19)			
Client:	Pacific Gas & Electric	Prep:	METHOD			
Project#:	STANDARD	Analysis:	SM4500CN-C,E			
Analyte:	Cyanide	Batch#:	267621			
Field ID:	UP SOURCE WATER	Sampled:	02/07/19			
MSS Lab ID:	307019-003	Received:	02/07/19			
Matrix:	Water	Prepared:	02/07/19			
Units:	mg/L	Analyzed:	02/08/19			
Diln Fac:	1.000					

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC964160		0.2000	0.1579	79	75-120		
MS	QC964161	<0.01000	0.2000	0.1211	61	56-120		
MSD	QC964162		0.2000	0.1513	76	56-120	22	25

Attachment 13

Analytical Report on Resampling #11



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1902474

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue Antioch, CA 94509

Project Contact: Angel Espiritu **Project P.O.:**

Project: Resample II (2/11/19)

Project Received: 02/11/2019

Analytical Report reviewed & approved for release on 02/12/2019 by:

Christine Askari Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com CA ELAP 1644 ♦ NELAP 4033 ORELAP



Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station

Project: Resample II (2/11/19)

WorkOrder: 1902474

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client:	PG&E Gateway Generating Station
Date Received:	2/11/19 10:05
Date Prepared:	2/12/19
Project:	Resample II (2/11/19)

WorkOrder:	1902474
Extraction Method:	SM4500-CN ⁻ E
Analytical Method:	SM4500-CN ⁻ CE
Unit:	μg/L

Cyanide, Total									
Client ID	Lab ID	Matrix	Date Col	lected	Instrument	Batch ID			
UP Tiger Pit	1902474-001A	1902474-001A Water		9 08:30	WC_SKALAR 021219A1_29	172888			
Analytes	Result		<u>RL</u>	DF	Date	Analyzed			
Total Cyanide	29		1.0	1	02/12	2/2019 11:55			

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Col	llected	Instrument	Batch ID
UP RO	1902474-002A	Water	02/11/201	9 09:25	WC_SKALAR 021219A1_32	172888
Analytes	Result		<u>RL</u>	<u>DF</u>	Date	Analyzed
Total Cyanide	1.7		1.0	1	02/12	2/2019 12:03

Analyst(s): NM

Quality Control Report

Client:	PG&E Gateway Generating Station
Date Prepared:	2/12/19
Date Analyzed:	2/12/19
Instrument:	WC_SKALAR
Matrix:	Water
Project:	Resample II (2/11/19)

WorkOrder:	1902474
BatchID:	172888
Extraction Method:	SM4500-CN ⁻ E
Analytical Method:	SM4500-CN ⁻ CE
Unit:	µg/L
Sample ID:	MB/LCS/LCSD-172888

QC Summary Report for SM4500-CN⁻ CE

Analyte	MB Result		MDL	RL					
Total Cyanide	ND		0.84	1.0		-	-	-	
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit

•	bell Analytical, low Pass Rd	Inc.			CHAIN-OF-CUSTODY RECORD Page 1 of									1		
C 18 8/	, CA 94565-1701 2-9262	□WaterTrax	WriteOn	EDF	E	Excel	:: 1902 4 ■E n Summa	QuIS	√ Er	C lientCo mail ry-Weigh		GEA lardCopy	Third	Party	J-f	lag
Report to: Angel Espiritu PG&E Gatewa	y Generating Station	Email: cc/3rd Party:	abe4@pge.com		Bill to: Angel Espiritu PG&E Gateway Generating St				ation	Req	equested TAT: 1 day;					
3225 Wilbur A Antioch, CA 9 (925) 459-7212	venue	PO: Project: Resample II (2/11/19)			3225 Wilbur Avenue Antioch, CA 94509						Date Received: Date Logged:			02/11/2019 02/11/2019		
					[Requ	uested T	ests (Se	ee legend l	below)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7 8	9	10	11	12
1902474-001	UP Tiger Pit		Water	2/11/2019 08:30		А										<u> </u>

А

2/11/2019 09:25

Test Legend:

1902474-002

1	CN_SM4500CE_W
5	
9	

UP RO

2	
-	
6	
10	

Water

3	
7	
11	

4	
8	
12	

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

	McCampbell Analytical, Inc. "When Quality Counts"					1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com						
WORK ORDER SUMMARY												
Client Name:PG&E GATEWAY GENERATING STATIONProject:Resample II (2/11/19)Work Order:1902474Client Contact:Angel EspirituQC Level:LEVEL 2												
Contact's Email: abe4@pge.com			Con	Comments:					-	2/11/2019		
		WaterTrax	WriteOn	EDF	Excel	EQuIS Email	HardC	opy ThirdParty	/	J-flag		
Lab ID	Client ID	Matrix	Test Name		Containers /Composite		e De- chlorinated	Collection Date & Time	ТАТ	Sediment Content	Hold SubOut	
1902474-001A	UP Tiger Pit	Water	SM4500-CN-	CE (Cyanide, Total)	1	500mL aHDPE w/ NaOH Na2S2O3	+	2/11/2019 8:30	1 day	None		
1902474-002A	UP RO	Water	SM4500-CN-	CE (Cyanide, Total)	1	500mL HDPE w/ Na2S20	03	2/11/2019 9:25	1 day	Present		

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

R	U	S	H
		ALL	

General COC

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MAI Work Order # 1902474

¢	McCAMP	BELL	ANAI	YT	ICAL	INC.						С	HAI	N OI	F CU	STO	DY	REC	COR	D				
								Turn Around Time: 1 Day Rush 2 Day Rush						Rush		3 Day	Rush		STD Quote #					
		one: (877) 25					3	J-Flag / MDL ESL					Cleanup Approved					Bottle Order #						
	www.mccampt	ell.com	ma	in@mc	campbell.	com	Deliv	ery Fo	rmat:	PDF		Geo	Fracker	r EDF		EDD		Wr	ite On	(DW)		E	QuIS	
Ì	Report To: Ancel FSOI	cidu	Bill To:	PGA	FFCO	Epical								Ar	ialysi	s Re	quest	ted				2	5	
	Company: PGF Concerne Email: Concerne Alt Email: Project Name: Resample 11 (Project Location: Topec Pit Sampler Signature: Mus Ken SAMPLE ID Location / Field Point		Tele: Project #: PO # pling	#Containers	A Sen Matrix	plig f	BTEX & TPH as Gas (8021/ 8015) MTBE	FPH as Diesel (8015) + Motor Oil Without Silica Gel	PPH as Diesel (8015) + Motor Oil <u>With</u> silca Gel	Total Oil & Grease (1664 / 9071) <u>Without</u> Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) <u>With</u> Silica Gel	Total Petroleum Hydrocarbons (418.1) With Silica Gel	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)	Baylands Requirements	Lab to filter sample for dissolved metals analysis	cyamile(total) psetandia	CN-RBCE TWING	
	Location / Field Folin	Date	Time	#Cc			BTI	TPI	TPH : Silca	Tot	Tot: Gre	Tot	EP/	EP/	EP/	EP.	EP.	CA	Me	Bay	Lal	C S		
V T	UP Tiger Pit UP RO	2/11/19 2/11/19	08:30	1	water huter	-										~						X X		
	1						-	_	-															
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								L																MALMOR
	MAI clients MUST disclose any dangerous chemica Non-disclosure incurs an immediate \$250 surcharge	ls known to be and the client i	present in their s subject to full	submitted legal liab	I samples in co pility for harm	oncentrations th suffered. Thank	at may c you fo	cause in r your i	mmedia understa	anding a	or seri	allowin	g us to	ith enda work sa	ngerme afely.	nt as a	result o	of brief,	, giovec	i, open	air, san	ipie nan	ding by	WAI Stall.
	* If metals are requested for water samples and						1	2												С	omme	nts / Ins	struction	ns
	Please provide an adequate volume of sample.													ort.]					
	Relinquished By / Compar	ny Name		Dat	te T	ime	X	Rece	ived B	y/Cor	npany	Name			D	ate,	Ti	ime						
17 2/11/19 10:05 7								he	1)					2/1	lig	10	1:05	-					
	<i>F</i> =					1		21	J	/					//	<u>.</u>		1	1					
								-								<u> </u>			4					
	Matrix Code: DW=Drinking Water, (L=Slu	dge,	A=Ai	r, WI	P=Wi	pe, O	=Oth	er	т	5	11	°C	Ini	tials	
	Preservative Code: 1=4°C 2=HCl	$3=H_2SO_4$	$4=HNO_3$	5=Na	$OH 6=Z_1$	nOAc/NaQ	H 1	=Noi	ne									remp	4.	7		IIII	nais .	
																		i	NE	T		F	Page _	of



Sample Receipt Checklist

Client Name: Project:	PG&E Gateway Ger Resample II (2/11/1	-			Date and Time Received Date Logged:	2/11/2019 10:05 2/11/2019
r Toject.		3)			Received by:	Julia Danielsson
WorkOrder №: Carrier:	1902474 <u>Client Drop-In</u>	Matrix: <u>Water</u>			Logged by:	Agustina Venegas
		Chain of C	ustody	/ (COC) Infor	mation	
Chain of custody	present?		Yes	✓	No 🗌	
Chain of custody	signed when relinquis	shed and received?	Yes	✓	No 🗌	
Chain of custody	agrees with sample la	abels?	Yes	✓	No 🗌	
Sample IDs noted	d by Client on COC?		Yes	✓	No 🗌	
Date and Time of	collection noted by C	lient on COC?	Yes		No 🗌	
Sampler's name	noted on COC?		Yes		No 🗌	
COC agrees with	Quote?		Yes		No 🗌	NA 🗹
		Samp	le Rece	eipt Informati	on	
Custody seals int	act on shipping conta	iner/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good cond	lition?	Yes		No 🗌	
Samples in prope	er containers/bottles?		Yes		No 🗌	
Sample container	rs intact?		Yes		No 🗌	
Sufficient sample	volume for indicated	test?	Yes	✓	No 🗌	
		Sample Preservation	on and	Hold Time (I	HT) Information	
All samples recei	ved within holding tim	e?	Yes		No 🗌	NA
Samples Receive	ed on Ice?		Yes	✓	No 🗌	
		(Ісе Тур	e: WE			_
Sample/Temp Bla	ank temperature			Temp: 4.4	Р°С	
Water - VOA vials	s have zero headspac	ce / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	ecked for correct pres	servation?	Yes	✓	No 🗌	
pH acceptable up <2; 522: <4; 218.		Nitrate 353.2/4500NO3:	Yes		No 🗌	NA 🗹
UCMR Samples:				_	_	_
	acceptable upon recei 3; 544: <6.5 & 7.5)?	pt (200.8: ≤2; 525.3: ≤4;	Yes		No	NA 🗹
Free Chlorine to	ested and acceptable	upon receipt (<0.1mg/L)?	Yes		No 🗌	NA 🗹





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 307128 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 11 (2/11/19) Level : II

<u>Sample ID</u>	<u>Lab ID</u>
UP TIGER PIT	307128-001
UP RO	307128-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Haley Campbell Project Manager haley.campbell@enthalpy.com

Date: <u>02/12/2019</u>

CA ELAP# 2896, NELAP# 4044-001



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 307128 Pacific Gas & Electric Resample 11 (2/11/19) 02/11/19 02/11/19

This data package contains sample and QC results for two water samples, requested for the above referenced project on 02/11/19. The samples were received on ice and intact, directly from the field.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

Formerly C	alpy Analytical Curtis & Tompkins cal Laboratory Since 1878]	CH	AI	Ν	OF	= (CL	JS	ST	0	D	Y				f C		-		of				
2323 F Berkele (510)48	ifth Street ey, CA 94710 86-0900 Phone 86-0532 Fax		C&T I	OGIN	\# <u>_</u>	307	.12	<u>20</u>				- China ha	H Syd and			An		tica			iest				
Rpt Le	t No: t Name: <u>Resample 11 (2</u> , evel: II round Time: Cannolani Rush	<u>/11/19)</u>	Repo Comp Telep	rt To: bany : hone	Ar PG : (g	an En gel / SEG 25)	Esp note	11-7 1-7		San nexal	stati		OO CN-ABC												
Lab		Sampl	······································	T	trix]		Che rese				Chot													
No.	Sample ID.	Date	Time	Water Soil	Other	# of Container	HCI	H ₂ SQ4	НNO ³	NaOH		evanide (tota)	1 200 J H												
	UP TIGER Pit UP RO	2/11/19 2/11/19	08:30	X ;X						> -> 			X												
															+										
Notes: Sam C	nple sent on ICE ontainers: 500 ml poly	SAMPLE Rt	ld	REL	INQ	UISHE	: D В ////,	4		8	D		Z TIME TIME	_(/ED	BY:	<u>M</u> a	/	~	h	2/,	DA	7 // <u>TE/T</u>	
	3 Not Nose	VR Sa	ples								D	ATE/	TIME										DA	TE/T	IME

Section 1: Login #				
Date Received: 2/11/19 Project: RCSAMPTRE.1 Return 1 Section 2: Samples received in a cooler; D vs., how many? Dive (bit) Section 2: 5 using IR Gun 4; D. A, or D B D samples received on ke directly from the field. Cooling process had begun (ign)	SAMPLE RECEIPT CHECKLIST	i	. 12	
Date Received: 2/11/19 Project: RCSAMPTRE.1 Return 1 Section 2: Samples received in a cooler; D vs., how many? Dive (bit) Section 2: 5 using IR Gun 4; D. A, or D B D samples received on ke directly from the field. Cooling process had begun (ign)	Section 1: Login#_307128 Client: MUSKan Environ	menta		
Section 2: Samples received in a coder? □ Yes, how many? □ No (ptip Section 3 below) If no coder Samples received on the directly from the field. Cooling process head begun if in cooler: Deta Opened By (print) (sign) Are custody seals present? Ø No, or □ Yes. If yes, where? □ on cooler, □ on samples, □ on package □ Dete: How many Signature, □ hittais, □ None Were custody seals intact upon artival? □ Yes. □ No _Ø N/A Section 3: In other directly from the field. Cooling process hat begun □ Bubble Wrap, □ Foam blocks, JØ Bag, □ None, □ Cloth material, □ Cardboard, □ Styrofoam, □ Paper towels □ Bubble Wrap, □ Foam blocks, JØ Bag, □ None, □ Cloth material, □ Cardboard, □ Styrofoam, □ Paper towels □ Bubble Wrap, □ Foam blocks, JØ Bag, □ None, □ Cloth material, □ Cardboard, □ Styrofoam, □ Paper towels □ Samples received on ice directly from the field. Cooling process hat begun □ for bids with a cool paper towels 0	Date Received: 2/11/19 Project: RESAMPTLE 11		ENT	MALPY MING
if no cooler Samples received on ice directly from the field. Cooling process had begun if no cooler. Date Opened				
□ Samples received on log directly from the field. Cooling process had begun if in cooler: Data Opaned by (print)				
if in cooler: Data OpanedBY (print)				
Shipping info (if applicable) Are castody seals present? Ø(No, or □ Yes. If yes, where? □ on cooler, □ on samples, □ on package □ Date:	• • • • •			
Are custody seals present? ØNo, or □ Yes. If yes, where? □ on cooler, □ on samples, □ on package □ Bubs::::::::::::::::::::::::::::::::::::				•
□ Date:	Snipping into (it applicable)		nackaga	
Were custody seals intact upon arrival? IVes IV IV Section 8: Important : Notify PM If temperature access 6°C or arrive frozen Bubble Wrap,Foam blocks, [2] Bags,None,Cloth material,Cardboard,Styrofoam,Paper towels Samples received on Lc directly from the field. Cooling process had begun Type of ice uses:Styrofoam,Blux/Gel,None,Or itemperature blank(s) included?Yes,No Temperature measured usingNtermometer ID: or iR Gun #AtStyrofoam #Styrofoam #	Are custopy seals presents , CL NO, OF LL Tes. IT yes, where f LL On cooler, LL On Sar	ایا بردی ۱۱۷۲۰ میل (۱۱۷	harvalle	
Section S: Important : Notify PM if temperature exceeds 6°C or arrive fraces Packing in cooler: (if other, describe) Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels Display the massure dusing Internometer ID:		9		
Packing in cooler: (if other, describe)	Were clistody seals intact upon arrival? LI Yes LI NO ZI N/A	no overede C		a frances
□ Bubble Wrap, □ Foam blocks, □/ Bags, □ None, □ Coth material, □ Cardboard, □ Styrofoam, □ Paper towels □ Samples received on Loc directly from the field. Cooling process had begun □ Funderstature measured using □ Thermometer ID:		re excens s		a I L'ACELL
□ Samples received on ice directly from the field. Cooling process had begun Type of ice used : Wet, □ Blue/Gel, □ None Temperature blank(s) included? □ Yes, □ No Temperature measured using □ Thermometer ID or IR Gun # 2I A □ B Cooler Temp (*C): #1: 3 ·			r tousie	
Type of ice used : Wet, Blue/Gel, None Temperature blank(s) included? Yes, No Temperature measured using Thermometer ID:		ан, штарс		
Temperature measured using LI Thermometer ID:, or it Gun #/LI A LI B Cooler Temp (*C): #1: 3.5	Li Samples received on ice directly from the field. Localing process had begun	1012 177 V~		
Cooler Temp (*C): #1: 3.5 #2:		ueur Li⊓to: R	9 LI 140	
Saction 4: YES NO N/A Ware austody papers dry, filled out property, and the project identifiable ////////////////////////////////////				
Were custody papers dry, filled out property, and the project identifiable			NO	N/A
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Are samples in the appropriate containers for indicated tests?	Are there any missing / extra samples?	Ι,	1/	
Are sample labels present, in good condition and complete?	Are samples in the appropriate containers for indicated tests?			
Do the sample labels agree with custody papers?	Are sample labels present, in good condition and complete?			
Was sufficient amount of sample sent for tests requested?	Does the container count match the COC?			
Did you change the hold time in LIMS for unpreserved VOAs?				
Did you change the hold time in LIMS for preserved terracores?				
Are bubbles > 6mm absent in VOA samples?				\vdash
Was the client contacted concerning this sample delivery? By				
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pH strip lot#			12	
Preservative added: on/at I H2SO4 lot# added to samples added to samples on/at I HNO3 lot# added to samples added to samples on/at NaOH lot# added to samples on/at on/at Section 6: Explanations/Comments: Date Logged in 2-1119 By (print)			•	
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	Date Labeled 2/11/19 By (print) (sign)	let	<u> </u>	-



Detections Summary for 307128

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 11 (2/11/19)

Client Sample ID : UP TIGER PIT Laboratory Sample ID : 307128-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cyanide	0.014		0.010	mg/L	TOTAL	1.000	SM4500CN-C,E	METHOD

Client Sample ID : UP RO Laboratory Sample ID : 307128-002

No Detections



	Tot	al Cyanide	
Lab #:	307128	Location:	Resample 11 (2/11/19)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Sampled:	02/11/19
Matrix:	Water	Received:	02/11/19
Units:	mg/L	Prepared:	02/11/19
Diln Fac:	1.000	Analyzed:	02/12/19
Batch#:	267700		
Field I	D Type Lab ID	Result	RL

Field ID	Type Lab ID	Result	RL	
UP TIGER PIT	SAMPLE 307128-001	0.014	0.010	
UP RO	SAMPLE 307128-002	ND	0.010	
	BLANK QC964476	ND	0.010	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide								
Lab #:	307128	Location:	Resample 11 (2/11/19)					
Client:	Pacific Gas & Electric	Prep:	METHOD					
Project#:	STANDARD	Analysis:	SM4500CN-C,E					
Analyte:	Cyanide	Batch#:	267700					
Field ID:	UP TIGER PIT	Sampled:	02/11/19					
MSS Lab ID:	307128-001	Received:	02/11/19					
Matrix:	Water	Prepared:	02/11/19					
Units:	mg/L	Analyzed:	02/12/19					
Diln Fac:	1.000							

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC964477		0.2000	0.1665	83	75-120		
MS	QC964478	0.01390	0.2000	0.1986	92	56-120		
MSD	QC964479		0.2000	0.1985	92	56-120	0	25

Attachment 14

Analytical Report on Resampling #12





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 307577 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD

Level : II

	<u>Sample ID</u>	<u>Lab ID</u>
UP	HAMMOND TAND	307577-001
UP	RO REJECT	307577-002
UP	TIGER PIT	307577-003
UP	SOURCE WATER	307577-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Haley Campbell Project Manager haley.campbell@enthalpy.com

Date: <u>02/26/2019</u>

CA ELAP# 2896, NELAP# 4044-001



CASE NARRATIVE

Laboratory number: Client: Request Date: Samples Received: 307577 Pacific Gas & Electric 02/25/19 02/25/19

This data package contains sample and QC results for four water samples, requested for the above referenced project on 02/25/19. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

No analytical problems were encountered.

