

DOCKETED

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Project Title:	Contra Costa Power Plant Project Compliance
TN #:	232519
Document Title:	ACR RY 2019 for GGS_2of4 parts
Description:	N/A
Filer:	Angel B. Espiritu
Organization:	PG&E Gateway Generating Station
Submitter Role:	Applicant Representative
Submission Date:	3/24/2020 11:53:09 AM
Docketed Date:	3/24/2020



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: AA1
Matrix: Water
Project: Quarterly sampling (September 2019)

WorkOrder: 1909181
BatchID: 184762
Extraction Method: E245.2
Analytical Method: E245.2
Unit: µg/L
Sample ID: MB/LCS/LCSD-184762
1909181-002EMS/MSD

QC Summary Report for Mercury

Analyte	MB Result	MDL	RL			
Mercury	ND	0.14	0.20	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Mercury	2.1	2.0	2	106	102	85-115	3.57	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Mercury	1	2.2	2.1	2	ND	109	104	80-120	4.33	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Mercury	ND	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/4/19
Date Analyzed: 9/5/19
Instrument: ICP-MS1
Matrix: Water
Project: Quarterly sampling (September 2019)

WorkOrder: 1909181
BatchID: 184709
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-184709

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.12	0.50	-	-	-
Cadmium	ND	0.060	0.50	-	-	-
Chromium	ND	0.36	0.50	-	-	-
Copper	ND	0.43	0.50	-	-	-
Iron	ND	58	100	-	-	-
Lead	ND	0.32	0.50	-	-	-
Molybdenum	ND	0.21	0.50	-	-	-
Nickel	ND	0.58	1.0	-	-	-
Selenium	ND	0.18	0.50	-	-	-
Silver	ND	0.042	0.50	-	-	-
Zinc	ND	11	20	-	-	-

Surrogate Recovery

Terbium	500	500	100	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	52	53	50	104	106	85-115	1.45	20
Cadmium	53	53	50	105	106	85-115	0.493	20
Chromium	53	53	50	107	106	85-115	0.527	20
Copper	54	53	50	107	106	85-115	0.881	20
Iron	5200	5200	5000	105	104	85-115	0.441	20
Lead	52	51	50	104	103	85-115	1.14	20
Molybdenum	50	50	50	100	100	85-115	0	20
Nickel	54	53	50	108	105	85-115	2.44	20
Selenium	53	54	50	106	108	85-115	1.59	20
Silver	50	50	50	101	100	85-115	0.877	20
Zinc	540	540	500	108	109	85-115	0.980	20

Surrogate Recovery

Terbium	520	520	500	104	104	70-130	0	20
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Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/9/19
Date Analyzed: 9/9/19
Instrument: WC_SKALAR
Matrix: Water
Project: Quarterly sampling (September 2019)

WorkOrder: 1909181
BatchID: 184921
Extraction Method: E420.4
Analytical Method: E420.4
Unit: µg/L
Sample ID: MB/LCS/LCSD-184921

QC Summary Report for E420.4

Analyte	MB Result	MDL	RL			
Phenolics	ND	2.0	2.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Phenolics	38	40	40	96	99	80-120	0	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: WetChem
Matrix: Water
Project: Quarterly sampling (September 2019)

WorkOrder: 1909181
BatchID: 184788
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C-1997
Unit: mg/L
Sample ID: MB-184788

QC Summary Report for Total Dissolved Solids

Analyte	MB Result	MDL	RL			
Total Dissolved Solids	ND	10.0	10.0	-	-	-



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/5/19
Instrument: WetChem
Matrix: Water
Project: Quarterly sampling (September 2019)

WorkOrder: 1909181
BatchID: 184719
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D-1997
Unit: mg/L
Sample ID: MB-184719

QC Summary Report for Total Suspended Solids

Analyte	MB Result	MDL	RL			
Total Suspended Solids	ND	1.00	1.00	-	-	-



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1909181

ClientCode: PGEA

☐ WaterTrax☐ WriteOn☐ EDF☐ Excel☐ EQuIS☒ Email☐ HardCopy☐ ThirdParty☐ J-flag☐ Detection Summary☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com; J5Ld@pge.com;
PO:
Project: Quarterly sampling (September 2019)

Bill to:

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

Requested TATs: 5 days;
7 days;

Date Received: 09/05/2019

Date Logged: 09/05/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1909181-001	E-001 9/4/19 10:40	Water	9/4/2019 10:40	☐	B	A								A		
1909181-001	E-001 9/5/19 11:35	Water	9/5/2019 11:35	☐	D	C	E		F				E			
1909181-002	E-001 9/5/19 11:00	Water	9/5/2019 11:00	☐				A		B	E	F		A	C	D

Test Legend:

1	1664A_SG_W
5	CN_SM4500CE_W
9	PHENOLICS_W

2	1664A_W
6	COD_W
10	PRDisposal Fee

3	AMMONIA-SM4500BG_W
7	HG_W
11	TDS_W

4	BOD_W
8	METALSMS_TTLC_W
12	TSS_W

Project Manager: Angela Rydelius

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.



McC Campbell 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 STATION

Project: Quarterly sampling (September 2019)

Work Order: 1909181

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 9/5/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1909181-001A	E-001 9/4/19 10:40	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	1	1LA w/ HCl	☐	9/4/2019 10:40	5 days	1%+	☐	
1909181-001B	E-001 9/4/19 10:40	Water	E1664A (SGT- HEM; Non-polar Material)	1	1L w/ HCl	☐	9/4/2019 10:40	5 days	1%+	☐	
1909181-001C	E-001 9/5/19 11:35	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	1	1LA w/ HCl	☐	9/5/2019 11:35	5 days	1%+	☐	
1909181-001D	E-001 9/5/19 11:35	Water	E1664A (SGT- HEM; Non-polar Material)	1	1LA w/ HCl	☐	9/5/2019 11:35	5 days	1%+	☐	
1909181-001E	E-001 9/5/19 11:35	Water	E420.4 (Phenolics)	1	500mL aG w/ H2SO4	☐	9/5/2019 11:35	5 days	1%+	☐	
			SM4500-NH3 BG (Ammonia Nitrogen)			☐		5 days	1%+	☐	
1909181-001F	E-001 9/5/19 11:35	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3	☐	9/5/2019 11:35	5 days	1%+	☐	
1909181-002A	E-001 9/5/19 11:00	Water	SM5210B (BOD)	1	1L HDPE, unprsv.	☐	9/5/2019 11:00	7 days	None	☐	
1909181-002B	E-001 9/5/19 11:00	Water	SM5220D (COD)	2	aVOA w/ H2SO4	☐	9/5/2019 11:00	5 days	None	☐	
1909181-002C	E-001 9/5/19 11:00	Water	SM2540C (TDS)	1	500mL HDPE, unprsv.	☐	9/5/2019 11:00	5 days	None	☐	
1909181-002D	E-001 9/5/19 11:00	Water	SM2540D (TSS)	1	1L HDPE, unprsv.	☐	9/5/2019 11:00	5 days	None	☐	
1909181-002E	E-001 9/5/19 11:00	Water	E245.2 (Mercury)	1	250mL HDPE w/ HNO3	☐	9/5/2019 11:00	5 days	None	☐	
1909181-002F	E-001 9/5/19 11:00	Water	E200.8 (Metals) <Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Molybdenum, Nickel, Selenium, Silver, Zinc>	1	250mL HDPE w/ HNO3	☐	9/5/2019 11:00	5 days	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.



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **Quarterly sampling (September 2019)**

Date and Time Received: **9/5/2019 13:05**

Date Logged: **9/5/2019**

Received by: **Jena Alfaro**

Logged by: **Kena Ponce**

WorkOrder No: **1909181** Matrix: Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 1.4°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☒ No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes ☒ No ☐	NA ☐

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1909182

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue
Antioch, CA 94509

Project Contact: Angel Espiritu

Project P.O.:

Project: Semi-Annual Sampling (September 2019)

Project Received: 09/05/2019

Analytical Report reviewed & approved for release on 09/12/2019 by:

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.





Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station
Project: Semi-Annual Sampling (September 2019)
WorkOrder: 1909182

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
LQL	Lowest Quantitation Level
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)



Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station
Project: Semi-Annual Sampling (September 2019)
WorkOrder: 1909182

Quality Control Qualifiers

F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 9/5/19 13:05
Date Prepared: 9/6/19
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
Extraction Method: E608/SW3620B
Analytical Method: E608
Unit: µg/L

Organochlorine Pesticides + PCBs w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1909182-001D	Water	09/05/2019 11:35	GC22 09061912.D	184831

Analytes	Result	MDL	RL	DE	Date Analyzed
Aldrin	ND	0.00028	0.0010	1	09/06/2019 18:47
a-BHC	ND	0.00031	0.0010	1	09/06/2019 18:47
b-BHC	ND	0.00069	0.0010	1	09/06/2019 18:47
d-BHC	ND	0.00014	0.0010	1	09/06/2019 18:47
g-BHC	ND	0.00045	0.0010	1	09/06/2019 18:47
Chlordane (Technical)	ND	0.0023	0.020	1	09/06/2019 18:47
p,p-DDD	ND	0.00011	0.0010	1	09/06/2019 18:47
p,p-DDE	ND	0.00018	0.0010	1	09/06/2019 18:47
p,p-DDT	ND	0.00017	0.0010	1	09/06/2019 18:47
Dieldrin	ND	0.00014	0.0010	1	09/06/2019 18:47
Endosulfan I	ND	0.00011	0.0010	1	09/06/2019 18:47
Endosulfan II	ND	0.00046	0.0010	1	09/06/2019 18:47
Endosulfan sulfate	ND	0.00033	0.0020	1	09/06/2019 18:47
Endrin	ND	0.00018	0.0010	1	09/06/2019 18:47
Endrin aldehyde	ND	0.00053	0.0010	1	09/06/2019 18:47
Heptachlor	ND	0.00041	0.0010	1	09/06/2019 18:47
Heptachlor epoxide	ND	0.00025	0.0010	1	09/06/2019 18:47
Methoxychlor	ND	0.00012	0.0010	1	09/06/2019 18:47
Toxaphene	ND	0.0020	0.020	1	09/06/2019 18:47
Aroclor1016	ND	0.0019	0.020	1	09/06/2019 18:47
Aroclor1221	ND	0.0024	0.020	1	09/06/2019 18:47
Aroclor1232	ND	0.0038	0.020	1	09/06/2019 18:47
Aroclor1242	ND	0.0028	0.020	1	09/06/2019 18:47
Aroclor1248	ND	0.0018	0.020	1	09/06/2019 18:47
Aroclor1254	ND	0.0015	0.020	1	09/06/2019 18:47
Aroclor1260	ND	0.0028	0.020	1	09/06/2019 18:47
PCBs, total	ND	N/A	0.020	1	09/06/2019 18:47

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	81	14-168	09/06/2019 18:47

Analyst(s): CK



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 9/5/19 13:05
Date Prepared: 9/5/19
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
Extraction Method: E624
Analytical Method: E624
Unit: µg/L

Acrolein, Acrylonitrile, & 2-Chloroethyl Vinyl Ether

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1909182-001B	Water	09/05/2019 11:35	GC45 09051913.D	184803

Analytes	Result	RL	DE	Date Analyzed
Acrolein (Propenal)	ND	5.0	1	09/05/2019 16:46
Acrylonitrile	ND	2.0	1	09/05/2019 16:46
2-Chloroethyl Vinyl Ether	ND	1.0	1	09/05/2019 16:46

Surrogates	REC (%)	Limits	
Dibromofluoromethane	109	65-165	09/05/2019 16:46

Analyst(s): KF



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 9/5/19 13:05
Date Prepared: 9/11/19
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
Extraction Method: E624
Analytical Method: E624
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1909182-001A	Water	09/05/2019 11:35	GC10 09101931.D	184941