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Analytic	cal Laboratory Since 1878													r			CI					/#: I Re	2011		F				
Berkele (510)48	ey, CA 94710 36-0900 Phone 36-0532 Fax		C&T L												L'						U								
Project		-	Samp Repor Comp	ler:	2	Incka	mt	Envir	(and	me	hal	Som	wig :		ABC														
	t Name: Resample 12	2/25/19)	Repor	t To	D:	An	ge	K Es	pic	F	<u>u</u>			P	٩¢														
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Lab No.	Sample ID.	Date	Time	Water			\$0#	Container	<u> </u>		T	NaUH	None	cranded of al	NWS 19														
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	UP RO Reject	2/25/19	08:35				1					×	\Box		<u>¥</u>									_	\rightarrow	4			
	UP Tiger Pit	2/25/19	08:10	Ķ1	_		<u> </u>		+-			X	H	\vdash	\mathbf{b}								-+			+		+	
	UP Source Water	2/25/19	08:45	쒸	-	+	┝╵				+	+	4	F	\mathbf{P}								-+	-+	+	+	+		-
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	CENT CHECKLIST		"2	21
Section 1:	Login # 307577 Client: PG+E	-		
·	Date Received: 2-25.19 Project:	_	ENT	MALPY
Section 2:	Samples received in a cooler? [] Yes, how many? [] No (skip Section 3 belo	ineri	·	
If no coole	Sample Temp (°C): <u>3.0.0</u> using IR Gun # [2] A, or [] B	1		
	Samples received on ice directly from the field, Cooling process had begun	•		
	Date Opened 2.25.19 By (print) (sign)			
n in cooler:				•
	Shipping info (if applicable)			
	Are custody seals present? II No, or II Yes. If yes, where? II on cooler, II on sampl	les, Li on pi	ackage	
	Date: How many Disgnature, Distails, Disone			
	Were custody seals intact upon arrival? Yes No N/A			<u>.</u>
Section 3:	Important : Notify PM if temperature	exceeds 6°C	or antivi	e frozen.
	ooler: (if other, describe)			
1	ble Wrap, 🗋 Foam blocks, 🗋 Bags, 📮 None, 🗋 Cloth material, 🗖 Cardboard, 🗖 Styrofoan	n, 🖾 Paper	towels	
	received on ice directly from the field. Cooling process had begun			
	used : El Wet, D Blue/Gel, D None Temperature blank(s) included	? 🗋 Yes,	□ No	
	e measurad using 🗆 Thermometer ID;, or IR Gun # 🗆 A 🗔 B			
	p (*C); #1:, #2:, #3:, #4:, #5:, #6:	#7:		
Section 4:		YES	NO	N/A
	ty papers dry, filled out properly, and the project identifiable			
	od 5035 sampling containers present?			
	what time were they transferred to freezer?			
	es arrive unbroken/unopened?			
	ny missing / extra samples? In the appropriate containers for indicated tests?		F	
			+	
	abels present, in good condition and complete? ntainer count match the COC?			
	namer count match the COC? De labels agree with custody papers?			
	nt amount of sample sent for tests requested?		<u> </u>	
	nge the hold time in LIMS for unpreserved VQAs?		 	
Did you che	nge the hold time in LIMS for preserved terracores?		 	
	> 6mm absent in VOA samples?		†	1
	nt contacted concerning this sample delivery?			
	who was called?ByBy			
	Deber.	YES	NO	M/A
Section 5:	ples appropriately preserved? (If N/A, skip the rest of section 5)			NA
	ck preservatives for all bottles for each sample?	· -		
	ument your preservative check?		t	
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Section 6:				
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Date La	beled 2-2.5-16) By (print) (sign) (<u> </u>		
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307577-001

307577-002

307577-003

307577-004

Detections Summary for 307577

Results for any subcontracted analyses are not included in this summary.

```
Client : Pacific Gas & Electric

Project : STANDARD

Location :

Client Sample ID : UP HAMMOND TAND Laboratory Sample ID :

No Detections

Client Sample ID : UP RO REJECT Laboratory Sample ID :

No Detections

Client Sample ID : UP TIGER PIT Laboratory Sample ID :

No Detections
```

Client Sample ID : UP SOURCE WATER Laboratory Sample ID :

No Detections



Total Cyanide										
Lab #:	307577	Prep:	METHOD							
Client:	Pacific Gas & Electric	Analysis:	SM4500CN-C,E							
Project#:	STANDARD									
Analyte:	Cyanide	Sampled:	02/25/19							
Matrix:	Water	Received:	02/25/19							
Units:	mg/L	Prepared:	02/25/19							
Diln Fac:	1.000	Analyzed:	02/26/19							
Batch#:	268093									

	Field ID	Type	Lab ID	Result	RL
UP	HAMMOND TAND	SAMPLE	307577-001	ND	0.010
UP	RO REJECT	SAMPLE	307577-002	ND	0.010
UP	TIGER PIT	SAMPLE	307577-003	ND	0.010
UP	SOURCE WATER	SAMPLE	307577-004	ND	0.010
		BLANK	QC966128	ND	0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide									
Lab #:	307577	Prep:	METHOD						
Client:	Pacific Gas & Electric	Analysis:	SM4500CN-C,E						
Project#:	STANDARD								
Analyte:	Cyanide	Batch#:	268093						
Field ID:	ZZZZZZZZZ	Sampled:	02/14/19						
MSS Lab ID:	307279-002	Received:	02/15/19						
Matrix:	Water	Prepared:	02/25/19						
Units:	mg/L	Analyzed:	02/26/19						
Diln Fac:	1.000								

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC966129		0.2000	0.1828	91	75-120		
MS	QC966130	<0.01000	0.2000	0.1470	74	56-120		
MSD	QC966131		0.2000	0.1472	74	56-120	0	25

Attachment 15

Analytical Report on Resampling #13





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 307679 ANALYTICAL REPORT

Pacific Gas & Electric	Project : STANDARD
4801 Oakport Street	Location : Resample Compliance-2/27/19
Oakland, CA 94601	Level : II

<u>Sample ID</u> UP-I-001 <u>Lab ID</u> 307679-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Haley Campbell Project Manager haley.campbell@enthalpy.com

Date: <u>03/01/2019</u>

CA ELAP# 2896, NELAP# 4044-001



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 307679 Pacific Gas & Electric Resample Compliance-2/27/19 02/27/19 02/27/19

This data package contains sample and QC results for one water sample, requested for the above referenced project on 02/27/19. The sample was received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recoveries were observed for cyanide in the MS/MSD for batch 268177; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

CHAIN OF CUSTODY

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Project	Name: Resample Compliance	-2/27/19 F	Report To: A	nget	15	Piri	tu	Ţ	m	Wi	sil	m	1	ar lan	DOS 2	ĕ										
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Sam	ples set on ICE 10T preserve Sample	RECEIPT	Daug	تكاعا	leh	<u></u>		DATE	2)	27/4	ME:	:095	-/		(/	-					E:24	Z7,,,,	NE:	251	<u>_</u>
Do N	10T preserve Sample		-(1	\leq				DATE	Q	2	IME:	105	5]-		Í	1_			~		DAT	E:2	27/1	<u>ле:</u>	10.	<u></u> 42
		On Ice Ambient						DATE	<u>:</u>	T	IME:	:		· · · · •						<u></u>	DAT	<u>E:</u>	TIN	ME:		-

	ECEIPT CHECKLIST			
Section 1:	Login # Client: 900	-	ENT	A ALIPY
	Date Received: 2 27 9 Project:		-446	
Section 2:	Samples received in a cooler? 🖾 Yes, how many? 🖾 No (skip Section 3 bei	DWY)		
lf no cooler	Sample Temp (*C): using IR Gun # 🗆 A, or 🗔 B			
	Samples received on ice directly from the field. Cooling process had begun			
If in cooler:	Dete Opened 2 27/19 By (print) AC (sign)			
	Shipping info (if applicable)			•
	Are custody seals present? 12 No, or 🗆 Yes. If yes, where? 🖾 on cooler, 🗆 on samp	les, 🗋 on pa	ickage	
	Date: How many Dignature, Dinitials, Dinone			
	Were custody seals intact upon arrival? [] Yes [] No []-N/A			•
Section 3:	important : Notify PM if temperature	exceeds 6°C	or arrive	frozen
Packing in e	poler: (if other, describe)			
	ble Wrap, 🛛 Foam blocks, 🗋 Bags, 🖾 None, 🖾 Cloth material, 🗖 Cardboard, 🗖 Styrofoan	n, 🗆 Paper 1	toweis	
	received on ice directly from the field. Cooling process had begun	•		
**	used : 12 Wet, 🛛 Blue/Gel, 🗋 None Temperature blank(s) included	1? 🗋 Yes,	er No	
	e measured using Thermometer ID:, or IR Gun # A B B			
	p (°C): #1:K_7_, #2:, #3:, #4:, #5:, #6:,	# 7:		
Section 4:		YES	NO	N/A
	by papers dry, filled out property, and the project identifiable			
	pd 5035 sampling containers present? what time were they transferred to freezer?			
	es arrive unbroken/unopened?			
	ny missing / extra samples?			
	in the appropriate containers for indicated tests?			
	abels present, in good condition and complete?			
	ntainer count match the COC?			
	ole labels agree with custody papers?			
	nt amount of sample sent for tests requested?			
	nge the hold time in LIMS for unpreserved VOAs?			
	nge the hold time in LIMS for preserved terracores?			
	> 6mm absent in VOA samples?			
	nt contacted concerning this semple delivery?			
	who was called?ByDate:	MEC		
Section 5:	ples appropriately preserved? (If N/A, skip the rest of section 5)	YES	NO ·	N/A
	ck preservatives for all bottles for each sample?	·		
	ument your preservative check?			
-	p lot#, pH strip lot#, pH strip lot#,			
Preservativ			•	
H2504		n∕at		
HCL loti		n/at		
HNOS I	t# added to samples or	v∕at		
🗆 NaOH Io	t# added to samples or	ı/at		
Section 6:				
Explanation	s/Comments:	<u> </u>		
•	11			
		-		
Dete Log			· _	
Date Li	beled 2 27/14 By (print) (sign)	_//		



Detections Summary for 307679

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample Compliance-2/27/19

Client Sample ID : UP-I-001

Laboratory Sample ID :

307679-001

No Detections



Total Cyanide										
Lab #:	307679	Location:	Resample Compliance-2/27/19							
Client:	Pacific Gas & Electric	Prep:	METHOD							
Project#:	STANDARD	Analysis:	SM4500CN-C,E							
Analyte:	Cyanide	Batch#:	268177							
Field ID:	UP-I-001	Sampled:	02/27/19							
Matrix:	Water	Received:	02/27/19							
Units:	mg/L	Prepared:	02/27/19							
Diln Fac:	1.000	Analyzed:	02/28/19							
Type Lab	ID Result	RL								
SAMPLE 307679	-001 ND	0.010								

 SAMPLE 307679-001
 ND
 0.010

 BLANK
 QC966472
 ND
 0.010

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide									
Lab #:	307679	Location:	Resample Compliance-2/27/19						
Client:	Pacific Gas & Electric	Prep:	METHOD						
Project#:	STANDARD	Analysis:	SM4500CN-C,E						
Analyte:	Cyanide	Batch#:	268177						
Field ID:	ZZZZZZZZZ	Sampled:	02/27/19						
MSS Lab ID:	307710-001	Received:	02/27/19						
Matrix:	Water	Prepared:	02/27/19						
Units:	mg/L	Analyzed:	02/28/19						
Diln Fac:	1.000								

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC966473		0.2000	0.1816	91	75-120		
MS	QC966474	<0.01000	0.2000	0.1003	50 *	56-120		
MSD	QC966475		0.2000	0.1001	50 *	56-120	0	25

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1

Attachment 16

Analytical Report on Resampling #14





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 307726 ANALYTICAL REPORT

Pacific Gas & Electric	Project : STANDARD
4801 Oakport Street	Location : Resample Compliance (2/28/19)
Oakland, CA 94601	Level : II

<u>Sample ID</u> UP I-001 <u>Lab ID</u> 307726-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:

Haley Campbell Project Manager haley.campbell@enthalpy.com

Date: <u>03/01/2019</u>

CA ELAP# 2896, NELAP# 4044-001



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 307726 Pacific Gas & Electric Resample Compliance (2/28/19) 02/28/19 02/28/19

This data package contains sample and QC results for one water sample, requested for the above referenced project on 02/28/19. The sample was received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recoveries were observed for cyanide in the MS/MSD for batch 268177; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Formerly Curt			CH		N	O)F	С	;U;	S	TO	D'	Y					Paç	је <u>1</u>	0	f	****	
	Laboratory Since 1878											je je			Chair							and the second	
(510)486	CA 94710 -0900 Phone	£	C&T L	.0Gl	N #	3	57	72	24			A Chi		Ť	ľ	Inal	lytic		Req	ues	t	T	
	-0532 Fax		Samp					_	J	f s	undie												•
Project N			Samp	ler:	M	iska	me	Env	ir en	mai	12	有											
Rpt Leve	lame: Rosample Com el: 11	-ptionce (2/28/19	Report	nt To any	: <u>p</u> : p/	nge	1 Z	SP Lay	hone	rati	Shit	at the											
Turnarou		24255	<u>Telep</u> Email	hone) : ((125	15	22	- 78	34		1) CP											
		Sampli	<u></u>	Γ	atrix	Ť		C	hem serv			(total											
Lab No.	Sample ID.	Date	Time	Water	Other	jo#	Container	Ŧ	NONH	NaOH	None	cycline saline											
	UP J-001	2/28/19	08:05	X			-				乙	X		1	1-			+	1	1		1	
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3 of 7

				•
SAMPLE R	SCEIPT CHECKLIST			
Section 1:	Login# 307726 Client:		ENT	
	Date Received: 2 21 11 Project:		45179 8-1 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	IN TAK AS
Section 2:	Samples received in a cooler? [] Yes, how many? [2] No (skip Section 3 below)			
	Sample Temp (*C): 4.0 using IR Gun # EA, or D B			
	El Samples received on ice directly from the field. Cooling process had begun			
If in cooler	Date Opened 2 28 /14 By (print) / (sign)			
	Shipping info (if applicable)		_	•
	Are custody seals present? Ino, or I Yes. If yes, where? I on cooler, I on samples,] on pa	clage	
	Dete: How many D Signature, D Initials, D None			
	Were custody seels intact upon arrival? Yes NO NA			
Section 3:	Important : Notify PM if temperature exc	wis 6°C	or or he	from
	· · ·			,
	poler: (if other, describe) ble Wrap, 🗇 Foam blocks, 🗇 Bags, 🗇 None, 🗇 Cloth material, 🗇 Cardboard, 🗇 Styrofoam, 🛱	l Donar ti	numite	
	received on ice directly from the field. Cooling process had beguin used : [] Wet, [] Blue/Gel, [] None Temperature blank(s) included? [TVee ("I No	
	re measured using [] Thermometer ID:, or iR Gun # [] A [] B		and a year	
-		17:		
Section 4:		YES	NO	N/A
	dy papers dry, filled out property, and the project identifiable			
	od 5035 sampling containers present?		· - · ·	
	what time were they transferred to freezer?			
	es arrive unbroken/unopened?	\langle		
	ny missing / extra samples?		(-	
Are sample	s in the appropriate containers for indicated tests?			
Are sample	labels present, in good condition and complete?			
	ntainer count metch the COC?			
	ple labels agree with custody papers?			
	nt amount of sample sent for tests requested?			
	nge the hold time in LINIS for unpreserved VQAs?			
	nge the hold time in LIMS for preserved terracores?			
	> 6mm absent in VOA samples?			
	nt contacted concerning this sample delivery?			
	who was called?Date;	Millio		N/A
Section 5:	La company de	YES	NO ·	NA
	ples appropriately preserved? (If N/A, skip the rest of section 5) ck preservatives for all bottles for each sample?			
	ument your preservative check?			
-	p lot#, pH strip lot#, pH strip lot#, pH strip lot#			
Preservativ				
LI H2SO4 I	· • ·			
HNOS K				
	the added to samples on/at			
	added to samples on/at			
Section 6:				
Section 6:	di added to samples on/at			
Section 6:				
Section 6:				
Section 6:	s/Comments:			
Section 6: Explanation	s/Comments:			

Rev.15, 02/02/2038



307726-001

Detections Summary for 307726

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample Compliance (2/28/19)

Client Sample ID : UP I-001

Laboratory Sample ID :

No Detections



	Tota	al Cyanide	
Lab #:	307726	Location: Re	sample Compliance (2/28/19)
Client:	Pacific Gas & Electric	Prep: ME	THOD
Project#:	STANDARD	Analysis: SM	4500CN-C,E
Analyte:	Cyanide	Batch#:	268177
Field ID:	UP I-001	Sampled:	02/28/19
Matrix:	Water	Received:	02/28/19
Units:	mg/L	Analyzed:	02/28/19
Diln Fac:	1.000		

Type	Lab ID	Result	RL	Prepared	
SAMPLE	307726-001	ND	0.010	02/28/19	
BLANK	QC966472	ND	0.010	02/27/19	

ND= Not Detected RL= Reporting Limit Page 1 of 1



Batch QC Report

Total Cyanide									
Lab #:	307726	Location:	Resample Compliance (2/28/19)						
Client:	Pacific Gas & Electric	Prep:	METHOD						
Project#:	STANDARD	Analysis:	SM4500CN-C,E						
Analyte:	Cyanide	Batch#:	268177						
Field ID:	ZZZZZZZZZZ	Sampled:	02/27/19						
MSS Lab ID:	307710-001	Received:	02/27/19						
Matrix:	Water	Prepared:	02/27/19						
Units:	mg/L	Analyzed:	02/28/19						
Diln Fac:	1.000								
DIIII Fac.	1.000								

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC966473		0.2000	0.1816	91	75-120		
MS	QC966474	<0.01000	0.2000	0.1003	50 *	56-120		
MSD	QC966475		0.2000	0.1001	50 *	56-120	0	25

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1



MAR 1.3 2019

Mailing Address: Pacific Gas & Electric Company Gateway Generating Station 3225 Wilbur Ave. Antioch, CA 94509 (925) 522-7801

March 13, 2019

Michael Auer Delta Diablo (DD) 2500 Pittsburg-Antioch Hwy. Antioch, CA 94509-1373

Reference: Pacific Gas and Electric Company - Gateway Generating Station (GGS) DDSD Industrial Wastewater Discharge Permit Permit Number: 0208841-C

Subject: Request: Exemption from 126 Priority Pollutants Applicability

Dear Mr. Auer,

With reference to 40 CFR 403.12(e)(2), 40 CFR 423.17(d)(2) and Section D.3 of the Industrial Wastewater Discharge Permit (0208841-C), the PG&E Gateway Generating Station (GGS) respectfully requests to forego the monitoring requirement on the Categorical Waste Stream based on the following premises:

- 1. We understand that the monitoring for the categorical 126 criteria pollutants resulted from GGS operation of the Wet Surface Air Condenser (WSAC).
- 2. The attached certification from Nalco, indicates that the use of indicated products at the WSAC and elsewhere in the plant will not contribute detectable concentrations of Priority Pollutants listed in 40 CFR 423 to the effluent by the criteria specified in 40 CFR 136, and will not contribute listed priority pollutants to the discharge stream at concentrations greater than 10 parts per billion (ppb).
- 3. The attached Closure Report on the cyanide event of September 27, 2018 clearly indicate the "false positive" impact of sodium hydroxide preservation of samples on the result of cyanide analysis.
- 4. The attached Closure Report demonstrates the completion of two consecutive clean results (<10 ppb) on cyanide resampling

If you have any questions about this request, please feel free to contact Angel Espiritu at 925-522-7838, 510-861-1597, or at abe4@pge.com. Thank you.