Analytes	Result	RL	DE	Date Analyzed
Benzene	ND	0.50	1	09/11/2019 03:49
Bromodichloromethane	1.1	0.50	1	09/11/2019 03:49
Bromoform	ND	0.50	1	09/11/2019 03:49
Bromomethane	ND	0.50	1	09/11/2019 03:49
Chlorobenzene	ND	0.50	1	09/11/2019 03:49
Chloroethane	ND	0.50	1	09/11/2019 03:49
Chloroform	1.1	0.50	1	09/11/2019 03:49
Chloromethane	ND	0.50	1	09/11/2019 03:49
Dibromochloromethane	ND	0.50	1	09/11/2019 03:49
1,2-Dichlorobenzene	ND	0.50	1	09/11/2019 03:49
1,3-Dichlorobenzene	ND	0.50	1	09/11/2019 03:49
1,4-Dichlorobenzene	ND	0.50	1	09/11/2019 03:49
1,1-Dichloroethane	ND	0.50	1	09/11/2019 03:49
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	09/11/2019 03:49
1,1-Dichloroethene	ND	0.50	1	09/11/2019 03:49
trans-1,2-Dichloroethene	ND	0.50	1	09/11/2019 03:49
1,2-Dichloropropane	ND	0.50	1	09/11/2019 03:49
cis-1,3-Dichloropropene	ND	0.50	1	09/11/2019 03:49
trans-1,3-Dichloropropene	ND	0.50	1	09/11/2019 03:49
Ethylbenzene	ND	0.50	1	09/11/2019 03:49
Methylene chloride	ND	2.0	1	09/11/2019 03:49
1,1,2,2-Tetrachloroethane	ND	0.50	1	09/11/2019 03:49
Tetrachloroethene	ND	0.50	1	09/11/2019 03:49
Toluene	ND	0.50	1	09/11/2019 03:49
1,1,1-Trichloroethane	ND	0.50	1	09/11/2019 03:49
1,1,2-Trichloroethane	ND	0.50	1	09/11/2019 03:49
Trichloroethene	ND	0.50	1	09/11/2019 03:49
Trichlorofluoromethane	ND	0.50	1	09/11/2019 03:49
Vinyl chloride	ND	0.50	1	09/11/2019 03:49
Surrogates	REC (%)	Limits		
Dibromofluoromethane	97	78-112		09/11/2019 03:49
Toluene-d8	98	82-109		09/11/2019 03:49
4-BFB	91	63-121		09/11/2019 03:49

Analyst(s): KF



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 9/5/19 13:05
Date Prepared: 9/5/19
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
Extraction Method: E625
Analytical Method: E625
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
E-001	1909182-001C	Water	09/05/2019 11:35		GC21 09061935.D	184776
Analytes	Result	RL	DE	Date Analyzed		
Acenaphthene	ND	0.0095	1	09/07/2019 00:39		
Acenaphthylene	ND	0.0095	1	09/07/2019 00:39		
Anthracene	ND	0.0095	1	09/07/2019 00:39		
Benzidine	ND	4.7	1	09/07/2019 00:39		
Benzo (a) anthracene	ND	0.019	1	09/07/2019 00:39		
Benzo (a) pyrene	ND	0.0095	1	09/07/2019 00:39		
Benzo (b) fluoranthene	ND	0.0047	1	09/07/2019 00:39		
Benzo (g,h,i) perylene	ND	0.019	1	09/07/2019 00:39		
Benzo (k) fluoranthene	ND	0.0095	1	09/07/2019 00:39		
Bis (2-chloroethoxy) Methane	ND	0.95	1	09/07/2019 00:39		
Bis (2-chloroethyl) Ether	ND	0.0047	1	09/07/2019 00:39		
Bis (2-chloroisopropyl) Ether	ND	0.0095	1	09/07/2019 00:39		
Bis (2-ethylhexyl) Phthalate	0.63	0.095	1	09/07/2019 00:39		
4-Bromophenyl Phenyl Ether	ND	0.95	1	09/07/2019 00:39		
Butylbenzyl Phthalate	0.16	0.047	1	09/07/2019 00:39		
4-Chloro-3-methylphenol	ND	0.95	1	09/07/2019 00:39		
2-Chloronaphthalene	ND	0.95	1	09/07/2019 00:39		
2-Chlorophenol	ND	0.019	1	09/07/2019 00:39		
4-Chlorophenyl Phenyl Ether	ND	0.95	1	09/07/2019 00:39		
Chrysene	ND	0.0095	1	09/07/2019 00:39		
Dibenzo (a,h) anthracene	ND	0.0095	1	09/07/2019 00:39		
Di-n-butyl Phthalate	0.047	0.019	1	09/07/2019 00:39		
1,2-Dichlorobenzene	ND	1.9	1	09/07/2019 00:39		
1,3-Dichlorobenzene	ND	1.9	1	09/07/2019 00:39		
1,4-Dichlorobenzene	ND	1.9	1	09/07/2019 00:39		
3,3-Dichlorobenzidine	ND	0.019	1	09/07/2019 00:39		
2,4-Dichlorophenol	0.21	0.0095	1	09/07/2019 00:39		
Diethyl Phthalate	0.047	0.019	1	09/07/2019 00:39		
2,4-Dimethylphenol	ND	0.95	1	09/07/2019 00:39		
Dimethyl Phthalate	ND	0.019	1	09/07/2019 00:39		
4,6-Dinitro-2-methylphenol	ND	4.7	1	09/07/2019 00:39		
2,4-Dinitrophenol	ND	0.47	1	09/07/2019 00:39		
2,4-Dinitrotoluene	ND	0.024	1	09/07/2019 00:39		
2,6-Dinitrotoluene	ND	0.0095	1	09/07/2019 00:39		
Di-n-octyl Phthalate	ND	0.12	1	09/07/2019 00:39		
1,2-Diphenylhydrazine	ND	0.95	1	09/07/2019 00:39		
Fluoranthene	ND	0.0095	1	09/07/2019 00:39		

(Cont.)



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 9/5/19 13:05
Date Prepared: 9/5/19
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
Extraction Method: E625
Analytical Method: E625
Unit: µg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1909182-001C	Water	09/05/2019 11:35	GC21 09061935.D	184776

Analytes	Result	RL	DE	Date Analyzed
Fluorene	ND	0.0095	1	09/07/2019 00:39
Hexachlorobenzene	ND	0.0047	1	09/07/2019 00:39
Hexachlorobutadiene	ND	0.0095	1	09/07/2019 00:39
Hexachlorocyclopentadiene	ND	4.7	1	09/07/2019 00:39
Hexachloroethane	ND	0.0095	1	09/07/2019 00:39
Indeno (1,2,3-cd) pyrene	ND	0.019	1	09/07/2019 00:39
Isophorone	ND	0.95	1	09/07/2019 00:39
Naphthalene	0.012	0.0095	1	09/07/2019 00:39
Nitrobenzene	ND	0.95	1	09/07/2019 00:39
2-Nitrophenol	ND	4.7	1	09/07/2019 00:39
4-Nitrophenol	ND	4.7	1	09/07/2019 00:39
N-Nitrosodiphenylamine	ND	0.95	1	09/07/2019 00:39
N-Nitrosodi-n-propylamine	ND	0.95	1	09/07/2019 00:39
Pentachlorophenol	ND	0.24	1	09/07/2019 00:39
Phenanthrene	ND	0.019	1	09/07/2019 00:39
Phenol	27	0.019	1	09/07/2019 00:39
Pyrene	ND	0.019	1	09/07/2019 00:39
1,2,4-Trichlorobenzene	ND	0.95	1	09/07/2019 00:39
2,4,6-Trichlorophenol	ND	0.047	1	09/07/2019 00:39
N-Nitrosodimethylamine	ND	4.7	1	09/07/2019 00:39