Sincerely,

Tim Wisdom

Tim Wisdom Senior Plant Manager

Attachment: a/s



March 07, 2019

Angel B. Espiritu Pacific Gas & Electric – Gateway Generating Station Sr. Environmental Consultant-Environmental Compliance Manager

To Whom It May Concern

With respect to your request for information regarding the following list of products and whether these products contain chemicals present on the Priority Pollutants List Appendix A (Total Toxic Organics), and Appendix B (40 CFR part 423-126 Priority Pollutants).

- NALCO® BT-3400
- 3D TRASAR™ 3DT447
- NALCO® TRAC107

- STABREX™ ST70
- NALCO® 5711

These products do not contain materially identified components as contained in 40 CFR 423 (Appendix A to Part 423-126 Priority Pollutants) either as a formulation component or as a known contaminant. Use of these products will not contribute detectable concentrations of Priority Pollutants listed in 40 CFR 423 to the effluent by the criteria specified in 40 CFR 136, and will not contribute listed priority pollutants to the discharge at concentrations greater than 10 ppb

This information is provided in good faith and is believed accurate as of the date of this letter based on a review of current composition data and information supplied by the vendors. No warranty is expressed or implied. Liability is expressly disclaimed.



Please contact your local Sales Representative if you have additional questions regarding Nalco Water products.

Sincerely,

Nicolás Martin de Eugenio

Product Stewardship North America

PRODUCT, SOLUTIONS & INNOVATION MARKETING NALCO Water | An Ecolab Company



Mailing Address: Pacific Gas & Electric Company Gateway Generating Station 3225 Wilbur Ave. Antioch, CA 94509 (925) 522-7801

Mar 8, 2019

Michael Auer Delta Diablo District 2500 Pittsburg-Antioch Hwy. Antioch, CA 94509-1373

Reference: Pacific Gas and Electric Company - Gateway Generating Station (GGS) Delta Diablo Industrial Wastewater Discharge Permit Number: 0208841-C

Subject: <u>Closure Report on Cyanide Event of September 2018</u>

Dear Mr. Auer,

This report submits the timeline of activities that GGS implemented as a result of the cyanide exceedance event during the 9/19/2018 semi-annual monitoring of the categorical waste stream. The activities include investigation of the plant's operation processes to identify potential sources of cyanide contamination, clean up of process/storage waste water tanks to remove accumulated debris and sediment, and resampling/analysis of waste streams. This report also submits the results of two consecutive resamplings with non-detectable (<10 parts per billion, ppb) cyanide concentrations.

<u>9/19/2018</u>: The semi-annual monitoring of the categorical waste stream was conducted.

<u>9/27/2018</u>: The analytical result on semi-annual monitoring was received. The cyanide limit (of 0.01 mg/L, or 10 ppb) was exceeded (with 0.047 mg/L, or 47 ppb)

<u>9/27/2018</u>: Notification of exceedance was submitted to the District. GGS suspected a "false positive" on the result. (See Attachment 1 – Notification to Delta Diablo on Cyanide Exceedance)

<u>10/30/2018</u>: The <u>first resampling</u> for cyanide was conducted. Following the recommendations from the District, the samples were collected not from the compliance (sampling) point but from the underground tank (Tiger Pit), which is prior to the compliance point in the plant's process flow. Split samples were collected and sent for analysis to three separate ELAP certified laboratories. All samples were pre-treated with sodium thiosulfate. Each laboratory received two split samples. One sample was preserved with sodium hydroxide the other was not. This approach aims to address the concern on "false positive" results. The samples were analyzed as immediately as feasible to prevent the possible degradation of the analyte over time on the un-preserved samples.

Of the three laboratories, two reported detection levels on cyanide (> 10 ppb) in the preserved samples, but only one in the un-preserved samples. Also, the concentration of cyanide in this un-preserved sample was lower (slightly above the detection level) than in the preserved sample (14 ppb to 21 ppb). The results on this first resampling clearly indicate the "false positive" impact of sodium hydroxide preservation on the cyanide analysis result. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 3 - Analytical Report on Resampling #1.)

<u>11/07/2018</u>: The <u>second resampling</u> on cyanide was collected and analyzed. This is to validate the findings of the first resampling. All results from three laboratories were non-detectable (ND <10 ppb) for both preserved and un-preserved samples. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 4 – Analytical Report on Resampling #2.)

<u>11/24/2018</u>: The <u>third resampling</u> on cyanide was collected and analyzed. The results indicated nondetectable (<10 ppb) concentration in un-preserved sample, and 12 ppb in the preserved sample. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 5 – Analytical Report on Resampling #3.)

<u>12/04/2018</u>: The <u>fourth resampling</u> on cyanide was collected and analyzed. The results in both unpreserved and preserved samples were above detection levels, 32 ppb and 30 ppb, respectively. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 6 – Analytical Report on Resampling #4.)

<u>12/11/2018</u>: The <u>fifth resampling</u> on cyanide was collected and analyzed. The results in both unpreserved and preserved samples were above detection levels, 18 ppb and 13 ppb, respectively. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 7 – Analytical Report on Resampling #5.)

<u>12/14/2018</u>: The <u>sixth resampling</u> on cyanide was collected and analyzed. The results indicated 20 ppb concentration in un-preserved sample, and ND in the preserved sample. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 8 – Analytical Report on Resampling #6.)

<u>12/18/2018</u>: The <u>seventh resampling</u> on cyanide was collected and analyzed. The results in both unpreserved and preserved samples were above detection levels, 28 ppb. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 9 – Analytical Report on Resampling #7.)

 $\frac{1/10/2019}{1}$: The <u>eighth resampling</u> on cyanide was collected and analyzed. Following the guidance by the District, two sets of samples were collected: one collected by the laboratory sampler, the other by GGS laboratory technician. Both samplers follow the standard sampling procedure. The samples were not preserved. The results in both samples were above detection levels, 51 ppb and 55 ppb, respectively. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 10 – Analytical Report on Resampling #8.)

<u>1/16/2019</u>: The <u>ninth resampling</u> on cyanide was collected and analyzed. On this resampling, GGS investigated the plant's operational processes. This approach aims to identify the potential source/s of cyanide contamination in the wastewater streams prior to and including the Tiger Pit. The source water supply form the City was also sampled. Of the twelve samples, all had non-detectable (ND<10 ppb) concentrations excepting the sample from the Hammond Tank with 26 ppb. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 11 – Analytical Report on Resampling #9.)

<u>1/29/2019</u>: The Hammond Tank was emptied and cleaned-up. GGS suspected that the algal growth inside the tank might have contributed to the above detection level concentration in ninth resampling.

<u>2/7/2019</u>: The <u>tenth resampling</u> on cyanide was collected and analyzed. Three samples were collected: from the Tiger Pit, Hammond Tank, and Source Water. Of these three samples only that which was

collected from the Tiger Pit had detectable concentration. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 12 – Analytical Report on Resampling #10.)

<u>2/11/2019</u>: The <u>eleventh resampling</u> on cyanide was collected and analyzed. Two sets of split samples were collected from the Tiger Pit and RO Reject, and sent to two separate ELAP certified laboratories. The results were closely consistent between the two laboratories. Only the samples that were collected from the Tiger Pit had detectable concentrations. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 13 – Analytical Report on Resampling #11.)

2/20/2019: The Tiger Pit was emptied and cleaned-up.

2/21/2019: The Waste Water Tank was emptied and cleaned-up.

<u>2/25/2019</u>: The <u>twelfth resampling</u> on cyanide was collected and analyzed. Four samples were collected: from the Tiger Pit, Hammond Tank, RO Reject, and Source Water. The results indicated non-detectable concentration (ND<10 ppb) in all samples. (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 14 – Analytical Report on Resampling #12.)

<u>2/27/2019</u>: The <u>thirteenth resampling</u> on cyanide was collected and analyzed. The analytical report on the sample collected from the compliance point indicated non-detectable concentration (ND<10 ppb). (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 15 – Analytical Report on Resampling #13.)

<u>2/28/2019</u>: The <u>fourteenth resampling</u> on cyanide was collected and analyzed. The analytical report on the sample collected from the compliance point indicated non-detectable concentration (ND<10 ppb). (See Attachment 2 – Summary of Cyanide Resampling, and Attachment 16 – Analytical Report on Resampling #14.)

Based on the result of the thirteenth and fourteenth resamplings, GGS believes that the cyanide concentrations of the waste water streams in the system are now below the permit limit.

If you have any questions about this report, please feel free to contact Angel Espiritu at 925-522-7838, 510-861-1597, or at <u>abe4@pge.com</u>. Thank you.

Sincerely,

Tim Wisdom Senior Plant Manager

Attachment: a/s

Attachment 1

Notification to Delta Diablo on Cyanide Exceedance (09/27/2018)

Espiritu, Angel

From:	Espiritu, Angel
Sent:	Thursday, September 27, 2018 5:40 PM
То:	'Auer, Michael'
Cc:	Wisdom, Tim; Price, Charles; Hammond, David
Subject:	Permit Number:0208841-C PG&E Gateway Generating Station
Attachments:	1809780.pdf

Importance: High

Hi Mike,

This is to comply Section F.8 of the Industrial Discharge Permit. Attached is a copy of analytical results on the semiannual monitoring of the categorical flow. The results on total cyanide is 47 ppb. The limit is 10 ppb. Please let me know if you have questions. I will be off of work tomorrow. Thank you.

Angel B. Espiritu Pacific Gas & Electric – Gateway Generating Station Sr. Environmental Consultant-Environmental Compliance Manager 3225 Wilbur Avenue, Antioch, CA 94509 925-522-7838, 510-861-1597 (Cell) <u>ABE4@pge.com</u>

From: Yen Cao <yen.cao@mccampbell.com> On Behalf Of main@mccampbell.com
Sent: Thursday, September 27, 2018 4:20 PM
To: Espiritu, Angel <ABE4@pge.com>
Cc: Hankins, Adam <A1HE@pge.com>; Laurin, Jeremy <J5Ld@pge.com>; Wisdom, Tim <T1WY@pge.com>
Subject: PARTIAL Analytical Report for Project: Semi-Annually Sampling (September 2018) [MAI WO#: 1809780]

*****CAUTION: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.****

Angel,

Attached is your PARTIAL analytical report. The final report and invoice will follow upon completion of the Dioxins and subcontracted results.

Best regards,

Nen Cao

McCampbell Analytical, Inc. Ph: 925-252-9262 Fx: 925-252-9269 www.mccampbell.com

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Glossary of Terms & Qualifier Definitions

Client:	PG&E Gateway Generating Station
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- **Project:** Semi-Annually Sampling (September 2018)
- **WorkOrder:** 1809780

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Client:	PG&E Gateway Generating Station			
Date Received:	9/19/18 13:45			
Date Prepared:	9/19/18			
Project:	Semi-Annually Sampling (September 2018)			

WorkOrder:	1809780
Extraction Method:	E608/SW3620B
Analytical Method:	E608
Unit:	μg/L

Organochlorine Pesticides + PCBs w/ Florisil Clean-up

Client ID	Lab ID	Matrix		Date Co	ollected	Instrument	Batch ID
I-001	1809780-001E	Water		09/19/2018 11:10 GC22 09211811.D		GC22 09211811.D	165139
Analytes	Result		MDL	<u>RL</u>	<u>DF</u>		Date Analyzed
Aldrin	ND		0.00028	0.0010	1		09/21/2018 15:03
a-BHC	ND		0.00031	0.0010	1		09/21/2018 15:03
b-BHC	ND		0.00069	0.0010	1		09/21/2018 15:03
d-BHC	ND		0.00014	0.0010	1		09/21/2018 15:03
g-BHC	ND		0.00045	0.0010	1		09/21/2018 15:03
Chlordane (Technical)	ND		0.0023	0.020	1		09/21/2018 15:03
a-Chlordane	ND		0.00085	0.0010	1		09/21/2018 15:03
g-Chlordane	ND		0.00015	0.0010	1		09/21/2018 15:03
p,p-DDD	ND		0.00011	0.0010	1		09/21/2018 15:03
p,p-DDE	ND		0.00018	0.0010	1		09/21/2018 15:03
p,p-DDT	ND		0.00017	0.0010	1		09/21/2018 15:03
Dieldrin	ND		0.00014	0.0010	1		09/21/2018 15:03
Endosulfan I	ND		0.00011	0.0010	1		09/21/2018 15:03
Endosulfan II	ND		0.00046	0.0010	1		09/21/2018 15:03
Endosulfan sulfate	ND		0.00033	0.0020	1		09/21/2018 15:03
Endrin	ND		0.00018	0.0010	1		09/21/2018 15:03
Endrin aldehyde	ND		0.00053	0.0010	1		09/21/2018 15:03
Endrin ketone	ND		0.00026	0.0010	1		09/21/2018 15:03
Heptachlor	ND		0.00041	0.0010	1		09/21/2018 15:03
Heptachlor epoxide	ND		0.00025	0.0010	1		09/21/2018 15:03
Methoxychlor	ND		0.00012	0.0010	1		09/21/2018 15:03
Toxaphene	ND		0.0020	0.020	1		09/21/2018 15:03
Aroclor1016	ND		0.0019	0.020	1		09/21/2018 15:03
Aroclor1221	ND		0.0024	0.020	1		09/21/2018 15:03
Aroclor1232	ND		0.0038	0.020	1		09/21/2018 15:03
Aroclor1242	ND		0.0028	0.020	1		09/21/2018 15:03
Aroclor1248	ND		0.0018	0.020	1		09/21/2018 15:03
Aroclor1254	ND		0.0015	0.020	1		09/21/2018 15:03
Aroclor1260	ND		0.0028	0.020	1		09/21/2018 15:03
PCBs, total	ND		0.020	0.020	1		09/21/2018 15:03
Surrogates	<u>REC (%)</u>			<u>Limits</u>			
Decachlorobiphenyl	97			14-168			09/21/2018 15:03
Analyst(s): CK							



Client:	PG&E Gateway Generating Station		
Date Received:	9/19/18 13:45		
Date Prepared:	9/20/18		
Project:	Semi-Annually Sampling (September 2018)		

WorkOrder:	1809780
Extraction Method:	E624
Analytical Method:	E624
Unit:	µg/L

Acrolein, Acrylonitrile, & 2-Chloroethyl Vinyl Ether

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
I-001	1809780-001C	Water	09/19/2	018 11:10 GC28 09201815	.D 165341
Analytes	Result		<u>RL</u>	DF	Date Analyzed
Acrolein (Propenal)	ND		5.0	1	09/20/2018 19:05
Acrylonitrile	ND		2.0	1	09/20/2018 19:05
2-Chloroethyl Vinyl Ether	ND		1.0	1	09/20/2018 19:05
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	115		78-141		09/20/2018 19:05
<u>Analyst(s):</u> JEM					



Client:	PG&E Gateway Generating Station
Date Received:	9/19/18 13:45
Date Prepared:	9/24/18
Project:	Semi-Annually Sampling (September 2018)
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WorkOrder:	1809780
Extraction Method:	E624
Analytical Method:	E624
Unit:	µg/L

Volatile Organics					
Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
I-001	1809780-001B	Water	09/19/20	018 11:10 GC10 09241810.D	165451
Analytes	Result		<u>RL</u>	DF	Date Analyzed
Benzene	ND		0.50	1	09/24/2018 13:31
Bromodichloromethane	1.5		0.50	1	09/24/2018 13:31
Bromoform	ND		0.50	1	09/24/2018 13:31
Bromomethane	ND		0.50	1	09/24/2018 13:31
Carbon tetrachloride	ND		0.50	1	09/24/2018 13:31
Chlorobenzene	ND		0.50	1	09/24/2018 13:31
Chloroethane	ND		0.50	1	09/24/2018 13:31
Chloroform	1.2		0.50	1	09/24/2018 13:31
Chloromethane	ND		0.50	1	09/24/2018 13:31
Dibromochloromethane	ND		0.50	1	09/24/2018 13:31
1,2-Dibromoethane (EDB)	ND		0.50	1	09/24/2018 13:31
1,2-Dichlorobenzene	ND		0.50	1	09/24/2018 13:31
1,3-Dichlorobenzene	ND		0.50	1	09/24/2018 13:31
1,4-Dichlorobenzene	ND		0.50	1	09/24/2018 13:31
1,1-Dichloroethane	ND		0.50	1	09/24/2018 13:31
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	09/24/2018 13:31
1,1-Dichloroethene	ND		0.50	1	09/24/2018 13:31
trans-1,2-Dichloroethene	ND		0.50	1	09/24/2018 13:31
1,2-Dichloropropane	ND		0.50	1	09/24/2018 13:31
cis-1,3-Dichloropropene	ND		0.50	1	09/24/2018 13:31
trans-1,3-Dichloropropene	ND		0.50	1	09/24/2018 13:31
Ethylbenzene	ND		0.50	1	09/24/2018 13:31
Methyl-t-butyl ether (MTBE)	ND		0.50	1	09/24/2018 13:31
Methylene chloride	ND		2.0	1	09/24/2018 13:31
1,1,2,2-Tetrachloroethane	ND		0.50	1	09/24/2018 13:31
Tetrachloroethene	ND		0.50	1	09/24/2018 13:31
Toluene	ND		0.50	1	09/24/2018 13:31
1.2.4-Trichlorobenzene	ND		0.50	1	09/24/2018 13:31
1,1,1-Trichloroethane	ND		0.50	1	09/24/2018 13:31
1,1,2-Trichloroethane	ND		0.50	1	09/24/2018 13:31
Trichloroethene	ND		0.50	1	09/24/2018 13:31
Trichlorofluoromethane	ND		0.50	1	09/24/2018 13:31
Vinyl chloride	ND		0.50	1	09/24/2018 13:31
m,p-Xylene	ND		0.50	1	09/24/2018 13:31
o-Xylene	ND		0.25	1	09/24/2018 13:31
Xylenes, Total	ND		0.25	1	09/24/2018 13:31



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Extraction Method:	E624
Analytical Method:	E624
Unit:	µg/L

Volatile Organics					
Client ID	Lab ID Matrix		Date Collected Instrument		Batch ID
I-001	1809780-001B	Water	09/19/2018	311:10 GC10 09241810.D	165451
Analytes	Result		<u>RL</u>	DE	Date Analyzed
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	104		78-141		09/24/2018 13:31
Toluene-d8	93		78-129		09/24/2018 13:31
4-BFB	86		61-140		09/24/2018 13:31
<u>Analyst(s):</u> TK					



PG&E Gateway Generating Station
9/19/18 13:45
9/19/18
Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	E625
Analytical Method:	E625
Unit:	µg/L

Semi-Volatile Organics

Client ID	Lab ID	ID Matrix Date Collected Instrument		Instrument	Batch ID	
I-001	1809780-001D	Water	09/19/20)18 11:10	GC17 09261824.D	165166
Analytes	<u>Result</u>		<u>RL</u>	DF		Date Analyzed
Acenaphthene	ND		0.19	20		09/26/2018 20:45
Acenaphthylene	ND		0.19	20		09/26/2018 20:45
Anthracene	ND		0.19	20		09/26/2018 20:45
Benzidine	ND		96	20		09/26/2018 20:45
Benzo (a) anthracene	ND		0.38	20		09/26/2018 20:45
Benzo (a) pyrene	ND		0.19	20		09/26/2018 20:45
Benzo (b) fluoranthene	ND		0.096	20		09/26/2018 20:45
Benzo (g,h,i) perylene	ND		0.38	20		09/26/2018 20:45
Benzo (k) fluoranthene	ND		0.19	20		09/26/2018 20:45
Benzyl Alcohol	ND		96	20		09/26/2018 20:45
Bis (2-chloroethoxy) Methane	ND		19	20		09/26/2018 20:45
Bis (2-chloroethyl) Ether	ND		0.096	20		09/26/2018 20:45
Bis (2-chloroisopropyl) Ether	ND		0.19	20		09/26/2018 20:45
Bis (2-ethylhexyl) Adipate	ND		57	20		09/26/2018 20:45
Bis (2-ethylhexyl) Phthalate	6.9		0.76	20		09/26/2018 20:45
4-Bromophenyl Phenyl Ether	ND		19	20		09/26/2018 20:45
Butylbenzyl Phthalate	ND		38	20		09/26/2018 20:45
4-Chloroaniline	ND		0.38	20		09/26/2018 20:45
4-Chloro-3-methylphenol	ND		19	20		09/26/2018 20:45
2-Chloronaphthalene	ND		19	20		09/26/2018 20:45
2-Chlorophenol	ND		0.38	20		09/26/2018 20:45
4-Chlorophenyl Phenyl Ether	ND		19	20		09/26/2018 20:45
Chrysene	ND		0.19	20		09/26/2018 20:45
Dibenzo (a,h) anthracene	ND		0.19	20		09/26/2018 20:45
Dibenzofuran	ND		19	20		09/26/2018 20:45
Di-n-butyl Phthalate	ND		0.38	20		09/26/2018 20:45
1,2-Dichlorobenzene	ND		38	20		09/26/2018 20:45
1,3-Dichlorobenzene	ND		38	20		09/26/2018 20:45
1,4-Dichlorobenzene	ND		38	20		09/26/2018 20:45
3,3-Dichlorobenzidine	ND		0.38	20		09/26/2018 20:45
2,4-Dichlorophenol	ND		0.19	20		09/26/2018 20:45
Diethyl Phthalate	ND		0.38	20		09/26/2018 20:45
2,4-Dimethylphenol	ND		19	20		09/26/2018 20:45
Dimethyl Phthalate	ND		0.38	20		09/26/2018 20:45
4,6-Dinitro-2-methylphenol	ND		96	20		09/26/2018 20:45
2,4-Dinitrophenol	ND		9.6	20		09/26/2018 20:45
2,4-Dinitrotoluene	ND		0.48	20		09/26/2018 20:45



PG&E Gateway Generating Station
9/19/18 13:45
9/19/18
Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	E625
Analytical Method:	E625
Unit:	µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
I-001	1809780-001D	Water	09/19/20	018 11:10 GC17 09261824.D	165166
Analytes	Result		<u>RL</u>	DF	Date Analyzed
2,6-Dinitrotoluene	ND		0.19	20	09/26/2018 20:45
Di-n-octyl Phthalate	ND		2.4	20	09/26/2018 20:45
1,2-Diphenylhydrazine	ND		19	20	09/26/2018 20:45
Fluoranthene	ND		0.19	20	09/26/2018 20:45
Fluorene	ND		0.19	20	09/26/2018 20:45
Hexachlorobenzene	ND		0.096	20	09/26/2018 20:45
Hexachlorobutadiene	ND		0.19	20	09/26/2018 20:45
Hexachlorocyclopentadiene	ND		96	20	09/26/2018 20:45
Hexachloroethane	ND		0.19	20	09/26/2018 20:45
Indeno (1,2,3-cd) pyrene	ND		0.38	20	09/26/2018 20:45
Isophorone	ND		19	20	09/26/2018 20:45
2-Methylnaphthalene	ND		0.19	20	09/26/2018 20:45
2-Methylphenol (o-Cresol)	ND		19	20	09/26/2018 20:45
3 & 4-Methylphenol (m,p-Cresol)	ND		19	20	09/26/2018 20:45
Naphthalene	ND		0.19	20	09/26/2018 20:45
2-Nitroaniline	ND		96	20	09/26/2018 20:45
3-Nitroaniline	ND		96	20	09/26/2018 20:45
4-Nitroaniline	ND		96	20	09/26/2018 20:45
Nitrobenzene	ND		19	20	09/26/2018 20:45
2-Nitrophenol	ND		96	20	09/26/2018 20:45
4-Nitrophenol	ND		96	20	09/26/2018 20:45
N-Nitrosodiphenylamine	ND		19	20	09/26/2018 20:45
N-Nitrosodi-n-propylamine	ND		19	20	09/26/2018 20:45
Pentachlorophenol	ND		4.8	20	09/26/2018 20:45
Phenanthrene	ND		0.38	20	09/26/2018 20:45
Phenol	0.44		0.38	20	09/26/2018 20:45
Pyrene	ND		0.38	20	09/26/2018 20:45
Pyridine	ND		19	20	09/26/2018 20:45
1,2,4-Trichlorobenzene	ND		19	20	09/26/2018 20:45
2,4,5-Trichlorophenol	ND		0.96	20	09/26/2018 20:45
2,4,6-Trichlorophenol	ND		0.96	20	09/26/2018 20:45
N-Nitrosodimethylamine	ND		96	20	09/26/2018 20:45



Client:	PG&E Gateway Generating Station
Date Received:	9/19/18 13:45
Date Prepared:	9/19/18
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	E625
Analytical Method:	E625
Unit:	µg/L

Semi-Volatile Organics

Client ID	Lab ID Matri	x Date Collected Instrument	Batch ID
I-001	1809780-001D Water	09/19/2018 11:10 GC17 09261824.D	165166
Analytes	Result	<u>RL</u> <u>DF</u>	Date Analyzed
Surrogates	<u>REC (%)</u>	Limits	
2-Fluorophenol	38	23-101	09/26/2018 20:45
Phenol-d5	40	27-116	09/26/2018 20:45
Nitrobenzene-d5	44	29-116	09/26/2018 20:45
2-Fluorobiphenyl	61	29-112	09/26/2018 20:45
2,4,6-Tribromophenol	70	34-125	09/26/2018 20:45
Terphenyl-d14	88	23-136	09/26/2018 20:45



Client:	PG&E Gateway Generating Station
Date Received:	9/19/18 13:45
Date Prepared:	9/24/18
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	SM4500-CN ⁻ E
Analytical Method:	SM4500-CN ⁻ CE
Unit:	μg/L

Cyanide, Total							
Client ID	Lab ID	Matrix	Date (Collected	Instrument		Batch ID
I-001	1809780-001A	Water	09/19/2	018 11:10	WC_SKALAR ()92418A1_25	165431
Analytes	Result		<u>RL</u>	DF		Date	Analyzed
Total Cyanide	47		1.0	1		09/24	/2018 12:48

Analyst(s): BM



Client:	PG&E Gateway Generating Station
Date Received:	9/19/18 13:45
Date Prepared:	9/19/18
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	E245.2
Analytical Method:	E245.2
Unit:	µg/L

Mercury by Cold Vapor Atomic Absorption

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
I-001	1809780-001F	Water	09/19/20	18 11:10 AA1 _16	165200
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
Mercury	ND		0.20	1	09/20/2018 11:20

Analyst(s): JC



Client:	PG&E Gateway Generating Station
Date Received:	9/19/18 13:45
Date Prepared:	9/19/18
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
Extraction Method:	E200.8
Analytical Method:	E200.8
Unit:	µg/L

Priority Pollutant Metals

Client ID	Lab ID	Matrix	Date C	ollected	Instrument	Batch ID
I-001	1809780-001F	Water	09/19/20)18 11:10	ICP-MS1 124SMPL.D	165141
Analytes	<u>Result</u>		<u>RL</u>	DF		Date Analyzed
Antimony	ND		0.50	1		09/21/2018 02:46
Arsenic	0.91		0.50	1		09/21/2018 02:46
Beryllium	ND		0.50	1		09/21/2018 02:46
Cadmium	ND		0.25	1		09/21/2018 02:46
Chromium	ND		0.50	1		09/21/2018 02:46
Copper	4.3		2.0	1		09/21/2018 02:46
Lead	ND		0.50	1		09/21/2018 02:46
Mercury	ND		0.050	1		09/21/2018 02:46
Nickel	1.5		0.50	1		09/21/2018 02:46
Selenium	ND		0.50	1		09/21/2018 02:46
Silver	ND		0.19	1		09/21/2018 02:46
Thallium	ND		0.50	1		09/21/2018 02:46
Zinc	61		15	1		09/21/2018 02:46
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	101		70-130			09/21/2018 02:46
<u>Analyst(s):</u> ND						

PG&E Gateway Generating Station
9/18/18
9/18/18 - 9/19/18
GC22
Water
Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
BatchID:	165139
Extraction Method:	E608/SW3620B
Analytical Method:	E608
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165139

QC Summary Report for E608 w/ Florisil Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.00028	0.0010	-	-	-
a-BHC	ND	0.00031	0.0010	-	-	-
b-BHC	ND	0.00069	0.0010	-	-	-
d-BHC	ND	0.00014	0.0010	-	-	-
g-BHC	ND	0.00045	0.0010	-	-	-
Chlordane (Technical)	ND	0.0023	0.020	-	-	-
a-Chlordane	ND	0.00085	0.0010	-	-	-
g-Chlordane	ND	0.00015	0.0010	-	-	-
p,p-DDD	ND	0.00011	0.0010	-	-	-
p,p-DDE	ND	0.00018	0.0010	-	-	-
p,p-DDT	ND	0.00017	0.0010	-	-	-
Dieldrin	ND	0.00014	0.0010	-	-	-
Endosulfan I	ND	0.00011	0.0010	-	-	-
Endosulfan II	ND	0.00046	0.0010	-	-	-
Endosulfan sulfate	ND	0.00033	0.0020	-	-	-
Endrin	ND	0.00018	0.0010	-	-	-
Endrin aldehyde	ND	0.00053	0.0010	-	-	-
Endrin ketone	ND	0.00026	0.0010	-	-	-
Heptachlor	ND	0.00041	0.0010	-	-	-
Heptachlor epoxide	ND	0.00025	0.0010	-	-	-
Methoxychlor	ND	0.00012	0.0010	-	-	-
Toxaphene	ND	0.0020	0.020	-	-	-
Aroclor1016	ND	0.0019	0.020	-	-	-
Aroclor1221	ND	0.0024	0.020	-	-	-
Aroclor1232	ND	0.0038	0.020	-	-	-
Aroclor1242	ND	0.0028	0.020	-	-	-
Aroclor1248	ND	0.0018	0.020	-	-	-
Aroclor1254	ND	0.0015	0.020	-	-	-
Aroclor1260	ND	0.0028	0.020	-	-	-
PCBs, total	ND	0.020	0.020	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0453			0.050	91	35-113

Client:	PG&E Gateway Generating Station
Date Prepared:	9/18/18
Date Analyzed:	9/18/18 - 9/19/18
Instrument:	GC22
Matrix:	Water
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
BatchID:	165139
Extraction Method:	E608/SW3620B
Analytical Method:	E608
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165139

QC Summary Report for E608 w/ Florisil Clean-up

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0349	0.0338	0.050	70	68	50-103	3.16	20
a-BHC	0.0375	0.0364	0.050	75	73	63-131	2.97	20
b-BHC	0.0327	0.0314	0.050	65	63	56-112	4.24	20
d-BHC	0.0406	0.0400	0.050	81	80	63-132	1.36	20
g-BHC	0.0363	0.0353	0.050	73	71	61-135	2.66	20
a-Chlordane	0.0343	0.0333	0.050	69	67	54-113	2.91	20
g-Chlordane	0.0359	0.0347	0.050	72	69	55-117	3.31	20
p,p-DDD	0.0340	0.0336	0.050	68	67	56-135	1.22	20
p,p-DDE	0.0365	0.0360	0.050	73	72	56-131	1.43	20
p,p-DDT	0.0344	0.0341	0.050	69	68	47-153	0.865	20
Dieldrin	0.0405	0.0396	0.050	81	79	67-152	2.31	20
Endosulfan I	0.0355	0.0344	0.050	71	69	56-137	3.29	20
Endosulfan II	0.0346	0.0338	0.050	69	68	50-113	2.61	20
Endosulfan sulfate	0.0344	0.0336	0.050	69	67	57-121	2.18	20
Endrin	0.0386	0.0377	0.050	77	75	60-150	2.47	20
Endrin aldehyde	0.0308	0.0304	0.050	62	61	47-121	1.07	20
Endrin ketone	0.0334	0.0326	0.050	67	65	48-130	2.44	20
Heptachlor	0.0350	0.0337	0.050	70	67	46-133	3.60	20
Heptachlor epoxide	0.0336	0.0324	0.050	67	65	54-105	3.61	20
Methoxychlor	0.0398	0.0389	0.050	80	78	54-135	2.20	20
Aroclor1016	0.132	0.129	0.15	88	86	54-103	2.44	20
Aroclor1260	0.124	0.125	0.15	83	83	42-121	0	20
Surrogate Recovery								
Decachlorobiphenyl	0.0354	0.0346	0.050	71	69	35-113	2.23	20

Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/20/18	BatchID:	165341
Date Analyzed:	9/20/18	Extraction Method:	E624
Instrument:	GC28	Analytical Method:	E624
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165341

Analyte	MB Result			RL	SPK Val		B SS REC		IB SS imits
Acrolein (Propenal)	ND			5.0	-	-		-	
Acrylonitrile	ND			2.0	-	-		-	
2-Chloroethyl Vinyl Ether	ND			1.0	-	-		-	
Surrogate Recovery									
		31.1			25	124		83-139	
Dibromofluoromethane	31.1				25	12	.4	0.	5-159
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD
	LCS		-		LCS	LCSD	LCS/LCSD	-	RPD Limit
Analyte	LCS Result	Result	Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Analyte Acrolein (Propenal)	LCS Result 17.0	Result 18.0	Val 20		LCS %REC 85	LCSD %REC 90	LCS/LCSD Limits 70-130	RPD 5.69	RPD Limit
Analyte Acrolein (Propenal) Acrylonitrile	LCS Result 17.0 15.9	Result 18.0 16.0	Val 20 20		LCS %REC 85 80	LCSD %REC 90 80	LCS/LCSD Limits 70-130 70-130	RPD 5.69 0	RPD Limit 20 20

Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/24/18	BatchID:	165451
Date Analyzed:	9/24/18	Extraction Method:	E624
Instrument:	GC10	Analytical Method:	E624
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165451

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.20	-	-	-
Bromodichloromethane	ND	0.50	-	-	-
Bromoform	ND	0.50	-	-	-
Bromomethane	ND	0.50	-	-	-
Carbon tetrachloride	ND	0.50	-	-	-
Chlorobenzene	ND	0.50	-	-	-
Chloroethane	ND	0.50	-	-	-
Chloroform	ND	0.50	-	-	-
Chloromethane	ND	0.50	-	-	-
Dibromochloromethane	ND	0.50	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.50	-	-	-
1,1-Dichloroethane	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
1,1-Dichloroethene	ND	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.50	-	-	-
1,2-Dichloropropane	ND	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.50	-	-	-
trans-1,3-Dichloropropene	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Methylene chloride	6.05	2.0	-	-	-
Styrene	ND	0.50	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.50	-	-	-
Tetrachloroethene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
1,2,4-Trichlorobenzene	ND	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.50	-	-	-
Trichloroethene	ND	0.50	-	-	-
Trichlorofluoromethane	ND	0.50	-	-	-
Vinyl chloride	ND	0.50	-	-	-
m,p-Xylene	ND	0.25	-	-	-
o-Xylene	ND	0.25	-	-	-
Xylenes, Total	ND	0.25	-	-	-



Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/24/18	BatchID:	165451
Date Analyzed:	9/24/18	Extraction Method:	E624
Instrument:	GC10	Analytical Method:	E624
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165451

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery					
Dibromofluoromethane	25.0		25	100	83-139
Toluene-d8	23.7		25	95	87-125
4-BFB	2.11		2.5	84	74-133

Client:	PG&E Gateway Generating Station	WorkOr
Date Prepared:	9/24/18	BatchID
Date Analyzed:	9/24/18	Extractio
Instrument:	GC10	Analytic
Matrix:	Water	Unit:
Project:	Semi-Annually Sampling (September 2018)	Sample I

WorkOrder:	1809780
BatchID:	165451
Extraction Method:	E624
Analytical Method:	E624
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165451

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzene	9.16	9.35	10	92	93	37-151	2.00	20
Bromodichloromethane	8.12	8.43	10	81	84	35-155	3.65	20
Bromoform	7.56	8.05	10	76	80	45-169	6.33	20
Bromomethane	14.8	14.1	10	148	141	1-242	4.80	20
Carbon tetrachloride	8.54	8.86	10	85	89	70-140	3.70	20
Chlorobenzene	8.85	9.16	10	88	92	37-160	3.40	20
Chloroethane	10.0	9.82	10	100	98	14-230	1.76	20
Chloroform	8.83	9.04	10	88	90	51-138	2.33	20
Chloromethane	5.61	5.68	10	56	57	1-273	1.20	20
Dibromochloromethane	8.09	8.54	10	81	85	53-149	5.37	20
1,2-Dibromoethane (EDB)	8.08	8.55	10	81	86	62-127	5.73	20
1,2-Dichlorobenzene	8.99	9.40	10	90	94	18-190	4.50	20
1,3-Dichlorobenzene	8.55	8.88	10	85	89	59-156	3.84	20
1,4-Dichlorobenzene	8.55	8.88	10	85	89	18-190	3.84	20
1,1-Dichloroethane	8.99	9.29	10	90	93	70-130	3.26	20
1,2-Dichloroethane (1,2-DCA)	7.76	8.03	10	78	80	49-155	3.44	20
1,1-Dichloroethene	9.84	10.0	10	98	100	1-234	2.00	20
trans-1,2-Dichloroethene	9.62	9.82	10	96	98	54-156	2.09	20
1,2-Dichloropropane	8.77	9.03	10	88	90	1-210	2.94	20
cis-1,3-Dichloropropene	8.01	8.42	10	80	84	1-227	4.93	20
trans-1,3-Dichloropropene	8.19	8.70	10	82	87	17-183	6.01	20
Ethylbenzene	9.09	9.45	10	91	94	37-162	3.85	20
Methyl-t-butyl ether (MTBE)	7.58	7.90	10	76	79	70-130	4.21	20
Methylene chloride	8.74	9.12	10	87	91	1-221	4.27	20
Styrene	8.46	8.71	10	85	87	54-135	2.98	20
1,1,2,2-Tetrachloroethane	7.83	8.44	10	78	84	46-157	7.43	20
Tetrachloroethene	9.18	9.52	10	92	95	64-148	3.63	20
Toluene	8.32	8.73	10	83	87	47-150	4.76	20
1,2,4-Trichlorobenzene	9.16	9.49	10	92	95	57-139	3.48	20
1,1,1-Trichloroethane	8.56	8.86	10	86	89	52-162	3.34	20
1,1,2-Trichloroethane	8.14	8.68	10	81	87	52-150	6.41	20
Trichloroethene	9.44	9.55	10	94	96	71-157	1.13	20
Trichlorofluoromethane	8.62	8.85	10	86	89	17-181	2.73	20
Vinyl chloride	9.79	9.68	10	98	97	1-251	1.16	20
m,p-Xylene	17.7	18.2	20	89	91	56-131	2.72	20
o-Xylene	8.76	9.04	10	88	90	62-126	3.10	20
Xylenes, Total	26.5	27.2	30	88	91	59-128	2.84	20



Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/24/18	BatchID:	165451
Date Analyzed:	9/24/18	Extraction Method:	E624
Instrument:	GC10	Analytical Method:	E624
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165451

	QC Su	mmary l	Report for E	524				
Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	25.0	25.0	25	100	100	83-139	0	20
Toluene-d8	25.1	25.4	25	100	102	87-125	1.23	20
4-BFB	2.26	2.37	2.5	90	95	74-133	4.75	20



Client:	PG&E Gateway Generating Station	WorkOrder:
Date Prepared:	9/19/18	BatchID:
Date Analyzed:	9/19/18	Extraction Me
Instrument:	GC17	Analytical Me
Matrix:	Water	Unit:
Project:	Semi-Annually Sampling (September 2018)	Sample ID:

WorkOrder:	1809780
BatchID:	165166
Extraction Method:	E625
Analytical Method:	E625
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165166

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.010	-	-	-
Acenaphthylene	ND	0.010	-	-	-
Anthracene	ND	0.010	-	-	-
Benzidine	ND	5.0	-	-	-
Benzo (a) anthracene	ND	0.020	-	-	-
Benzo (a) pyrene	ND	0.010	-	-	-
Benzo (b) fluoranthene	ND	0.0050	-	-	-
Benzo (g,h,i) perylene	ND	0.020	-	-	-
Benzo (k) fluoranthene	ND	0.010	-	-	-
Benzyl Alcohol	ND	5.0	-	-	-
Bis (2-chloroethoxy) Methane	ND	1.0	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0050	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.010	-	-	-
Bis (2-ethylhexyl) Adipate	ND	3.0	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.040	-	-	-
4-Bromophenyl Phenyl Ether	ND	1.0	-	-	-
Butylbenzyl Phthalate	ND	2.0	-	-	-
4-Chloroaniline	ND	0.020	-	-	-
4-Chloro-3-methylphenol	ND	1.0	-	-	-
2-Chloronaphthalene	ND	1.0	-	-	-
2-Chlorophenol	ND	0.020	-	-	-
4-Chlorophenyl Phenyl Ether	ND	1.0	-	-	-
Chrysene	ND	0.010	-	-	-
Dibenzo (a,h) anthracene	ND	0.010	-	-	-
Dibenzofuran	ND	1.0	-	-	-
Di-n-butyl Phthalate	ND	0.020	-	-	-
1,2-Dichlorobenzene	ND	2.0	-	-	-
1,3-Dichlorobenzene	ND	2.0	-	-	-
1,4-Dichlorobenzene	ND	2.0	-	-	-
3,3-Dichlorobenzidine	ND	0.020	-	-	-
2,4-Dichlorophenol	ND	0.010	-	-	-
Diethyl Phthalate	ND	0.020	-	-	-
2,4-Dimethylphenol	ND	1.0	-	-	-
Dimethyl Phthalate	ND	0.020	-	-	-
4,6-Dinitro-2-methylphenol	ND	5.0	-	-	-
2,4-Dinitrophenol	ND	0.50	-	-	-
2,4-Dinitrotoluene	ND	0.025	-	-	-
2,6-Dinitrotoluene	ND	0.010	-	-	-



Client:	PG&E Gateway Generating Station	WorkOrder:
Date Prepared:	9/19/18	BatchID:
Date Analyzed:	9/19/18	Extraction M
Instrument:	GC17	Analytical Me
Matrix:	Water	Unit:
Project:	Semi-Annually Sampling (September 2018)	Sample ID:

WorkOrder:	1809780
BatchID:	165166
Extraction Method:	E625
Analytical Method:	E625
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165166

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Di-n-octyl Phthalate	ND	0.12	-	-	-
1,2-Diphenylhydrazine	ND	1.0	-	-	-
Fluoranthene	ND	0.010	-	-	-
Fluorene	ND	0.010	-	-	-
Hexachlorobenzene	ND	0.0050	-	-	-
Hexachlorobutadiene	ND	0.010	-	-	-
Hexachlorocyclopentadiene	ND	5.0	-	-	-
Hexachloroethane	ND	0.010	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.020	-	-	-
Isophorone	ND	1.0	-	-	-
2-Methylnaphthalene	ND	0.010	-	-	-
2-Methylphenol (o-Cresol)	ND	1.0	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	1.0	-	-	-
Naphthalene	ND	0.010	-	-	-
2-Nitroaniline	ND	5.0	-	-	-
3-Nitroaniline	ND	5.0	-	-	-
4-Nitroaniline	ND	5.0	-	-	-
Nitrobenzene	ND	1.0	-	-	-
2-Nitrophenol	ND	5.0	-	-	-
4-Nitrophenol	ND	5.0	-	-	-
N-Nitrosodiphenylamine	ND	1.0	-	-	-
N-Nitrosodi-n-propylamine	ND	1.0	-	-	-
Pentachlorophenol	ND	0.25	-	-	-
Phenanthrene	ND	0.020	-	-	-
Phenol	ND	0.020	-	-	-
Pyrene	ND	0.020	-	-	-
Pyridine	ND	1.0	-	-	-
1,2,4-Trichlorobenzene	ND	1.0	-	-	-
2,4,5-Trichlorophenol	ND	0.050	-	-	-
2,4,6-Trichlorophenol	ND	0.050	-	-	-
N-Nitrosodimethylamine	ND	5.0	-	-	-



Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/19/18	BatchID:	165166
Date Analyzed:	9/19/18	Extraction Method:	E625
Instrument:	GC17	Analytical Method:	E625
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165166

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery					
2-Fluorophenol	5.08		5	102	8-130
Phenol-d5	5.37		5	107	5-130
Nitrobenzene-d5	4.67		5	93	20-140
2-Fluorobiphenyl	4.58		5	92	40-140
2,4,6-Tribromophenol	5.51		5	110	16-180
Terphenyl-d14	4.34		5	87	40-170



Client:	PG&E Gateway Generating Station
Date Prepared:	9/19/18
Date Analyzed:	9/19/18
Instrument:	GC17
Matrix:	Water
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
BatchID:	165166
Extraction Method:	E625
Analytical Method:	E625
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165166

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit	
Acenaphthene	0.217	0.220	0.25	87	88	47-145	1.14	25	
Acenaphthylene	0.207	0.212	0.25	83	85	33-145	2.35	25	
Anthracene	0.210	0.216	0.25	84	86	27-133	2.92	25	
Benzidine	17.0	18.3	25	68	73	43-106	7.53	25	
Benzo (a) anthracene	0.197	0.200	0.25	79	80	33-143	1.28	25	
Benzo (a) pyrene	0.226	0.222	0.25	90	89	17-163	1.97	25	
Benzo (b) fluoranthene	0.231	0.211	0.25	92	84	24-159	9.15	25	
Benzo (g,h,i) perylene	0.215	0.213	0.25	86	85	1-219	1.01	25	
Benzo (k) fluoranthene	0.207	0.200	0.25	83	80	11-162	3.10	25	
Benzyl Alcohol	26.3	23.7	25	105	95	53-117	10.3	25	
Bis (2-chloroethoxy) Methane	4.70	4.86	5	94	97	33-184	3.21	25	
Bis (2-chloroethyl) Ether	0.254	0.297	0.25	102	119	12-158	15.5	25	
Bis (2-chloroisopropyl) Ether	0.270	0.256	0.25	108	102	36-166	5.47	25	
Bis (2-ethylhexyl) Adipate	4.08	4.29	5	82	86	55-122	4.99	25	
Bis (2-ethylhexyl) Phthalate	0.236	0.241	0.25	95	96	8-158	2.01	25	
4-Bromophenyl Phenyl Ether	4.11	4.27	5	82	85	53-127	3.75	25	
Butylbenzyl Phthalate	4.99	4.73	5	100	95	1-152	5.38	25	
4-Chloroaniline	0.233	0.234	0.25	93	94	63-120	0.618	25	
4-Chloro-3-methylphenol	4.55	4.62	5	91	92	22-147	1.54	25	
2-Chloronaphthalene	4.62	4.66	5	92	93	60-118	0.892	25	
2-Chlorophenol	0.237	0.216	0.25	95	87	23-134	9.26	25	
4-Chlorophenyl Phenyl Ether	4.26	4.14	5	85	83	25-158	2.94	25	
Chrysene	0.203	0.201	0.25	81	81	17-168	0	25	
Dibenzo (a,h) anthracene	0.211	0.210	0.25	84	84	1-227	0	25	
Dibenzofuran	4.35	4.38	5	87	88	64-122	0.679	25	
Di-n-butyl Phthalate	0.228	0.236	0.25	91	95	1-118	3.69	25	
1,2-Dichlorobenzene	4.27	4.02	5	85	80	32-129	6.14	25	
1,3-Dichlorobenzene	4.31	4.22	5	86	84	1-172	2.27	25	
1,4-Dichlorobenzene	4.48	4.22	5	90	84	20-124	5.99	25	
3,3-Dichlorobenzidine	0.217	0.226	0.25	87	90	1-262	3.89	25	
2,4-Dichlorophenol	0.243	0.241	0.25	97	96	39-135	1.01	25	
Diethyl Phthalate	0.227	0.228	0.25	91	91	1-114	0	25	
2,4-Dimethylphenol	4.72	4.85	5	94	97	32-119	2.58	25	
Dimethyl Phthalate	0.220	0.223	0.25	88	89	1-112	1.55	25	
4,6-Dinitro-2-methylphenol	17.5	18.1	25	70	72	59-123	3.29	25	
2,4-Dinitrophenol	0.904	0.891	1.25	72	71	1-191	1.43	25	
2,4-Dinitrotoluene	0.197	0.208	0.25	79	83	39-139	5.49	25	
2,6-Dinitrotoluene	0.193	0.198	0.25	77	79	50-158	2.65	25	



Client:	PG&E Gateway Generating Station
Date Prepared:	9/19/18
Date Analyzed:	9/19/18
Instrument:	GC17
Matrix:	Water
Project:	Semi-Annually Sampling (September 2018)

WorkOrder:	1809780
BatchID:	165166
Extraction Method:	E625
Analytical Method:	E625
Unit:	μg/L
Sample ID:	MB/LCS/LCSD-165166

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.256	0.249	0.25	103	99	4-146	3.11	25
1,2-Diphenylhydrazine	4.44	4.56	5	89	91	66-128	2.57	25
Fluoranthene	0.213	0.219	0.25	85	88	26-137	2.78	25
Fluorene	0.219	0.217	0.25	88	87	59-121	0.827	25
Hexachlorobenzene	0.199	0.207	0.25	79	83	1-152	4.37	25
Hexachlorobutadiene	0.224	0.222	0.25	89	89	24-116	0	25
Hexachlorocyclopentadiene	18.6	18.2	25	74	73	36-109	1.84	25
Hexachloroethane	0.213	0.199	0.25	85	80	40-113	6.69	25
Indeno (1,2,3-cd) pyrene	0.219	0.215	0.25	88	86	1-171	1.95	25
Isophorone	4.56	4.75	5	91	95	21-196	4.01	25
2-Methylnaphthalene	0.249	0.237	0.25	100	95	58-122	5.01	25
2-Methylphenol (o-Cresol)	5.55	5.07	5	111	101	55-121	9.14	25
3 & 4-Methylphenol (m,p-Cresol)	4.91	4.70	5	98	94	58-121	4.41	25
Naphthalene	0.215	0.214	0.25	86	86	21-133	0	25
2-Nitroaniline	23.1	23.7	25	92	95	65-124	2.60	25
3-Nitroaniline	22.1	22.2	25	88	89	67-125	0.295	25
4-Nitroaniline	23.0	22.7	25	92	91	65-124	1.01	25
Nitrobenzene	4.66	4.75	5	93	95	35-180	1.74	25
2-Nitrophenol	22.3	23.3	25	89	93	29-182	4.22	25
4-Nitrophenol	22.5	22.8	25	90	91	1-132	1.23	25
N-Nitrosodiphenylamine	4.15	4.30	5	83	86	67-132	3.56	25
N-Nitrosodi-n-propylamine	4.91	4.70	5	98	94	1-230	4.40	25
Pentachlorophenol	1.12	1.13	1.25	90	91	14-176	1.15	25
Phenanthrene	0.203	0.208	0.25	81	83	54-120	2.76	25
Phenol	0.234	0.221	0.25	93	89	5-112	5.34	25
Pyrene	0.202	0.202	0.25	81	81	52-115	0	25
Pyridine	3.56	3.06	5	71	61	60-140	15.2	25
1,2,4-Trichlorobenzene	4.46	4.53	5	89	91	44-142	1.65	25
2,4,5-Trichlorophenol	0.218	0.226	0.25	87	90	62-124	3.17	25
2,4,6-Trichlorophenol	0.234	0.232	0.25	93	93	37-144	0	25
N-Nitrosodimethylamine	22.6	21.4	25	91	86	45-111	5.63	25



Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/19/18	BatchID:	165166
Date Analyzed:	9/19/18	Extraction Method:	E625
Instrument:	GC17	Analytical Method:	E625
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165166

QC Summary Report for E625 LCS LCSD SPK LCS RPD Analyte LCSD LCS/LCSD RPD Val %REC Result Result %REC Limits Limit Surrogate Recovery 2-Fluorophenol 5.14 4.81 5 103 96 29-140 6.60 25 Phenol-d5 5.94 25 5.67 5.34 5 113 107 38-148 Nitrobenzene-d5 5.20 5.24 5 104 105 31-152 0.775 25 25 2-Fluorobiphenyl 5.01 5.03 5 100 101 40-140 0.514 5.74 2,4,6-Tribromophenol 5.49 5 110 39-150 4.33 25 115 Terphenyl-d14 4.79 4.76 5 96 95 38-147 0.689 25

Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/24/18	BatchID:	165431
Date Analyzed:	9/24/18	Extraction Method:	SM4500-CN ⁻ E
Instrument:	WC_SKALAR	Analytical Method:	SM4500-CN ⁻ CE
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165431

QC Summary Report for SM4500-CN⁻ CE

Analyte	MB Result			RL					
Total Cyanide	ND			1.0	-	-		-	
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide	40.5	41.4	40		101	103	80-120	1.99	20

Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/19/18	BatchID:	165200
Date Analyzed:	9/20/18	Extraction Method:	E245.2
Instrument:	AA1	Analytical Method:	E245.2
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165200

QC Summary Report for Mercury

Analyte	MB Result			RL					
Mercury	ND			0.20	-	-		-	
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limi

Client:	PG&E Gateway Generating Station	WorkOrder:	1809780
Date Prepared:	9/18/18	BatchID:	165141
Date Analyzed:	9/19/18	Extraction Method:	E200.8
Instrument:	ICP-MS2	Analytical Method:	E200.8
Matrix:	Water	Unit:	μg/L
Project:	Semi-Annually Sampling (September 2018)	Sample ID:	MB/LCS/LCSD-165141

QC Summary Report for Metals

Analyte	MB Result			RL	SPK Val	MB SS %REC		MB SS Limits	
Antimony	ND			0.50	-	-		-	
Arsenic	ND			0.50	-	-		-	
Beryllium	ND			0.50	-	-		-	
Cadmium	ND			0.25	-	-		-	
Chromium	ND			0.50	-	-		-	
Copper	ND			2.0	-	-		-	
Lead	ND			0.50	-	-		-	
Mercury	ND			0.050	-	-		-	
Nickel	ND			0.50	-	-		-	
Selenium	ND			0.50	-	-		-	
Silver	ND			0.19	-	-		-	
Thallium	ND			0.50	-	-		-	
Zinc	ND			15	-	-		-	
Surrogate Recovery									
Terbium	758	758			750	10)1	7	0-130
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Analyte Antimony								RPD	
	Result	Result	Val		%REC	%REC	Limits		Limit
Antimony	Result 52.6	Result 52.5	Val 50		%REC 105	%REC 105	Limits 85-115	0	Limit 20
Antimony Arsenic	Result 52.6 50.4	Result 52.5 49.5	Val 50 50		%REC 105 101	%REC 105 99	Limits 85-115 85-115	0 1.92	Limit 20 20
Antimony Arsenic Beryllium	Result 52.6 50.4 53.0	Result 52.5 49.5 52.9	Val 50 50 50		%REC 105 101 106	%REC 105 99 106	Limits 85-115 85-115 85-115	0 1.92 0	Limit 20 20 20
Antimony Arsenic Beryllium Cadmium	Result 52.6 50.4 53.0 51.7	Result 52.5 49.5 52.9 51.5	Val 50 50 50 50 50		%REC 105 101 106 103	%REC 105 99 106 103	Limits 85-115 85-115 85-115 85-115	0 1.92 0 0	Limit 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium	Result 52.6 50.4 53.0 51.7 51.6	Result 52.5 49.5 52.9 51.5 51.3	Val 50 50 50 50 50 50		%REC 105 101 106 103 103	%REC 105 99 106 103 103	Limits 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0	Limit 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper	Result 52.6 50.4 53.0 51.7 51.6 52.0	Result 52.5 49.5 52.9 51.5 51.3 51.9	Val 50 50 50 50 50 50 50		%REC 105 101 106 103 103 104	%REC 105 99 106 103 103 104	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0	Limit 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8	Val 50 50 50 50 50 50 50 50		%REC 105 101 106 103 103 104 100	%REC 105 99 106 103 104 100	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 0	Limit 20 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1 1.20	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8 1.18	Val 50 50 50 50 50 50 50 50 50 1.25		%REC 105 101 106 103 103 104 100 96	%REC 105 99 106 103 104 100 94	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 0 0 2.02	Limit 20 20 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1 1.20 52.5	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8 1.18 51.5	Val 50 50 50 50 50 50 50 50 1.25 50		%REC 105 101 106 103 103 104 100 96 105	%REC 105 99 106 103 104 100 94 103	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 0 2.02 1.96	Limit 20 20 20 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1 1.20 52.5 51.7	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8 1.18 51.5 50.0	Val 50 50 50 50 50 50 50 50 1.25 50 50 50		%REC 105 101 106 103 103 104 100 96 105 103	%REC 105 99 106 103 103 104 100 94 103 103	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 2.02 1.96 3.36	Limit 20 20 20 20 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1 1.20 52.5 51.7	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8 1.18 51.5 50.0 51.1	Val 50 50 50 50 50 50 50 50 1.25 50 50 50 50 50		%REC 105 101 106 103 103 104 100 96 105 103 104	%REC 105 99 106 103 103 104 100 94 103 100 102 102	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 0 2.02 1.96 3.36 1.36	Limit 20 20 20 20 20 20 20 20 20 20 20 20 20
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium	Result 52.6 50.4 53.0 51.7 51.6 52.0 50.1 1.20 52.5 51.7 51.8 48.0	Result 52.5 49.5 52.9 51.5 51.3 51.9 49.8 1.18 51.5 50.0 51.1 47.9	Val 50 50 50 50 50 50 50 1.25 50 50 50 50 50 50 50 50 50 5		%REC 105 101 106 103 104 100 96 103 104 96	%REC 105 99 106 103 104 100 94 103 100 94 102 96	Limits 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115 85-115	0 1.92 0 0 0 0 0 0 2.02 1.96 3.36 1.36 0	Limit 20 20 20 20 20 20 20 20 20 20 20 20 20

McCampbell Analytica	l, Inc.			CHAI	N-OF-CU	STODY R	ECORD	Pag	e 1 of 1	
Pittsburg, CA 94565-1701 (925) 252-9262	□WaterTrax	WriteOn	EDF	Excel	er: 1809780	ClientCod	le: PGEA	ThirdParty	J-flag	
Report to: Angel Espiritu PG&E Gateway Generating Station		abe4@pge.com \1HE@pge.com	n; J5Ld@pge.cor		Bill to: Angel Espiritu			uested TATs:	15 days; 5 days;	
3225 Wilbur Avenue Antioch, CA 94509 (925) 459-7212 FAX:	PO: Project: S	Semi-Annually S	Sampling (Septer	mber 2018)	3225 Wilbur A Antioch, CA 94			te Received: te Logged:	09/19/2018 09/19/2018	
Lab ID Client ID		Matrix	Collection Date	Hold 1	2 3	· · · · ·	sts (See legend	below) 3 9 1	0 11 1	12