Surrogates	REC (%)	Limits	
2-Fluorophenol	48	1-92	09/07/2019 00:39
Phenol-d5	36	5-104	09/07/2019 00:39
Nitrobenzene-d5	80	4-143	09/07/2019 00:39
2-Fluorobiphenyl	82	9-134	09/07/2019 00:39
2,4,6-Tribromophenol	106	1-159	09/07/2019 00:39
Terphenyl-d14	71	5-150	09/07/2019 00:39

Analyst(s): REB



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/6/19
Date Analyzed: 9/9/19
Instrument: GC22
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184831
Extraction Method: E608/SW3620B
Analytical Method: E608
Unit: µg/L
Sample ID: MB/LCS/LCSD-184831

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	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.053			0.05	107	35-113

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/6/19
Date Analyzed: 9/9/19
Instrument: GC22
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184831
Extraction Method: E608/SW3620B
Analytical Method: E608
Unit: µg/L
Sample ID: MB/LCS/LCSD-184831

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	0.049	0.048	0.050	98	96	50-103	1.96	20
a-BHC	0.051	0.049	0.050	101	99	63-131	2.36	20
b-BHC	0.051	0.049	0.050	101	98	56-112	2.95	20
d-BHC	0.050	0.053	0.050	101	106	63-132	5.25	20
g-BHC	0.048	0.047	0.050	96	93	61-135	2.60	20
a-Chlordane	0.050	0.048	0.050	99	95	54-113	4.02	20
g-Chlordane	0.050	0.049	0.050	100	98	55-117	1.78	20
p,p-DDD	0.047	0.046	0.050	94	91	56-135	2.75	20
p,p-DDE	0.051	0.050	0.050	101	99	56-131	2.05	20
p,p-DDT	0.050	0.049	0.050	100	98	47-153	2.35	20
Dieldrin	0.056	0.055	0.050	112	110	67-152	1.70	20
Endosulfan I	0.050	0.050	0.050	99	100	56-137	1.17	20
Endosulfan II	0.051	0.050	0.050	103	100	50-113	2.26	20
Endosulfan sulfate	0.053	0.052	0.050	107	105	57-121	2.12	20
Endrin	0.057	0.056	0.050	114	112	60-150	1.97	20
Endrin aldehyde	0.052	0.051	0.050	104	101	47-121	2.14	20
Endrin ketone	0.049	0.048	0.050	97	95	48-130	2.33	20
Heptachlor	0.057	0.049	0.050	114	98	46-133	15.1	20
Heptachlor epoxide	0.049	0.048	0.050	98	97	54-105	1.71	20
Methoxychlor	0.053	0.052	0.050	107	104	54-135	2.30	20
Aroclor1016	0.15	0.15	0.15	98	101	50-114	3.62	20
Aroclor1260	0.16	0.17	0.15	109	112	42-121	2.17	20
Surrogate Recovery								
Decachlorobiphenyl	0.051	0.050	0.050	101	100	35-113	1.38	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/5/19
Instrument: GC45
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184803
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-184803

QC Summary Report for E624

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acrolein (Propenal)	ND	2.5	5.0	-	-	-
Acrylonitrile	ND	1.0	2.0	-	-	-
2-Chloroethyl Vinyl Ether	ND	0.50	1.0	-	-	-
Surrogate Recovery						
Dibromofluoromethane	27			25	108	68-160

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acrolein (Propenal)	23	23	20	115	114	71-140	0.995	20
Acrylonitrile	18	18	20	89	91	67-145	2.71	20
2-Chloroethyl Vinyl Ether	20	19	20	99	97	70-124	1.42	20
Surrogate Recovery								
Dibromofluoromethane	28	27	25	110	110	68-160	0	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/9/19
Date Analyzed: 9/9/19
Instrument: GC10
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184941
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-184941

QC Summary Report for E624

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.051	0.20	-	-	-
Bromodichloromethane	ND	0.20	0.50	-	-	-
Bromoform	ND	0.066	0.50	-	-	-
Bromomethane	ND	0.16	0.50	-	-	-
Carbon tetrachloride	ND	0.069	0.50	-	-	-
Chlorobenzene	ND	0.050	0.50	-	-	-
Chloroethane	ND	0.31	0.50	-	-	-
Chloroform	ND	0.064	0.50	-	-	-
Chloromethane	ND	0.13	0.50	-	-	-
Dibromochloromethane	ND	0.080	0.50	-	-	-
1,2-Dibromoethane (EDB)	ND	0.12	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.080	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.071	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.072	0.50	-	-	-
1,1-Dichloroethane	ND	0.060	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.090	0.50	-	-	-
1,1-Dichloroethene	ND	0.086	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.060	0.50	-	-	-
1,2-Dichloropropane	ND	0.055	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.090	0.50	-	-	-
trans-1,3-Dichloropropene	ND	0.070	0.50	-	-	-
Ethylbenzene	ND	0.050	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.10	0.50	-	-	-
Methylene chloride	ND	1.2	2.0	-	-	-
Styrene	ND	0.59	2.0	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.11	0.50	-	-	-
Tetrachloroethene	ND	0.082	0.50	-	-	-
Toluene	ND	0.25	0.50	-	-	-
1,2,4-Trichlorobenzene	ND	0.086	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.050	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.18	0.50	-	-	-
Trichloroethene	ND	0.060	0.50	-	-	-
Trichlorofluoromethane	ND	0.047	0.50	-	-	-
Vinyl chloride	ND	0.070	0.50	-	-	-
m,p-Xylene	ND	0.11	0.50	-	-	-
o-Xylene	ND	0.060	0.50	-	-	-

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/9/19
Date Analyzed: 9/9/19
Instrument: GC10
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184941
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-184941

QC Summary Report for E624

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	24			25	97	76-110
Toluene-d8	25			25	99	84-111
4-BFB	2.3			2.5	92	64-121



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/9/19
Date Analyzed: 9/9/19
Instrument: GC10
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184941
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-184941

QC Summary Report for E624

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzene	4.0	3.9	4	100	98	71-126	1.72	20
Bromodichloromethane	4.0	3.9	4	99	96	63-119	2.62	20
Bromoform	3.7	3.7	4	93	91	46-117	1.56	20
Bromomethane	4.5	4.1	4	113	103	32-171	9.40	20
Carbon tetrachloride	4.2	4.1	4	105	103	67-122	1.23	20
Chlorobenzene	4.0	3.9	4	100	98	71-117	2.39	20
Chloroethane	4.4	4.5	4	110	112	53-136	1.61	20
Chloroform	4.1	4.0	4	102	100	67-126	1.99	20
Chloromethane	4.0	4.2	4	101	106	42-148	5.07	20
Dibromochloromethane	4.0	3.9	4	99	97	52-120	2.12	20
1,2-Dibromoethane (EDB)	1.9	1.9	2	97	95	58-117	1.39	20
1,2-Dichlorobenzene	4.0	3.9	4	100	98	71-117	1.84	20
1,3-Dichlorobenzene	3.8	3.8	4	96	95	74-116	1.07	20
1,4-Dichlorobenzene	3.9	3.8	4	96	95	71-115	1.47	20
1,1-Dichloroethane	4.1	4.0	4	103	101	68-128	2.09	20
1,2-Dichloroethane (1,2-DCA)	4.0	3.9	4	99	97	61-123	2.15	20
1,1-Dichloroethene	3.9	3.9	4	98	97	65-126	0.789	20
trans-1,2-Dichloroethene	3.9	3.9	4	98	98	70-126	0	20
1,2-Dichloropropane	3.9	3.8	4	97	96	67-124	1.15	20
cis-1,3-Dichloropropene	3.9	3.8	4	99	96	63-119	3.07	20
trans-1,3-Dichloropropene	4.1	4.0	4	102	99	63-116	3.52	20
Ethylbenzene	3.9	3.8	4	96	95	69-120	1.44	20
Methyl-t-butyl ether (MTBE)	3.9	3.8	4	96	94	60-121	2.07	20
Methylene chloride	3.8	3.8	4	95	94	40-148	0.853	20
Styrene	3.8	3.8	4	95	94	57-118	1.31	20
1,1,2,2-Tetrachloroethane	3.6	3.5	4	89	88	60-116	1.34	20
Tetrachloroethene	4.0	3.9	4	99	98	60-131	1.48	20
Toluene	4.0	3.9	4	99	97	67-115	1.80	20
1,2,4-Trichlorobenzene	3.7	3.7	4	94	92	61-133	1.37	20
1,1,1-Trichloroethane	4.0	4.0	4	100	99	67-124	1.18	20
1,1,2-Trichloroethane	4.0	3.9	4	99	97	62-117	2.06	20
Trichloroethene	3.9	3.9	4	98	97	69-120	1.13	20
Trichlorofluoromethane	4.2	4.3	4	106	107	60-134	0.411	20
Vinyl chloride	2.2	2.1	2	109	106	52-145	2.24	20
m,p-Xylene	8.1	8.0	8	101	100	67-119	1.73	20
o-Xylene	3.9	3.8	4	97	96	68-120	0.805	20

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/9/19
Date Analyzed: 9/9/19
Instrument: GC10
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184941
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-184941

QC Summary Report for E624

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	24	24	25	96	96	76-110	0	20
Toluene-d8	25	25	25	99	99	84-111	0	20
4-BFB	2.3	2.3	2.5	90	92	64-121	1.36	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.0051	0.010	-	-	-
Acenaphthylene	ND	0.0050	0.010	-	-	-
Anthracene	ND	0.0043	0.010	-	-	-
Benzidine	ND	0.55	5.0	-	-	-
Benzo (a) anthracene	ND	0.019	0.020	-	-	-
Benzo (a) pyrene	ND	0.0064	0.010	-	-	-
Benzo (b) fluoranthene	ND	0.0040	0.0050	-	-	-
Benzo (g,h,i) perylene	ND	0.0071	0.020	-	-	-
Benzo (k) fluoranthene	ND	0.0063	0.010	-	-	-
Benzyl Alcohol	ND	2.9	5.0	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.84	1.0	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0021	0.0050	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0089	0.010	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.39	3.0	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.052	0.10	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.45	1.0	-	-	-
Butylbenzyl Phthalate	ND	0.028	0.050	-	-	-
4-Chloroaniline	ND	0.0051	0.020	-	-	-
4-Chloro-3-methylphenol	ND	0.55	1.0	-	-	-
2-Chloronaphthalene	ND	0.57	1.0	-	-	-
2-Chlorophenol	ND	0.0086	0.020	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.48	1.0	-	-	-
Chrysene	ND	0.0093	0.010	-	-	-
Dibenzo (a,h) anthracene	ND	0.0094	0.010	-	-	-
Dibenzofuran	ND	0.37	1.0	-	-	-
Di-n-butyl Phthalate	ND	0.012	0.020	-	-	-
1,2-Dichlorobenzene	ND	1.1	2.0	-	-	-
1,3-Dichlorobenzene	ND	1.2	2.0	-	-	-
1,4-Dichlorobenzene	ND	1.0	2.0	-	-	-
3,3-Dichlorobenzidine	ND	0.0081	0.020	-	-	-
2,4-Dichlorophenol	ND	0.0061	0.010	-	-	-
Diethyl Phthalate	ND	0.015	0.020	-	-	-
2,4-Dimethylphenol	ND	0.81	1.0	-	-	-
Dimethyl Phthalate	ND	0.011	0.020	-	-	-
4,6-Dinitro-2-methylphenol	ND	1.8	5.0	-	-	-
2,4-Dinitrophenol	ND	0.15	0.50	-	-	-
2,4-Dinitrotoluene	ND	0.0066	0.025	-	-	-
2,6-Dinitrotoluene	ND	0.0053	0.010	-	-	-