1809780-001 I-001 Water 9/19/2018 11:10 H E B C D G A F F I

Test Legend:

1	1613_TCDD_W
5	625_SCSM_W
9	PP13MS_TTLC_W

2	608_W [J]
6	ASBESTOS_E100_1M_WW
10	

3	624_W
7	CN_SM4500CE_W
11	

4	624ACR+2CEVE_W
8	HG_W
12	

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



"When Quality Counts"

WORK ORDER SUMMARY

Client Name Client Conta		EWAY GENERAT	ING STATION	e Proj	ject: Semi-Ar		k Order:	1809780 LEVEL 2			
	mail: abe4@pge.co			Con	nments:					-	9/19/2018
		WaterTrax	WriteOn	EDF	Excel]Fax √ Email	HardC	opyThirdPart	y 🗌	J-flag	
Lab ID	Client ID	Matrix	Test Name		Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1809780-001A	I-001	Water	SM4500-CN ⁻ C	E (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3		9/19/2018 11:10	5 days	Present	
1809780-001B	I-001	Water	E624 (VOCs)		2	VOA w/ HCl		9/19/2018 11:10	5 days	Present	
					2	VOA w/ HCl				Present	
1809780-001C	I-001	Water	E624 (ACRO, A	ACRY, & 2-CEVE)	2	VOA, Unpres		9/19/2018 11:10	5 days	Present	
					2	VOA, Unpres				Present	
1809780-001D	I-001	Water	E625 (SVOCs,	Low-Level)	1	1LA Narrow Mouth, Unpres		9/19/2018 11:10	5 days	Present	
					2	1LA Narrow Mouth, Unpres				Present	
1809780-001E	I-001	Water	E608 (OC Pesti Clean-up)	cides+PCBs w/ Floria	sil 1	1LA Narrow Mouth, Unpres		9/19/2018 11:10	5 days	Present	
1809780-001F	I-001	Water	E200.8 (PP13 N	Metals)	2	250mL HDPE w/ HNO3		9/19/2018 11:10	5 days	Present	
			E245.2 (Mercur	ry)					5 days	Present	
1809780-001G	I-001	Water	Asbestos - E100 Protocol (MFL)).1, modified EPA	3	1LA Narrow Mouth, Unpres		9/19/2018 11:10	5 days	Present	SubOut
1809780-001H	I-001	Water	E1613 (2,3,7,8-	TCDD only)	3	1LA Narrow Mouth, Unpres		9/19/2018 11:10	15 days	Present	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCAMPBELL ANALYTICAL, INC. 1534 WILLOW PASS ROAD PITTSBURG, CA 94565-1701 Website: www.mccampbell.com Telephone: (877) 252-9262 Fax: (925) 252-9269							CHAIN OF CUSTODY RECORD TURN AROUND TIME Image: Colspan="2">Image: Colspan="2" Image: Colspa																									
	Fo: Angel I					ill To: P	G&1	E Ga	ten	ay									Anal	lysis	Reg	uest	t				_			Rema	irks	
Compan	y: PG&E	Gate	way Gene	rating S	tation													(s	led													
															ż		(spu	PCE	y list													
	abe4@pge.						om, t	IWY	(@)	pge.	com					ls)	nodu	and	e onl													
	5) 522-783					ax: ()	_					_		sodi 1450	ounc	Con	cides	alyz													
	Name: Se				al and a second	ptember	201	8)							vith SM	dmo	anic	Pesti	Bar													
	Location: C			~			-+	C	-				10		ed w	nic C	Org	ine I	xibu													
Sampler	Signature		nicka	Env	jcov	ma	21		cin	-pl	in	+	R	5	/ing	rgar	latile	chlor	Appe													
		mposit	SAMP	LING		s	Ma	atri x	MI	ЕТНС	DD Pl	RESE	RV	ED) (Pret	/olatile ()	Semi Volatile Organic Compounds)	- Organochlorine Pesticides and PCBs)	nts (see /													
SAMPLE ID	LOCATION / Field Point Name	Sample Type Composite /Grah	Date	Time	# Containers	Type Containers	Waste Water	Sewer Water	None	ICE	No.Ou	HCI.	HNO.	Other	Cyanide (TOTAL) (Pretreated with sodium thiosulfate before preserving) by SM 4500 CN- ABCE	TTO (USEPA 624-Volatile Organic Compounds)	TTO (USEPA 625-	TTO (USEPA 608 -	126 Priority Pollutants (see Appendix B analyze only listed	commod mon												
I-001		G			1	250 ml	Х			Х	X				X					1						T				De GIRL, 9, UN 12		
			9/19/18	11:10		poly Amb																										
I-001		G	9/19/18		2	43-ml VOA	Х			Х		X				X																
I-001		G			2	43-ml	X			x	1	+-	-	-		X				1		+	1	+	-	+		\square				
			9/19/18		-	VOA 1L Amb							-				V					_	-	+			-					
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Relinquish	d By:		Date:	Time:	Rece	iver By:	4		-	1	-		1	1	ICE/t°	5.6	-				L				1		CON	IME	NTS:			
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Q//Q/18 13:45 W Q Q 19/18 13:4 Relinquished By: Date: Time: Received By: Q 19/18 13:4				HEAD S DECHL APPRO PRESE	ORIN	ATE FE C	D IN ONT	LAB_	RS_		-			-	Appe		x A a	5) see A nd analy														
Relinquish	ed By:		Date:	Time:	Rece	ived By:									PRESE		,		5 0	&G	ME pH<		5 0	тн	ER							

Sampling Containers for APPENDIX B

Date:	Time:	# Containers	Container Type	Preservative:	Composite/Grab
9/19/18 9/19/18 9/19/18 9/19/18	11:10 11:10 11:10 8 11:	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Amber Glass 1L VOA 40 mL VOA 40 mL POLY 250 ml	NP NP HCl HNO₃	Grab Grab Grab Composite
9/19/1	8 11.	1 0 1	Amber Poly 250 r (pretreated with set		Grab e)

9/19/18 13:45 9/19/18 13:45

APPENDIX A

District Local Discharge Limits include a parameter called Total Toxic Organics (TTO). The required analytical methods for TTO analysis are listed in 40 CFR Part 136 and include the following EPA methods: 624,625,608, and 1613, respectively. Unless specifically required, EPA method 1613 for dioxins is not mandatory for routine TTO analysis. The constituents with concentrations greater than the minimum limit/reporting limit must be added together to determine compliance with the District's Local Discharge Limit for TTO of 2.0 mg L. The following is a list of the constituents of TTO:

EPA Method 624 Compounds

Acrolem Acrylonitrile Benzene Bromodichloromethane (Dichlorobromomethane) Bromform Brommomethane (Methyl Bromide) Carbon tetrachloride (Tetrachloromethane) Chlorobenzene Chloroethane (Ethyl Chloride) 2-Chloroethyl vinyl ether Chloroform (trichloromethane) Chloromethane (Methyl Chloride) Dibromochloromethane (Chlorodibromomethane) 1, 2-Dichlorobenzene 1, 3-Dichlorobenzene 1, 4-Dichlorobenzene 1. 1-Dichloroethane 1. 2-Dichloroethane 1, 1-Dichloroethene (1, 1-dichloroethylene) trans-1, 2-Dichloroethene 1. 2-Dichloropropane cis-1. 3-Dichloropropene trans-1. 3-Dichloropropene Ethylbenzene Methylene Chloride (Dichloromethane) 1.1.2. 2.-Tetrachloroethane Tetrachloroethene (PCE) Toluene 1. 1. 1-Trichloreothane 1. 1. 2-Trichloroethane Trichloroethene (TCE) Trichlorofluoromethane Vinvl chloride (Chloroethylene)

EPA Method 625 Compounds

- Acenaphthene Acenaphthylene Anthracené Benzidine Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoranthene Benzo (b) fluoranthene Benzo (b) fluoranthene Benzo (k) fluoranthene Benzyl butyl phthalate bis (2-Chloroethoxy) methane bis (2-Chloroethoxy) phenyl ether 4-Chloro-3-methylphenol 2-Chlorophenyl phenyl ether Cluysene Dibenzo (a, h) anthracene 1, 2-Dichlorobenzene 1, 4-Dichlorobenzene
- 3. 3 Dichlorobenzidine

2. 4-Dichlorophenol Diethyl phthalate 2,4-Dimethylphenol Dimethylphthalate Di-n-butylphthalate 2, 4-Dimtirophenol 4-Dinitrotoluene 2. 6-Dinitrotoluene Di-n-octylphthalate 1.2-Diphenylhydrazine Azo Fluoranthene Fluorene Hexachlorobenzene Hexchlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno (1. 2. 3-cd) pyrene Isophorone 2-Methyl-4, 6-dinitrophenol Naphthalene Nitrobenzene 2-Nitrophenol 4-Nitrophenol N-Nitrosodimethylamine N-Nitroso-di-n-propylamine N-Nitrosodiphenylamine Pentachlorophenol Phenanthrene Phenol Pyrene 2. 4-Trichlorobenzene 2, 4, 6-Trichlorophenol

EPA Method 608 Compounds

Aldrin alpha-BHC beta-BHC delta-BHC gamma-BHC (Lindane) Chlordane 4.4°-DDD 4. 4 -DDE 4.4'DDT Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Endrin aldehyde Heptachlor Heptachlor epoxide PCB 1016 PCB 1221 PCB 1222 PCB 1232 PCB 1242 PCB 1248 PCB 1254 PCB 1260 Toxaphene

Juff 9/19/18/3:45 8 9/19/18 13:45

APPENDIX B

(for 40 CFR part 423 - 126 Priority Pollutants)

001	Acenaphthene
002	Acrolein
003	Acrylonitrile
004	Benzene
005	Benzidine
006	Carbon tetrachloride
000	
007	(tetrachloromethane)
007	Chlorobenzene
008	1, 2, 4-trichlorobenzene
009	Hexachlorobenzene
010	1, 2-dichloroethane
011	1, 1, 1-trichloreothane
012	Hexachloroethane
013	1, 1-dichloroethane
014	1, 1, 2-trichloroethane
015	1, 1, 2, 2-tetrachloroethane
016	Chloroethane
017	Bis (2-chloroethyl) ether
018	2-chloroethyl vinyl ether (mixed)
019	2-chloronaphthalene
020	2, 4, 6-trichlorophenol
021	
022	Parachlorometa cresol
022 023	Chloroform (trichloromethane)
023	2-chlorophenol
024	1,2-dichlorobenzene (benzo(b)fluoranthene)
025	1,3-dichlorobenzene (benzo(b)fluoranthene)
026	
027	1, 4-dichlorobenzene
027	3, 3-dichlorobenzidine
028	1, 1-dichloroethylene
029	1, 2-trans-dichloroethylene
030	2, 4-dichlorophenol
031	1. 2 diableroprener
	1, 2-dichloropropane 1, 2-dichloropropylene
032	1, 2-dichloropropylene
	(1, 3-dichloropropene)
033	2, 4-dimethylphenol
034	2. 4-dinitrotoluene
035	2, 4-dinitrotoluene 2, 6-dinitrotoluene
026	
036	1, 2-diphenylhydrazine
037	Ethylbenzene
038	Fluoranthene
039	4-chlorophenyl phenyl ether
040	I bromonhantil nhantil athar
	4-bromophenyl phenyl ether
041	Bis(2-chloroisopropyl) ether
042	Bis(2-chloroethoxy) methane
043	Methylene chloride (dichloromethane)
044	Methyl chloride (dichloromethane)
045	Methyl bromide (bromomethane)
046	Bromoform (tribromomethane)
047	Dichlorobromomethane
048	Chlorodibromomethane
049	Hexachlorobutadiene
050	Hexachloromyclopentadiene
051	Isophorono
	Isophorone
052	Naphthalene
053	Nitrobenzene
054	2-Nitrophenol
055	4-nitrophenol
056	2, 4-dinitrophenol
057	4. 6-dinitro-o-cresol
058	N-nitrosodimethylamine
059	N-nitrosodiphenylamine
060	N-nitrosodi-n-propylamine
	Pantachloronhanol
061	Pentachlorophenol
062	Phenol
063	Bis(2-ethylhexyl) phthalate
064	Butyl benzyl phthalate

- Di-N-Butyl Phthalate 065
- 066 Di-n-octyl Phthalate
- 067 Diethvl Phthalate 068
- Dimethyl phthalate
- 069 1. 2-benzanthracene
- (benzo(a)anthracene) Benzo(a)pyrene (3, 4-benzo-pyrene) 070
- 071 3.4-Benzofluoranthene (benzo(b) fluoranthene)
- 11,12-benzofluoranthene 072 (benzo(b) fluoranthene
- 073 Chrysene
- Acenaphthylene
- 074 075 Anthracene
- 1, 12-benzopervlene (benzo(ghi) pervlene
- 076 077 078 Fluorene
- Phenanthrene
- 079 1, 2, 5, 6-dibenzanthracene (dibenzo(a,h)anthracene) Indeno (1, 2, 3-cd) pyrene
- 080
- (2, 3-o-pheynylene pyrene) Pvrene 081
- 082 Tetrachloroethylene
- 083 Toluene
- 084 Trichloroethvlene
- 085 Vinvl chloride (chloroethylene)
- 086 Aldrin
- 087 Dieldrin
- 088 Chlordane (technical mixture and metabolites)
- 089 4. 4-DD1
- 4, 4-DDE (p, p-DDX) 4, 4-DDD (p, p-TDE) Alpha-endosulfan 090 091
- 092
- 093
- Beta-endosulfan Endosulfan sulfate 094
- 095 Endrin
- 096
- Endrin aldehyde Heptachlor 097
- 098 Heptachlor epoxide
 - (BHC-hexachlorocyclohexane) Alpha-BHC
- 099
- 100 Beta-BHC
- Gamma-BHC (lindane) Delta-BHC 101
- 102
- PCB-1242 (Arochlor 1242) PCB-1242 (Arochlor 1242) PCB-1254 (Arochlor 1254) PCB-1254 (Arochlor 1254) PCB-1221 (Arochlor 1221) PCB-1232 (Arochlor 1232) PCB-1248 (Arochlor 1248) PCB-1260 (Arochlor 1260) PCB-1016 (Arochlor 1016)
- 103
- 104
- 105
- 106
- 107
- 108 109
- PCB-1016 (Arochlor 1016) 110 Toxaphene
- 111 Antimony
- 112 Arsenic
- 113 Asbestos Beryllium
- 114 115 Cadmium
- 116 Chromium
- 117 Copper
- 118 Cvanide, (Total) 119 Lead

- 121 122 123 Selenium
 - Silver 124
 - 125
 - Zine 2.3.7,8-tetrachloro-dibenzo-p-dioxin (TCID) 13:45 R a/19/18 12:45 126



Sample Receipt Checklist

Client Name:	PG&E Gateway Generating Station			Date and Time Received	
Project:	Semi-Annually Sampling (September 2018)			Date Logged:	9/19/2018
WorkOrder №:	1809780 Matrix: <u>Water</u>			Received by: Logged by:	Tina Perez Kena Ponce
Carrier:	Client Drop-In				
	Chain of C	ustody	/ (COC) Infor	mation	
Chain of custody	present?	Yes	✓	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	✓	No 🗌	
Chain of custody	agrees with sample labels?	Yes	✓	No 🗌	
Sample IDs note	d by Client on COC?	Yes	✓	No 🗌	
Date and Time of	f collection noted by Client on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?	Yes	✓	No 🗌	
COC agrees with	Quote?	Yes		No 🗌	NA 🖌
	Samp	e Rece	eipt Informati	on	
Custody seals int	tact on shipping container/cooler?	Yes		No 🗌	NA 🔽
Shipping containe	er/cooler in good condition?	Yes	✓	No 🗌	
Samples in prope	er containers/bottles?	Yes	✓	No 🗌	
Sample containe	rs intact?	Yes	✓	No 🗌	
Sufficient sample	e volume for indicated test?	Yes	✓	No 🗌	
	Sample Preservation	on and	Hold Time (I	HT) Information	
All samples recei	ived within holding time?	Yes	✓	No 🗌	
Samples Receive	ed on Ice?	Yes	✓	No 🗌	
	(Ісе Тур	e: WE	TICE)		
Sample/Temp Bl	ank temperature		Temp: 5.6	S°C	
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	necked for correct preservation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
	acceptable upon receipt (200.8: ≤2; 525.3: ≤4; :3; 544: <6.5 & 7.5)?	Yes		No 🗌	NA 🗹
Free Chlorine t	ested and acceptable upon receipt (<0.1mg/L)?	Yes		No 🗌	NA 🗹

Attachment 2

Summary of Cyanide Resampling Results

GGS - Summary of Cyanide Resampling Results

	Resample #1: 1 Tige	0/30/2018 - @ r Pit		11/07/2018 @ er Pit	Resample #3 @ Tig	: 11/24/2018 ger Pit		: 12/04/2018 ger Pit	Resample #5: @ Tige		Resample #6: @ Tige		Resamı 12/18/ @ Tig	/2018
Analytical Laboratory	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative	No Preservative	w/ NaOH Preservative
	Units: ppb													
Laboratory 1	14.0	21.0	ND (<1.0)	ND (<1.0)										
Laboratory 2	9.7	20.0	ND (J1.1*)	ND (J2.5*)										
Laboratory 3	ND (<10.0)	ND (<10.0)	ND (<10.0)	ND (<10.0)	ND (<10.0)	12.0	32.0	30.0	18.0	13.0	20.0	ND (<10)	28.0	28.0

Note:

* - Non-detect with J Flag: Estimated values below the reporting limit, but above the method detection limit.