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Di-n-octyl Phthalate	ND	0.020	0.12	-	-	-
1,2-Diphenylhydrazine	ND	0.40	1.0	-	-	-
Fluoranthene	ND	0.0068	0.010	-	-	-
Fluorene	ND	0.0064	0.010	-	-	-
Hexachlorobenzene	ND	0.0043	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0035	0.010	-	-	-
Hexachlorocyclopentadiene	ND	0.48	5.0	-	-	-
Hexachloroethane	ND	0.0068	0.010	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0065	0.020	-	-	-
Isophorone	ND	0.66	1.0	-	-	-
2-Methylnaphthalene	ND	0.0053	0.010	-	-	-
2-Methylphenol (o-Cresol)	ND	0.53	1.0	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.41	1.0	-	-	-
Naphthalene	ND	0.0048	0.010	-	-	-
2-Nitroaniline	ND	1.8	5.0	-	-	-
3-Nitroaniline	ND	3.1	5.0	-	-	-
4-Nitroaniline	ND	2.7	5.0	-	-	-
Nitrobenzene	ND	0.95	1.0	-	-	-
2-Nitrophenol	ND	2.4	5.0	-	-	-
4-Nitrophenol	ND	1.1	5.0	-	-	-
N-Nitrosodiphenylamine	ND	0.41	1.0	-	-	-
N-Nitrosodi-n-propylamine	ND	0.65	1.0	-	-	-
Pentachlorophenol	ND	0.055	0.25	-	-	-
Phenanthrene	ND	0.0055	0.020	-	-	-
Phenol	ND	0.0088	0.020	-	-	-
Pyrene	ND	0.0057	0.020	-	-	-
Pyridine	ND	0.49	1.0	-	-	-
1,2,4-Trichlorobenzene	ND	0.089	1.0	-	-	-
2,4,5-Trichlorophenol	ND	0.0061	0.050	-	-	-
2,4,6-Trichlorophenol	ND	0.0049	0.050	-	-	-
N-Nitrosodimethylamine	ND	2.8	5.0	-	-	-

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	5.0			5	100	36-131
Phenol-d5	5.0			5	101	43-149
Nitrobenzene-d5	4.7			5	95	39-150
2-Fluorobiphenyl	4.4			5	88	43-133
2,4,6-Tribromophenol	5.5			5	109	42-147
Terphenyl-d14	2.3			5	45	44-124



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.44	0.41	0.50	88	82	47-145	6.59	25
Acenaphthylene	0.44	0.42	0.50	88	83	33-145	5.56	25
Anthracene	0.45	0.41	0.50	91	83	27-133	9.21	25
Benzidine	31	31	50	63	61	33-87	2.61	25
Benzo (a) anthracene	0.40	0.38	0.50	80	76	33-143	6.22	25
Benzo (a) pyrene	0.46	0.43	0.50	91	85	17-163	6.90	25
Benzo (b) fluoranthene	0.43	0.40	0.50	86	80	24-159	6.65	25
Benzo (g,h,i) perylene	0.42	0.40	0.50	84	80	1-219	4.97	25
Benzo (k) fluoranthene	0.44	0.40	0.50	87	81	11-162	8.10	25
Benzyl Alcohol	42	40	50	84	81	38-130	3.67	25
Bis (2-chloroethoxy) Methane	8.7	8.0	10	87	80	33-184	8.21	25
Bis (2-chloroethyl) Ether	0.38	0.37	0.50	76	74	12-158	2.81	25
Bis (2-chloroisopropyl) Ether	0.39	0.42	0.50	78	85	36-166	7.78	25
Bis (2-ethylhexyl) Adipate	8.4	7.8	10	84	78	49-109	7.32	25
Bis (2-ethylhexyl) Phthalate	0.44	0.41	0.50	89	82	8-158	7.63	25
4-Bromophenyl Phenyl Ether	8.6	8.1	10	86	81	53-127	6.60	25
Butylbenzyl Phthalate	0.45	0.41	0.50	89	82	1-152	8.69	25
4-Chloroaniline	0.46	0.42	0.50	92	85	57-121	8.09	25
4-Chloro-3-methylphenol	9.3	8.4	10	93	84	22-147	10.7	25
2-Chloronaphthalene	8.3	7.9	10	83	79	60-118	3.97	25
2-Chlorophenol	0.39	0.38	0.50	78	76	23-134	2.78	25
4-Chlorophenyl Phenyl Ether	8.2	7.6	10	82	76	25-158	7.63	25
Chrysene	0.42	0.40	0.50	84	80	17-168	5.67	25
Dibenzo (a,h) anthracene	0.46	0.44	0.50	93	88	1-227	4.70	25
Dibenzofuran	8.2	7.9	10	82	79	57-108	4.69	25
Di-n-butyl Phthalate	0.44	0.40	0.50	89	81	1-118	9.42	25
1,2-Dichlorobenzene	7.1	7.0	10	71	70	32-129	1.35	25
1,3-Dichlorobenzene	7.5	7.4	10	75	74	1-172	0.731	25
1,4-Dichlorobenzene	7.4	7.4	10	74	74	20-124	0	25
3,3-Dichlorobenzidine	0.48	0.46	0.50	96	92	1-262	4.47	25
2,4-Dichlorophenol	9.2	8.6	10	92	86	39-135	7.32	25
Diethyl Phthalate	0.44	0.40	0.50	87	80	1-114	8.00	25
2,4-Dimethylphenol	9.3	8.5	10	93	85	32-119	9.74	25
Dimethyl Phthalate	0.44	0.41	0.50	87	82	1-112	6.11	25
4,6-Dinitro-2-methylphenol	43	40	50	86	81	33-117	6.29	25
2,4-Dinitrophenol	9.7	9.2	10	97	92	1-191	5.21	25
2,4-Dinitrotoluene	0.44	0.41	0.50	88	82	39-139	6.94	25
2,6-Dinitrotoluene	0.44	0.41	0.50	87	82	50-158	6.55	25

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.51	0.45	0.50	101	90	4-146	12.1	25
1,2-Diphenylhydrazine	8.7	8.0	10	87	80	53-110	7.71	25
Fluoranthene	0.45	0.42	0.50	90	84	26-137	7.45	25
Fluorene	0.44	0.41	0.50	88	83	59-121	5.59	25
Hexachlorobenzene	0.41	0.38	0.50	81	77	1-152	5.85	25
Hexachlorobutadiene	0.40	0.38	0.50	79	76	24-116	3.90	25
Hexachlorocyclopentadiene	41	39	50	82	78	26-107	4.83	25
Hexachloroethane	0.36	0.35	0.50	72	70	40-113	2.40	25
Indeno (1,2,3-cd) pyrene	0.44	0.42	0.50	89	83	1-171	6.48	25
Isophorone	8.7	8.0	10	87	80	21-196	7.82	25
2-Methylnaphthalene	0.45	0.40	0.50	89	81	51-132	9.84	25
2-Methylphenol (o-Cresol)	8.1	7.5	10	81	75	47-127	7.82	25
3 & 4-Methylphenol (m,p-Cresol)	7.6	7.3	10	76	73	51-126	4.21	25
Naphthalene	0.37	0.35	0.50	74	70	21-133	6.50	25
2-Nitroaniline	45	43	50	90	87	56-126	3.41	25
3-Nitroaniline	45	43	50	91	86	57-124	5.27	25
4-Nitroaniline	44	42	50	88	83	58-130	5.95	25
Nitrobenzene	8.0	7.6	10	80	76	35-180	4.95	25
2-Nitrophenol	45	42	50	90	83	29-182	7.73	25
4-Nitrophenol	46	44	50	93	87	1-132	6.20	25
N-Nitrosodiphenylamine	8.5	8.0	10	85	80	56-106	4.91	25
N-Nitrosodi-n-propylamine	7.6	7.3	10	76	73	1-230	4.89	25
Pentachlorophenol	2.3	2.1	2.5	91	84	14-176	8.02	25
Phenanthrene	0.43	0.40	0.50	86	80	54-120	7.72	25
Phenol	1.5	1.5	2	75	73	5-112	3.52	25
Pyrene	0.44	0.41	0.50	88	82	52-115	6.97	25
Pyridine	5.1	4.8	10	51	48	36-96	5.95	25
1,2,4-Trichlorobenzene	8.1	7.8	10	81	78	44-142	3.96	25
2,4,5-Trichlorophenol	0.47	0.45	0.50	94	89	52-119	4.78	25
2,4,6-Trichlorophenol	0.46	0.44	0.50	91	89	37-144	2.60	25
N-Nitrosodimethylamine	38	37	50	76	75	42-121	1.51	25

(Cont.)



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/5/19
Date Analyzed: 9/6/19
Instrument: GC21
Matrix: Water
Project: Semi-Annual Sampling (September 2019)

WorkOrder: 1909182
BatchID: 184776
Extraction Method: E625
Analytical Method: E625
Unit: µg/L
Sample ID: MB/LCS/LCSD-184776

QC Summary Report for E625

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	5.4	5.7	5	107	114	36-131	6.13	25
Phenol-d5	5.9	6.0	5	117	120	43-149	2.64	25
Nitrobenzene-d5	6.3	6.2	5	125	124	39-150	0.730	25
2-Fluorobiphenyl	6.2	6.4	5	123	128	43-133	3.49	25
2,4,6-Tribromophenol	6.6	6.5	5	133	131	42-147	1.57	25
Terphenyl-d14	1.8	1.9	5	36,F3	37,F3	44-124	1.55	25



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax

☐ WriteOn

☐ EDF

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1909182

ClientCode: PGEA

☐ Excel

☐ EQulS

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com;J5Ld@pge.com;
PO:
Project: Semi-Annual Sampling (September 2019)

Bill to:

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

Requested TAT: 5 days;

Date Received: 09/05/2019

Date Logged: 09/05/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1909182-001	E-001	Water	9/5/2019 11:35	☐	D	A	B	C	A							

Test Legend:

1	608_W [J]
5	PRDisposal Fee
9	

2	624_W
6	
10	

3	624ACR+2CEVE_W
7	
11	

4	625_SCSM_W
8	
12	

Project Manager: Angela Rydelius

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.



McC Campbell Analytical, Inc.

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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 STATION

Project: Semi-Annual Sampling (September 2019)

Work Order: 1909182

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 9/5/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1909182-001A	E-001	Water	E624 (VOCs) <1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, 1,2-Dichloroethene, 1,2-Dichlorobenzene, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Bromodichloromethane, Bromoform, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Methylene chloride, Tetrachloroethene, Toluene, Total THMs, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl chloride, Xylenes, Total>	2	VOA w/ HCl	☐	9/5/2019 11:35	5 days	Present	☐	
1909182-001B	E-001	Water	E624 (ACRO, ACRY, & 2-CEVE) <2-Chloroethyl Vinyl Ether, Acrolein (Propenal), Acrylonitrile, Toluene-d8_C>	2	VOA, Unpres	☐	9/5/2019 11:35	5 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.



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WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: Semi-Annual Sampling (September 2019)

Work Order: 1909182

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 9/5/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1909182-001C	E-001	Water	E625 (SVOCs) <1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Diphenylhydrazine, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Nitrophenol, 3,3-Dichlorobenzidine, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl Phenyl Ether, 4-Chloro-3-methylphenol, 4-Chlorophenyl Phenyl Ether, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Anthracene, Benzidine, Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Benzo (g,h,i) perylene, Benzo (k) fluoranthene, Bis (2-chloroethoxy) Methane, Bis (2-chloroethyl) Ether, Bis (2-chloroisopropyl) Ether, Bis (2-ethylhexyl) Phthalate, Butylbenzyl Phthalate, Chrysene, Dibenzo (a,h) anthracene, Diethyl Phthalate, Dimethyl Phthalate, Di-n-butyl Phthalate, Di-n-octyl Phthalate, Fluoranthene, Fluorene,	1	1LA Narrow Mouth, Unpres	☐	9/5/2019 11:35	5 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.



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http://www.mcccampbell.com / E-mail: main@mcccampbell.com

WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: Semi-Annual Sampling (September 2019)

Work Order: 1909182

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

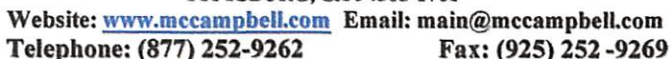
Date Logged: 9/5/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
			Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno (1,2,3-cd) pyrene, Isophorone, Naphthalene, Nitrobenzene, N-Nitrosodimethylamine, N-Nitrosodi-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, Pyrene>								
1909182-001D	E-001	Water	E608 (OC Pesticides+PCBs w/ Florisil Clean-up) <a-BHC_1, Aldrin_1, Aroclor1016_1, Aroclor1221_1, Aroclor1232_1, Aroclor1242_1, Aroclor1248_1, Aroclor1254_1, Aroclor1260_1, b-BHC_1, Chlordane (Technical)_1, d-BHC_1, Dieldrin_1, Endosulfan I_1, Endosulfan II_1, Endosulfan sulfate_1, Endrin aldehyde_1, Endrin_1, g-BHC_1, Heptachlor epoxide_1, Heptachlor_1, p,p-DDD_1, p,p-DDE_1, p,p-DDT_1, PCBs, total_1, Toxaphene_1>	1	1LA, Unpres	☐	9/5/2019 11:35	5 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.