	Resample #8	8 1/10/2019	Resample #9 (1/16/2019)	Resample #10 (2/7/2019)	Resample #1:	1 (2/11/2019)	Resample #12 (2/25/2019)	Resample #13 (2/27/2019)	Resample #14 (2/28/2019)
	No	No	No	No	No Pres	ervative	No	No	No
	Preservative	Preservative	Preservative	Preservative			Preservative	Preservative	Preservative
Sampler	Enthalpy	Doug Welch	Muskan	Muskan		skan	Muskan	Doug Welch	Muskan
Laboratory	Enthalpy	Enthalpy	Enthalpy	Enthalpy	Enthalpy	MAI	Enthalpy	Enthalpy	Enthalpy
Sampling Location	units: ppb								
Tiger Pit	51.0	55.0	ND (<10)	13.0	14.0	29.0	ND (<10)		
HRSG IP A			ND (<10)						
HRSG IP B			ND (<10)						
Phospate Skid			ND (<10)						
CC Coolong Water			ND (<10)						
Amine Skid			ND (<10)						
E-006 (Storm Outfall)			ND (<10)						
Hammond Tank			26.0	ND (<10)			ND (<10)		
ows			ND (<10)						
Ammonia Sump			ND (<10)						
Service Water Tank Drain			ND (<10)						
Source Water		ND (<10.0)	ND (<10)	ND (<10)			ND (<10)		
RO Reject					ND (<10)	1.7	ND (<10)		
Compliance Point								ND (<10)	ND (<10)

Attachment 3

Analytical Report on Resampling #1



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1810E56

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue Antioch, CA 94509

Project Contact:	Angel Espiritu
Project P.O.:	
Project:	Resample 1 (10/30/18)

Project Received: 10/30/2018

Analytical Report reviewed & approved for release on 10/31/2018 by:

Ja Cao

Yen Cao Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com CA ELAP 1644 ♦ NELAP 4033 ORELAP



Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station

Project: Resample 1 (10/30/18)

WorkOrder: 1810E56

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client:	PG&E Gateway Generating Station
Date Received:	10/30/18 10:00
Date Prepared:	10/30/18
Project:	Resample 1 (10/30/18)

WorkOrder:	1810E56
Extraction Method:	SM4500-CN ⁻ E
Analytical Method:	SM4500-CN ⁻ CE
Unit:	μg/L

Cyanide, Total											
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument		Batch ID				
Tiger Pit-Amber	1810E56-001A	Water	10/30/20	18 07:55	WC_SKALAR	103018A1_35	167499				
Analytes	<u>Result</u>		<u>RL</u>	DF		Date	Analyzed				
Total Cyanide	21		1.0	1		10/3	0/2018 11:17				

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Collecte	ed Instrument	Batch ID
Tiger Pit-Clear	1810E56-002A	Water	10/30/2018 07:	55 WC_SKALAR 103018A1_36	167499
Analytes	Result		<u>RL</u> DF	Dat	e Analyzed
Total Cyanide	14		1.0 1	10/	30/2018 11:20

Analyst(s): NM

Quality Control Report

Client:	PG&E Gateway Generating Station	WorkOrder:	1810E56
Date Prepared:	10/30/18	BatchID:	167499
Date Analyzed:	10/30/18	Extraction Method:	SM4500-CN ⁻ E
Instrument:	WC_SKALAR	Analytical Method:	SM4500-CN ⁻ CE
Matrix:	Water	Unit:	μg/L
Project:	Resample 1 (10/30/18)	Sample ID:	MB/LCS/LCSD-167499

QC Summary Report for SM4500-CN⁻ CE

Analyte	MB Result			RL					
Total Cyanide	ND			1.0	-	-		-	
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide	40	40	40		100	99	90-110	0.933	20

McCampbell Analyt	ical, Inc.			CHAI	N-OF	-CUS	STODY	RECOR		Page	ge 1 of 1					
1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262	□WaterTrax	WriteOn	EDF	WorkOrd	1010	E 56 EQuIS	ClientCo ✓ Email	de: PGEA	y 🗌 ThirdF	Party	_ J-fla	ıg				
Report to:						iry	Dry-Weigh		equested TAT	r.	1 day;					
Angel Espiritu PG&E Gateway Generating Stat 3225 Wilbur Avenue		^{3rd Party:} A1HE@pge.com; J5Ld@pge.com; tlWY@p PG&E Gatewa 3225 Wilbur A					0	ation	ate Received		10/30/2	018				
Antioch, CA 94509 (925) 459-7212 FAX:	Project:	Resample 1 (10	/30/18)		Antioch	, CA 945	509	D	ate Logged:		10/30/2	018				
							Requested T	ests (See leger	nd below)							
Lab ID CI	ient ID	Matrix	Collection Date	Hold 1	2	3	4 5	6 7	8 9	10	11	12				

1810E56-001	Tiger Pit-Amber	Water	10/30/2018 07:55	A					
1810E56-002	Tiger Pit-Clear	Water	10/30/2018 07:55	A					

Test Legend:

1	CN_SM4500CE_W
5	
9	

2	
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

WORK ORDER SUMMARY

Client Name	PG&E GAT	FEWAY GENERAT	ING STATION	Project:	Resample	e 1 (10/30/18)			Wor	k Order:	1810E56
Client Conta	ct: Angel Espir	ritu							Ç	C Level:	LEVEL 2
Contact's En	nail: abe4@pge.d	com		Comment	ts:				Date	Logged:	10/30/2018
		□WaterTrax	WriteOnE	DF Ex	cel	Fax 🖌 Email	HardCo	opyThirdPart	y 🗌	J-flag	
Lab ID	Client ID	Matrix	Test Name		Containers Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1810E56-001A	Tiger Pit-Amber	Water	SM4500-CN ⁻ CE (Cyan	nide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3		10/30/2018 7:55	1 day	None	
1810E56-002A	Tiger Pit-Clear	Water	SM4500-CN ⁻ CE (Cyar	nide, Total)	1	250mL HDPE w/ Na2S2O3		10/30/2018 7:55	1 day	None	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

																			-		1	X	11	JE	2	5	54	0			1	of		
					4 WILLO TSBURG,	W PAS CA 94	SS ROAD 565-1701					F	?(U	<i>]</i> ,	SUR	N A	RO	CH	AI D T	N (DF E		JS'		D 24 F	é.				RD	ב	5 DAY	,
	K			e: (877) 25		iii Eii		anc x: (92								Geo	[rac]	ker	ED	F C C													□ equireo	1
		To: Angel I					Bill To: P	G&I	E Ga	tewa	ay									Anal	ysis	Req	uest								R	emai	·ks	
	Compan	iy: PG&E	Gate	way Gene	rating St	ation	1								-			s)	CBs)	isted														
	the second s	abe4@pge.c		and the second se	and the second second second	And and a state of the	ge.com, tl 'ax: (WY@	Øpge	.com	, DJ	H2@	pge.	con	n	vith sodium SM 4500 CN	(spu	punoduuc	es and P(Appendix B analyze only listed														
	Project	the second s		umple	1 (10)								th soc SM 45	Compounds)	nic Co	sticid	analy														
		Location: 7	Figer	Pit, Sourc	ce Water			1	1	C				0		h d w	ic Co1	Orgai	ine Pe	ndix B														
	Sampler	· Signature		uskan	~ En	vir	anm	ent	B		Gran	19	by	Z	-	(Pretreated reserving) 1)rgan	latile	chlori	Apper														
			Composite b	SAMP	LING		L.S.	Ma	10.04926	ME	гно	D PR	ESEI	RVF	ED	L) (Pretreate e preserving)	Volatile (- Semi Vo	- Organo															
	SAMPLE ID	LOCATION / Field Point Name	Sample Type Co /Grab	Date	Time	# Containers	Type Containers	Waste Water	Sewer Water	None	H-SO4	NaOH	HCL	HNO	Other	Cyanide (TOTA) thiosulfate befor ABCE	TTO (USEPA 624-Volatile Organic	TTO (USEPA 625- Semi Volatile Organic Compounds)	TTO (USEPA 608 - Organochlorine Pesticides and PCBs)	126 Priority Pollutants (see comnounds)														
/	Tiger Pit		G	10/30/18	07:55	1	250 ml poly Amb	Х			x	X				Х																		
Ĩ	Tiger Pit		G	10/30/18	07:55	1	250 ml poly	х			x					Х																		
	Source Water		G	-10/30/18		1	250 ml poly	Х			x	X				- X																		
	Source Water		G	1 0/30/18		1	250 ml poly	Х			x																							
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	Relinquish Relinquish	K		Date: 0/30/18 Date:	Time: p:0 Time:	2	ived By:	2	2						_	ICE/t ^e GOOD HEAD DECHI APPRO	COND SPACE ORIN	ITIC ABS ATE	ON SENT D IN	LAB_	RS_					1	ТО (ГТО	EPA (EPA ndix	A 62 A a	(8), T 25) s	TO (E) e ATI inalyze	FACH	ED	



Sample Receipt Checklist

Client Name: Project:	PG&E Gateway Ger Resample 1 (10/30/	-			Date and Time Received Date Logged:	10/30/2018 10:00 10/30/2018
Flojeci.	Resample 1 (10/30/	10)			Received by:	Jena Alfaro
WorkOrder №: Carrier:	1810E56 Client Drop-In	Matrix: <u>Water</u>			Logged by:	Agustina Venegas
		Chain of C	ustody	(COC) Infor	mation	
Chain of custody	present?		Yes	✓	No 🗌	
Chain of custody	signed when relinquis	hed and received?	Yes	✓	No 🗌	
Chain of custody	agrees with sample la	bels?	Yes	✓	No 🗌	
Sample IDs note	d by Client on COC?		Yes	✓	No 🗌	
Date and Time of	f collection noted by C	lient on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?		Yes	✓	No 🗌	
COC agrees with	Quote?		Yes		No 🗌	NA 🗹
		Sampl	e Rece	ipt Informati	on	
Custody seals int	act on shipping contai	ner/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good cond	ition?	Yes	✓	No 🗌	
Samples in prope	er containers/bottles?		Yes		No 🗌	
Sample containe	rs intact?		Yes		No	
Sufficient sample	volume for indicated	test?	Yes	✓	No 🗌	
		Sample Preservation	on and	<u>Hold Time (I</u>	HT) Information	
All samples recei	ved within holding time	e?	Yes	✓	No 🗌	
Samples Receive	ed on Ice?		Yes	✓	No 🗌	
		(Ice Type	e: WE	TICE)		
Sample/Temp Bla	ank temperature			Temp: 5.5	ö°C	
Water - VOA vial	s have zero headspac	e / no bubbles?	Yes	✓	No 🗌	
Sample labels ch	ecked for correct pres	ervation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2;	522: <4; 218.7: >8)?	Yes		No 🗌	NA 🖌
		pt (200.8: ≤2; 525.3: ≤4;	Yes		No 🗌	NA 🗹
Free Chlorine t	ested and acceptable	upon receipt (<0.1mg/L)?	Yes		No 🗌	NA 🗹

Comments:



Thursday, November 01, 2018

Angel Espiritu PG&E Gateway Generating Station 3225 Wilbur Ave Antioch, CA 94509

Re Lab Order: T101182 Project ID: RESAMPLE 1 (10/30/18) Collected By: MUSKAN ENVIRONMENTAL PO/Contract #:

Dear Angel Espiritu:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, October 30, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

CC: Daryl Sattelberg, PG&E Gateway Generating Station

David Hammond, PG&E Gateway Generating Station

Tim Wisdom, PG&E Gateway Generating Station

Enclosures

Project Manager: Eli N. Greenwald

11/1/2018 09:09



REPORT OF LABORATORY ANALYSIS

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Page 1 of 7



NELAP/ORELAP Certification 4036



SAMPLE SUMMARY

Lab Order: T101182 Project ID: RESAMPLE 1 (10/30/18)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T101182001	TIGER PIT (NAOH PRESERVED)	Water	10/30/2018 07:55	10/30/2018 09:53
T101182002	TIGER PIT (UNPRESERVED)	Water	10/30/2018 07:55	10/30/2018 09:53

11/1/2018 09:09



REPORT OF LABORATORY ANALYSIS

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Page 2 of 7





NARRATIVE

Lab Order: T101182 Project ID: RESAMPLE 1 (10/30/18)

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis are not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

11/1/2018 09:09



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ANALYTICAL RESULTS

Lab Order: T101182 Project ID: RESAMPLE 1 (10/30/18)

Lab ID T101182001 Sample ID TIGER PIT (NAOH	Date Collected Date Received	10/30/2018 07:55 10/30/2018 09:53	Matrix	water			
PRESERVED)	Dooult Lipito			Datah	Applyzed	Dotob	Qual
Parameters	Result Units	R. L.	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis	Analytical Method:	SM 4500-CN C/E-9			Analyzed by:	BCP	
Cyanide	20 ug/L	3	1		10/30/18 16:12	WCO 14042	
Lab ID T101182002	Date Collected	10/30/2018 07:55	Matrix	water			
Sample ID TIGER PIT (UNPRESERVED)	Date Received	10/30/2018 09:53					
Parameters	Result Units	R. L.	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis	Analytical Method:	SM 4500-CN C/E-9	9/11		Analyzed by:	BCP	
Cyanide	9.7 ug/L	3	1		10/30/18 16:12	WCO 14042	

11/1/2018 09:09



REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Lab Order:	T101182
Project ID:	RESAMPLE 1 (10/30/18)

Analysis Description:		otal Analysis				QC Ba			WCO/140			
Analysis Method:	SM 4500-C	N C/E-99/11				QC Ba	atch Met	thod:	SM 4500-	CN C/E-99/	11	
METHOD BLANK:		850434										
Parameter		Blank Result	Reporti Li	-	nits	Qualifiers						
Cyanide		ND		3 u	g/L							
LABORATORY CONTRO	OL SAMPLE:	850435	Spike Conc.	F	LCS Result		LCS % Rec		REC nits Qualifier			
Cyanide		ug/L	20		19.9		100	80-	120			
MATRIX SPIKE & MATRI	X SPIKE DUI	PLICATE: 850)436	8	350437	7						
Parameter	Units	T101182001 Result	Spike Conc.	MS Result		MSD esult	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide	ug/L		40	52.7		58.6	82	97	80-120	 11	20	

11/1/2018 09:09



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QUALITY CONTROL DATA QUALIFIERS

Lab Order: T101182 Project ID: RESAMPLE 1 (10/30/18)

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order:	T101182
Project ID:	RESAMPLE 1 (10/30/18)

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
T101182001	TIGER PIT (NAOH	SM 4500-CN C/E-99/11	WCO/14042		
T101182002	TIGER PIT (UNPRESERVED	SM 4500-CN C/E-99/11	WCO/14042		

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Page 7 of 7

	С	alt	tes	t					DDY	email: abo		
CLIENT:		YTICAL LA		RY		mple 1 (10/30	118)		-	.O. NUMBER	LAB ORDER #	T10/182
PG&	EG	atewa	y Go	neratio	n Ang	el Espiritu CA	710		Lever J	ANALYSES REQUESTED		
322	<u>5 N.</u>	ilbur	AU	e.			9450	19	AB			TURN-AROUND TIME
PHONE NUMBER	<u>Some</u>		HONE NUMBER				virity	00	CN Se			STANDARD
(925)5					Muskan	IGN NAME): Angel ESP Environmental S	ample.	S	SOO		DUE DATE	
	SAMPLED	TIME SAMPLED	SAMPLE MATRIX*	CONTAINER TYPE/ AMOUNT**	PRESERVATIVE	SAMPLE IDENTIFICATION / SITE	CLIENT LAB #	COMP. or GRAB	by Sry 4		Sumpl	es send un SCE
-1 11	0/30/12	07:55	Laster	FOR	No OH No Ne Perserved	Tiger Pit		grap	\times			
-2 10	0/30/13	07:55	Waster	500mi	Perserved	Tiger Pit Tiger Pit		drap	X		s RU:	
			Proc	1							A NO.	
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LL	10/30/18 09:03	Gle Imrie	Gelmie	10/30/18/0953	about
					00/

Υ.	Samples:			BIO	AA	sv	VOA	pH? Y/N TEMP	P: 0.6	SEALED:	QIN	INTACT: GIN	 *MATRIX: AQ = Aqueous Nondrinking Water, Digested Metals; FE = Low R.L.s, Aqueous Nondrinking Water, Digested Metals; DW = Drinking
INO	CC:	 AA											Water; SL = Soil Sludge, Solid ; FP = Free Product **CONTAINER TYPES: AL = Amber Liter; AHL = 500
AB USE	and services	HP			VOA			-	1				ml Amber; PT = Pint (Plastic); QT = Quart (Plastic); HG = Half Gallon (Plastic); SJ = Soil Jar; B4 = 4oz. BACT;
FOR LA	W/HNO3				NaOH								BT = Brass Tube; VOA = 40mL VOA; OTC - Other Type Container
	Wirino ₃			H₂SO₄	NaOH	NaOH	н						
	PIL:	HNO3	and the second	H ₂ SU ₄		NaUH		JL	2 16 20 1				R PR M F

S

10/29/18





Enthalpy Analytical

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 304625 ANALYTICAL REPORT

Pacific Gas & Electric 4801 Oakport Street Oakland, CA 94601 Project : STANDARD Location : Resample 1 (10/30/18) Level : II

<u>Sample ID</u>	<u>Lab ID</u>
TIGER PIT	304625-001
TIGER PIT	304625-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Will fice

Signature:

Will Rice Project Manager will.rice@enthalpy.com (510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Date: <u>10/31/2018</u>



CASE NARRATIVE

Laboratory number: Client: Location: Request Date: Samples Received: 304625 Pacific Gas & Electric Resample 1 (10/30/18) 10/30/18 10/30/18

This data package contains sample and QC results for two water samples, requested for the above referenced project on 10/30/18. The samples were received cold and intact.

Total Cyanide (SM4500CN-C,E):

Low recovery was observed for cyanide in the MS for batch 265009; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

5.0

CHAIN OF CUSTODY

Formerly Curtis & Tompkins Labs Cart Login # ANALYTICAL REQUEST 2323 Fifth Street Project Nome: Somple: Mukkan Ensistemmaskal Somplifier Project Nome: Somple: Mukkan Ensistemmaskal Somplifier Project Nome: Somple: Mukkan Ensistemmaskal Somplifier Project Nome: Project Nome: Report Level	3		ALPY							1	s L	f(c)	25	5				c	Chair	n of (of	1
2323 Fifth Street Phone (510) 486-0900 Fax (510) 486-0932 Berkeley, CA 94710 Fax (510) 486-0932 Sample: Musikan Ensistemental Search 7 Sample: Musikan Ensistemental Search 7 Project No: Sample: Musikan Ensistemental Search 7 Sample: Musikan Ensistemental Search 7 Sample: Musikan Ensistemental Search 7 Project No: Compony: PAEE Cabuxy Geneticity, Statistication Sample: Musikan Ensistemental Search 7 Sample: Musikan Ensistemental Search 7 Project No: Compony: PAEE Cabuxy Geneticity, Statistication Sample: Musikan Ensistement 7 Sample: Musikan Ensistement 7 Normary: Bernoric: Report tevel[11] IIII V Pelephone: (425) 522 - 7193.8 Particity Tunaround Time: Russ Istonatora Emoli: object 8 Collected 2010 Collected 2010 Collected 2010 Collected Collected 2019 Sign 47 Sign 47 Sign 47 Sign 47 Sign 47 Tigger, Pi + 10/30/1% 07:55 //3 1 X Image: 47 Sign 47 Notes: Sample: Sample: Sample: Sample: Reclaintener Sample: <td< td=""><td>Form</td><td>nerly Curtis & Tomp</td><td>kins Labs</td><td></td><td></td><td>C</td><td>C&T L</td><td>OGIN</td><td> #_</td><td>\sim</td><td></td><td></td><td></td><td>2</td><td></td><td>A</td><td>NAL</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Form	nerly Curtis & Tomp	kins Labs			C	C&T L	OGIN	#_	\sim				2		A	NAL								
Project Name: $\[\mbox{Resonable} l \] (10/30/18) \] Report To: Ange l Spiriture Academic Status Stat$	2323 F	ifth Street	Phone (51					C.	00				MAN												
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SAMPLE RECEIPT CHECK	KUST						12	27
Section 1: Login # 3		Client	r <u>PG</u>	+ E				
Date Received		Proje	ct:				ENT	HALPY
		Fille	ct:					
Section 2: Samples received		Yes, how m	,			V)		
If no cooler Sample Temp				Gun # 🗆 A, d				
-		rectly from the f	· · · ·	+			•	
If in cooler: Date Opened					A		<u> </u>	
Shipping info	(if applicable)							
Are custody se	eals present?	🖥 No, or 🗖 Yes	. If yes, where	? 🛛 on coolei	r, 🗆 on samples	s, 🗆 on pa	ckage	
🗆 Date	e:	How many	🗆 SI	gnature, 🗖 Initi	als, 🗖 None			
Were c	ustody seals int	act upon arrival	? 🗆 Yes 🛛	NO EN/	A			
Section 3:			Importa	nt : Notify PM if	temperature ex	ceeds 6°C	or arrive	e frozen
Packing in cooler: (if other	r, describe)				-			
🗆 Bubble Wrap, 🗆 Fo	oam blocks, 🗖 I	Bags, 🗖 None, Í	Cloth materi	al, 🛛 Cardboard	d, 🗖 Styrofoam,	🗆 Paper t	owels	
Samples received on ice						•		
Type of ice used : 🛛 We	1			+	ank(s) included?	□ Yes.	🗆 No	
Temperature measured us		·						
Cooler Temp (*C): #1:	-				#6:	#7.		
Section 4:	<u>, , , , , , , , , , , , , , , , , </u>					YES	NO	N/A
Were custody papers dry,	filled out prope	rly, and the proj	iert identifiable	3				
Were Method 5035 sampl				-				
If YES, what time we	The second s							
Did all bottles arrive unbro								
Are there any missing / ex								
Are samples in the approp	to a second or the second of the second second second	for indicated te	sts?					Barrie (d.) Barrie (d.)
Are sample labels present,		the second s	the second s		·	- <u>F</u>		
Does the container count i							-	
Do the sample labels agree				•	· · · ·			
Was sufficient amount of s		and the second secon	?				-	
Did you change the hold ti	and an end of the second s	and the second						والمعرفة والمعرفين والمعرفة و
Did you change the hold ti		in the second						
Are bubbles > 6mm absent								
Was the client contacted c			?			-		
If YES, who was called	in the second		By		Date:			tininininininininini L
Section 5:			<u> </u>		Date	YES	NO	N/A
Are the samples appropria	itely preserved?	(if N/A skin	the rest of sec	tion 5)	· · · · · · · · · · · · · · · · · · ·	163	NO	IN/A
Did you check preservative								
Did you document your pr						+	-	
pH strip lot# <u>H(13</u>				, pH strip lot	H#			81
Preservative added:								
H2SO4 lot#	added to	samples			on/a	t		
HCL lot#		samples			on/a			
HNO3 lot#		samples			on/a			
NaOH lot# 164274		samples 13	<u></u>		on/a		8 12	:57
Section 6:	<u>\</u>		, 		Onya	· Lot M	0 12	~>
Explanations/Comments:								
		<u></u>						
		<u></u>						
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Data Lamad in INRI			×,	· ·	 h .			····
Date Logged in 1012		By (print)	4ML	(s	ign) - H - U			`
Date Labeled <u>10</u> 2		ly (print)	AC	(s	ign)	\sim		
	· · · · ·							

Enthalpy Sample Preservation for 304625

Sample	pH:	<2	2	> 2	Э	>12	<u>Other</u>
-001a	-	[]	[]	[]	<u></u>
b		[]	[]	[]	

Analyst: $M_{\text{Date:}}$



Detections Summary for 304625

Results for any subcontracted analyses are not included in this summary.

Client : Pacific Gas & Electric Project : STANDARD Location : Resample 1 (10/30/18)

Client Sample ID : TIGER PIT	Laboratory Sample ID :	304625-001
No Detections		
Client Sample ID : TIGER PIT	Laboratory Sample ID :	304625-002
No Detections		



0.0031

	Tota	al Cyanide	
	1000		
Lab #:	304625	Location:	Resample 1 (10/30/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	265009
Field ID:	TIGER PIT	Sampled:	10/30/18
Matrix:	Water	Received:	10/30/18
Units:	mg/L	Prepared:	10/30/18
Diln Fac:	1.000	Analyzed:	10/31/18
Type Lab	ID Result	RL	MDL
SAMPLE 304625	-001 ND	0.010	0.0031
SAMPLE 304625	-002 ND	0.010	0.0031

0.010

ND= Not Detected at or above MDL RL= Reporting Limit MDL= Method Detection Limit Page 1 of 1

BLANK QC953688

ND

2.1



Batch QC Report

	Tota	al Cyanide	
Lab #:	304625	Location:	Resample 1 (10/30/18)
Client:	Pacific Gas & Electric	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500CN-C,E
Analyte:	Cyanide	Batch#:	265009
Field ID:	ZZZZZZZZZ	Sampled:	10/24/18
MSS Lab ID:	304494-011	Received:	10/24/18
Matrix:	Water	Prepared:	10/30/18
Units:	mg/L	Analyzed:	10/31/18
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC953689		0.1000	0.08530	85	76-120		
MS	QC953690	<0.01000	0.1000	0.05860	59 *	66-120		
MSD	QC953691		0.1000	0.06700	67	66-120	13	28

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1

3.0

Attachment 4

Analytical Report on Resampling #2



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1811249

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue Antioch, CA 94509

Project Contact:	Angel Espiritu
Project P.O.:	
Project:	Resample 2 (11/7/18)

Project Received: 11/07/2018

Analytical Report reviewed & approved for release on 11/08/2018 by:

/ai Coo

Yen Cao Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com CA ELAP 1644 ♦ NELAP 4033 ORELAP



Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station

Project: Resample 2 (11/7/18)

WorkOrder: 1811249

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 μm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client:	PG&E Gateway Generating Station
Date Received:	11/7/18 9:45
Date Prepared:	11/7/18
Project:	Resample 2 (11/7/18)

WorkOrder:	1811249
Extraction Method:	SM4500-CN ⁻ E
Analytical Method:	SM4500-CN ⁻ CE
Unit:	μg/L

		Cyanide, '	Fotal				
Client ID	Lab ID	Matrix	Date Co	ollected	Instrument		Batch ID
Tiger Pit-Amber	1811249-001A	Water	11/07/20	18 08:06	WC_SKALAR	110718A1_21	167990
Analytes	<u>Result</u>		<u>RL</u>	DF		Date	Analyzed
Total Cyanide	ND		1.0	1		11/07	7/2018 11:36

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Colle	cted	Instrument	Batch ID
Tiger Pit-Clear	1811249-002A	Water	11/07/2018	08:06	WC_SKALAR 110718A1_24	167990
Analytes	Result		RL	<u>DF</u>	Date	Analyzed
Total Cyanide	ND		1.0	1	11/0	7/2018 11:47

Analyst(s): NM

Quality Control Report

Client:	PG&E Gateway Generating Station	WorkOrder:	1811249
Date Prepared:	11/7/18	BatchID:	167990
Date Analyzed:	11/7/18	Extraction Method:	SM4500-CN ⁻ E
Instrument:	WC_SKALAR	Analytical Method:	SM4500-CN ⁻ CE
Matrix:	Water	Unit:	μg/L
Project:	Resample 2 (11/7/18)	Sample ID:	MB/LCS/LCSD-167990
			1811249-001AMS/MSD

QC Summary Report for SM4500-CN⁻ CE

Analyte		MB Result			RL					
Total Cyanide		ND			1.0	-	-		-	
Analyte		LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide		39	40	40		98	99	90-110	1.36	20
Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Total Cyanide	1	41	42	40	ND	102	106	80-120	4.27	20

McCampbell Analytica 1534 Willow Pass Rd Pittsburg, CA 94565-1701	l, Inc.			CHA	IN-O	F-CU	STOD	Y RE	CORE		Page	1 of 1	
				WorkO	rder: 18	811249	Clien	tCode:	PGEA				
(925) 252-9262	WaterTrax	WriteOn	EDF	Exc	el [EQuIS	🖌 Email		HardCopy	☐ ThirdPa	irty	UJ-flag	J
				Det	ection Sum	nmary	Dry-W	eight					
Report to:					Bill to:				Re	quested TAT:	1	l day;	
Angel Espiritu		abe4@pge.com			0	el Espiritu							
PG&E Gateway Generating Station 3225 Wilbur Avenue	cc/3rd Party: , PO:	A1HE@pge.com	; J5Ld@pge.con	n; tIWY@	-	E Gatewa 5 Wilbur Av	y Generating venue	g Statior		te Received:	, .	11/07/20)18
Antioch, CA 94509 (925) 459-7212 FAX:	Project:	Resample 2 (11/	7/18)		Antio	och, CA 94	509		Da	te Logged:]	11/07/20)18
							Requeste	d Tests	(See legend	l below)			
Lab ID Client I	ס	Matrix	Collection Date	Hold	1 2	3	4 5	6	7	89	10	11	12

1811249-001	Tiger Pit-Amber	Water	11/7/2018 08:06	□ A				
1811249-002	Tiger Pit-Clear	Water	11/7/2018 08:06	A				

Test Legend:

1	CN_SM4500CE_W
5	
9	

2	
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Agustina Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

WORK ORDER SUMMARY

Client Name	e: PG&E GAT	FEWAY GENERAT	ING STATION	N Pr	oject: Resan	nple 2 (11/7/	(18)			Wor	k Order:	1811249
Client Conta	act: Angel Espin	ritu								Q	QC Level:	LEVEL 2
Contact's Er	mail: abe4@pge.d	com		Co	omments:					Date	Logged:	11/7/2018
		WaterTrax	WriteOn	EDF	Excel	Fax	✓ Email	HardCo	opyThirdPart	у 🗌	J-flag	
Lab ID	Client ID	Matrix	Test Name		Container /Composit		2 Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1811249-001A	Tiger Pit-Amber	Water	SM4500-CN ⁻ 0	CE (Cyanide, Total)	1		DPE w/ NaOH + Ja2S2O3		11/7/2018 8:06	1 day		
1811249-002A	Tiger Pit-Clear	Water	SM4500-CN ⁻ 0	CE (Cyanide, Total)	1	250mL HE	DPE w/ Na2S2O3		11/7/2018 8:06	1 day	None	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

	Webs	site: w		4 WILLO TSBURG, npbell.com	W PAS CA 94	SS ROAD 565-1701 ail: main	@mc	cam		com		2	L		Geol		RO	UN	DT	IMI J	E PDI	R F C	Ø≯ USH]]	Exc	□ 24 H el	R	48 W1		72 On	□ 2 HR (DW		
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	fo: Angel E					ill To: P	G&I	E Ga	tewa	у				_					Anal	ysis	Req	uest						+		Rem	arks	
Compan	y: PG&E	Gate	way Gene	erating St	ation	1								-			s)	CBs)	isted													
E-Mail:	abe4@pge.c	om, A	1HE@ng	e.com, J5I	d@n	ge.com. tl	WY	nge	.com	DJ	H2@	nge	.com		- C		puno)d pu	uly l													
and the second se	5) 522-7838		and the second second second second	the second s	the second second second	ax: ()	21055				PBC		-	1500	(spur	omp	les aı	lyze (
Project	the second se		ample			7/18)								th so SM 4	nodu	nic C	sticic	ana													
	Location: T	liger	Pit, Sour	ce Water					_				11		yd wi	ic Co	Orga	ne Pe	dix E													
Sampler	Signature		Inska	Env	iro	nmer	ta	1	يەخ	mp	lig	5	4		eate ing)	rgani	atile	hlori	ppen													
		mposite	SAMP	LING		S	Ma		МЕТ	нон	D PR	ESE	RVE	D	L) (Pretreated with sodium e preserving) by SM 4500 CN-	Volatile O	Semi Volatile Organic Compounds)	- Organoc	Pollutants (see Appendix B analyze only listed													
AMPLE ID	LOCATION / Field Point Name	Sample Type Composite, /Grab	Date	Time	# Containers	Type Containers	Waste Water	Sewer Water	None	H-SO4	NaOH	HCL	HNO	Other	Cyanide (TOTAL) thiosulfate before p ABCE	TTO (USEPA 624-Volatile Organic Compounds)	TTO (USEPA 625-	TTO (USEPA 608 – Organochlorine Pesticides and PCBs)	126 Priority Polluts compounds)													
Figer Pit		G	11/7/18	08:06	1	250 ml poly Amb	X			×	Х			7	X																	
Figer Pit		G	11/7/18	08:06	1	250 ml poly	X		3	X				2	x																	
ource		G	11/7/18		1	250 ml poly	X			×	Х			2	X																	
Water		G	11/7/18		1	250 ml	x			x			_	-						$\left \right $		+-				_		+				
ource Vater		<u> </u>	11///10			poly			-+-	1				ť	×									1								
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Relinquish Relinquish	C		Date: \ / 7 / 1 & Date:	Time: OG'.Y Time:	C	ived By:		2			-				ICE/t ^e _ GOOD HEAD S DECHI APPRO	CONE SPACI .ORIN	DITIO E ABS	N SENT D IN	LAB_	RS						TO (E TO (E ppend	EPA 6	625) so and a	TTO (I ee Al	EPA 62 FTACI ze only	IED	



Sample Receipt Checklist

Client Name: Project:	PG&E Gateway Ger Resample 2 (11/7/1	-			Date and Time Received Date Logged:	11/7/2018 09:45 11/7/2018
Floject.		b)			Received by:	Jena Alfaro
WorkOrder №: Carrier:	1811249 <u>Client Drop-In</u>	Matrix: <u>Water</u>			Logged by:	Agustina Venegas
		Chain of C	ustody	(COC) Infor	mation	
Chain of custody	present?		Yes		No 🗌	
Chain of custody	signed when relinquis	hed and received?	Yes	✓	No 🗌	
Chain of custody	agrees with sample la	abels?	Yes	✓	No 🗌	
Sample IDs note	d by Client on COC?		Yes	✓	No 🗌	
Date and Time of	f collection noted by C	lient on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?		Yes	✓	No 🗌	
COC agrees with	Quote?		Yes		No 🗌	NA 🗹
		Sampl	e Rece	ipt Informati	<u>on</u>	
Custody seals int	tact on shipping conta	iner/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good cond	ition?	Yes	✓	No 🗌	
Samples in prope	er containers/bottles?		Yes		No 🗌	
Sample containe	rs intact?		Yes		No 🗌	
Sufficient sample	volume for indicated	test?	Yes	✓	No 🗌	
		Sample Preservation	on and	<u>Hold Time (I</u>	HT) Information	
All samples recei	ived within holding tim	e?	Yes	✓	No 🗌	
Samples Receive	ed on Ice?		Yes	✓	No 🗌	
		(Ісе Туре	e: WE	TICE)		
Sample/Temp Bla	ank temperature			Temp: 5.6	°C	
Water - VOA vial	s have zero headspac	e / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	ecked for correct pres	ervation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2;	522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹
		pt (200.8: ≤2; 525.3: ≤4;	Yes		No 🗌	NA 🔽
Free Chlorine t	ested and acceptable	upon receipt (<0.1mg/L)?	Yes		No 🗌	NA 🗸



Friday, November 09, 2018

Angel Espiritu PG&E Gateway Generating Station 3225 Wilbur Ave Antioch, CA 94509

Re Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18) Collected By: MUSKAN ENV. PO/Contract #:

Dear Angel Espiritu:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, November 07, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

CC: Daryl Sattelberg, PG&E Gateway Generating Station

David Hammond, PG&E Gateway Generating Station

Tim Wisdom, PG&E Gateway Generating Station

Enclosures

Project Manager: Eli N. Greenwald

11/9/2018 15:44



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NELAP/ORELAP Certification 4036



SAMPLE SUMMARY

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T110273001	TIGER PIT (NAOH PRESERVED)	Water	11/07/2018 08:06	11/07/2018 09:58
T110273002	TIGER PIT (UNPRESERVED)	Water	11/07/2018 08:06	11/07/2018 09:58

11/9/2018 15:44



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NARRATIVE

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Filtrations performed at Caltest for dissolved metals (excluding mercury) and/or pH analysis are not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

Qualifiers and Compound Notes

1

2

Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

The sample was received unpreserved. At the time of the analysis, the measured pH of the sample was 10.



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ANALYTICAL RESULTS

Lab Order: T110273 Project ID: RESAMPLE 2 (11/7/18)

Lab ID T110273001 Sample ID TIGER PIT (NAO PRESERVED)	Date Collected H Date Received		/2018 08:06 /2018 09:58		Matrix	Water			
Parameters	Result Units	R. L.	MDL	DF Prepare	d B	atch	Analyzed	Batch	Qual
Cyanide, Total Analysis Cyanide	Analytical Method: J2.5 ug/L	SM 3	4500-CN C/E 0.90	-99/11 1			Analyzed by: 11/07/18 16:47	BCP WCO 14067	1
Lab ID T110273002 Sample ID TIGER PIT (UNPRESERVED	Date Collected Date Received		/2018 08:06 /2018 09:58		Matrix	Water			
Parameters	Result Units	R. L.	MDL	DF Prepare	d B	atch	Analyzed	Batch	Qual
Cyanide, Total Analysis Cyanide	Analytical Method: J1.1 ug/L	SM 3	4500-CN C/E 0.90	-99/11 1			Analyzed by: 11/07/18 16:47	BCP WCO 14067	1,2

11/9/2018 15:44



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QUALITY CONTROL DATA

Lab Order:	T110273
Project ID:	RESAMPLE 2 (11/7/18)

Analysis Description: Analysis Method:	Cyanide, Tota SM 4500-CN				QC B QC B	atch: atch Met	hod:	WCO/140 SM 4500-	67 CN C/E-99/1	1
METHOD BLANK:		851944								
Parameter		Blank Result	Reportir Lin	-	Units	Qualifie	ers			
Cyanide		ND		3 0.9	ug/L					
LABORATORY CONTRO	DL SAMPLE:	851945								
Parameter	U	nits	Spike Conc.	LC Resi		LCS % Rec	% R Lin	EC nits Qualifier		
		nits	•		ilt			nits Qualifier		
Cyanide	 Uį	g/L JCATE: 851	20 946	Resu 20 8519	1 lt 2 947	% Rec	Lin 80-1	Qualifier		
Parameter Cyanide MATRIX SPIKE & MATR Parameter	 Uį	g/L	20	Resu 20	2	% Rec	Lin	nits Qualifier	RPD	Max RPD Qualifiers

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QUALITY CONTROL DATA QUALIFIERS

Lab Order:	T110273
Project ID:	RESAMPLE 2 (11/7/18)

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.

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1



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ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order:	T110273
Project ID:	RESAMPLE 2 (11/7/18)

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch	
T110273001	TIGER PIT (NAOH	SM 4500-CN C/E-99/11	WCO/14067			
T110273002	TIGER PIT (UNPRESERVED)	SM 4500-CN C/E-99/11	WCO/14067			

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	ELLY ROAD NAPA, CA 94558 (707) 258-4000 FAX (7 SAMPLE CHAIN OF CUSTODY	07) 226-1001	PAGE OF
PROJECT NA	IDEED TATTA	P.O. NUMBER	LAB ORDER #
PGEE Cotoway Generation Station	Angel Éspiritu /email: Oppe.com	ANALYSES REQUESTED	
3225 Niber Ave. BILLING ADDRESS:	CA 94509	22 Ashira	
PHONE NUMBER: (925)522-7838 Mu	LER (PRINT & SIGN NAME): skan Environmental Sampling A		
		1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	DUE DATE:
CALTEST LAB # DATE SAMPLED TIME SAMPLED SAMPLE CONTAINER # TYPE/ AMOUNT** PRO	ESERVATIVE SAMPLE IDENTIFICATION / SITE CLIENT LAB # GRAE	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	somples scul in ICE
11/7/18 08:06 wite 500 ml No	OH Tiger Pit Grad ne Tiger Pit Grad		L REPORT PI
-2-11/7/18 08:06 Hoster Paly Per	serve Tiger Pit Gral	<u>'</u>	OMPANY FINA
			RUSH
			HITE - LABOR
			×

	A	RELINQUISHED BY DATE/TIME RECEIVED BY				RELIN	IQUISHED BY	DATE/TIME	RECEIVED BY				
	A	H			11/7/	08:47	se	_Om	rie	pl.	Imic	11/7/18/0958	
		0	1			/ ''							1 Au
	Samples:	wc X	MICRO	BIO	AA	SV	VOA	pH? Y/N TEMP	2.4	SEALED:			*MATRIX: AQ = Aqueous Nondrinking Water, Digested Metals; FE = Low R.L.s, Aqueous Nondrinking Water,
ONLY	BD:	BIO	WC AA					COMMEN	TS:		Digested Metals; DW = Drinking Water; SL = Soil Sludge, Solid ; FP = Free Product		
	CC:	AA	sv	VOA						1998年1月2日			**CONTAINER TYPES: AL = Amber Liter; AHL = 500 ml Amber; PT = Pint (Plastic); QT = Quart (Plastic); HG = Half
SLAB	SIL:	HP	РТ	QT	VOA		(* 14 f.) 1 f						Gallon (Plastic); SJ = Soil Jar; B4 = 4oz. BACT; BT = Brass Tube; VOA = 40mL VOA; OTC - Other Type Container
FOR	W/HNO3		H ₂ SO ₄		NaOH		有县政家。			生物动行动			
	PIL:	HNO3		H ₂ SO ₄		NaOH	н	CL					R PR M F