Check if sample is effluent and "J" flag is required

Remarks

Sampler Signature: Muskan Environmental Sampling 

**TTO (EPA 608), TTO (EPA 624),
TTO (EPA 625) see ATTACHED
Appendix A and analyze only listed
compounds**

pH<2

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

Acrolein
Acrylonitrile
Benzene
Bromodichloromethane (Dichlorobromomethane)
Bromform
Bromomethane (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-Trichloroethane
1, 1, 2-Trichloroethane
Trichloroethene (TCE)
Trichlorofluoromethane
Vinyl chloride (Chloroethylene)

EPA Method 625 Compounds

Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo (a) anthracene
Benzo (a) pyrene
Benzo (b) fluoranthene
Benzo (g, h, i) perylene
Benzo (k) fluoranthene
Benzyl butyl phthalate
bis (2-Chloroethoxy) methane
bis (2-Chloroethyl) ether
bis (2-Chloroisopropyl) ether
bis (2-Ethylhexyl) phthalate
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
2-Chloronaphthalene
2-Chlorophenyl
4-Chlorophenyl phenyl ether
Chrysene
Dibenzo (a, h) anthracene
1, 2-Dichlorobenzene
1, 3-Dichlorobenzene
1, 4-Dichlorobenzene
3, 3'-Dichlorobenzidine

2, 4-Dichlorophenol
Diethyl phthalate
2,4-Dimethylphenol
Dimethylphthalate
Di-n-butylphthalate
2, 4-Dinitrophenol
2, 4-Dinitrotoluene
2, 6-Dinitrotoluene
Di-n-octylphthalate
1,2-Diphenylhydrazine/Azo
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
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
1, 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 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260
Toxaphene

 9/5/19 13:05
 9/5/19 13:05



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **Semi-Annual Sampling (September 2019)**
WorkOrder No: **1909182** Matrix: Water
Carrier: Client Drop-In

Date and Time Received: **9/5/2019 13:05**
Date Logged: **9/5/2019**
Received by: **Jena Alfaro**
Logged by: **Kena Ponce**

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 1.4°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☒ No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO ₃ : <2; 522: <4; 218.7: >8)?	Yes ☐ No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1909081

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue
Antioch, CA 94509

Project Contact: Sanjiv Gill

Project P.O.:

Project: pH Sampling (September 2019)

Project Received: 09/04/2019

Analytical Report reviewed & approved for release on 09/11/2019 by:

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.





Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station
Project: pH Sampling (September 2019)
WorkOrder: 1909081

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
LQL	Lowest Quantitation Level
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: 9/4/19 12:45
Date Prepared: 9/4/19
Project: pH Sampling (September 2019)

WorkOrder: 1909081
Extraction Method: SM4500H+B-2000
Analytical Method: SM4500H+B
Unit: pH units

pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1909081-001A	Water	09/04/2019 10:44	WetChem	184687

<u>Analytes</u>	<u>Result</u>	<u>Accuracy</u>	<u>DF</u>	<u>Date Analyzed</u>
pH	7.82	±0.05	1	09/04/2019 10:45

Analyst(s): HAD



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax ☐ WriteOn ☐ EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1909081

ClientCode: PGEA

☐ Excel ☐ EQulS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:

Sanjiv Gill
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: sanjivgill@comcast.net
cc/3rd Party:
PO:
Project: pH Sampling (September 2019)

Bill to:

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

Requested TAT: 5 days;

Date Received: 09/04/2019

Date Logged: 09/04/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1909081-001	E-001	Water	9/4/2019 10:44	☐	A	A										

Test Legend:

1	PH_W_SANJIV	2	PRDisposal Fee	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

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.



McC Campbell 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.mcccampbell.com / E-mail: main@mcccampbell.com

WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: pH Sampling (September 2019)

Work Order: 1909081

Client Contact: Sanjiv Gill

QC Level: LEVEL 2

Contact's Email: sanjivgill@comcast.net

Comments:

Date Logged: 9/4/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1909081-001A	E-001	Water	SM4500H+B (Field pH)	1	125mL HDPE, unprsv.	☐	9/4/2019 10:44	5 days	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. Highly sensitive to plant stress

[illegible]



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **pH Sampling (September 2019)**

Date and Time Received: **9/4/2019 12:45**
Date Logged: **9/4/2019**
Received by: **Tina Perez**
Logged by: **Agustina Venegas**

WorkOrder No: **1909081** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☐	No ☒	NA ☐
Samples Received on Ice?	Yes ☐	No ☒	

Sample/Temp Blank temperature	Temp:		NA ☒
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☒
Sample labels checked for correct preservation?	Yes ☒	No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO ₃ : <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐	No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐	No ☐	NA ☒

Comments: Method SM4500H+B (Field pH) was received past its 0.25-day holding time.



**Pacific Gas and
Electric Company®**



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

January 8, 2020

Mr. Jason Yun
Delta Diablo Sanitation District (DDD)
2500 Pittsburg-Antioch Hwy.
Antioch, CA 94509-1373

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

Subject: Quarterly Self-Monitoring Report
(For Period Ending December 31, 2019)

Dear Mr. Yun,

Attached is the Quarterly Self-Monitoring Report (SMR) for Pacific Gas and Electric Company - Gateway Generating Station (GGS) for the period ending December 31, 2019, as required under DDD Industrial Wastewater Discharge Permit Number 0208841-C.

Included in the report are: Certification Statement, Industrial User Compliance Report, Industrial Monitoring Report Summary, Discharge Flow Data, WSAC Operating Months Report, Cycles of Concentration, and Copy of Laboratory Results.

If you have any questions about this report, 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

Pacific Gas and Electric Company
Gateway Generating Station

Quarterly Self-Monitoring Report
For the reporting period ending in December 31, 2019

This report is to comply with the requirement of the Industrial Wastewater Discharge Permit issued by the Delta Diablo Sanitation District (DDSD) to Gateway Generating Station (GGS) under Permit No. 02088441-C with expiration date of February 28, 2023.

The report includes the following attachments:

- | | |
|---------------|--------------------------------------|
| Attachment 1: | Certification Statement |
| Attachment 2: | Industrial User Compliance Report |
| Attachment 3: | Industrial Monitoring Report Summary |
| Attachment 4: | Discharge Flow Data |
| Attachment 5: | Monthly Flow Data |
| Attachment 6: | WSAC Operating Hours Report |
| Attachment 7: | Cycles of Concentration |
| Attachment 8: | Laboratory Results |

Attachment 1
Certification Statement

Certification Statement

Name of Business: PG&E Gateway Generating Station

Address: 3225 Wilbur Avenue, Antioch, CA. 94509

Phone: 925-522-7805

Period Covered: Period ending: December 31, 2019

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Tim Wisdom Date: Jan. 8, 2020

Print Name: Tim Wisdom

Attachment 2
Industrial User Compliance Report

Industrial User Compliance Report Form

Attn: Jason Yun

Pretreatment

Fax # (925)756-1961

Phone: (925)756-1929

From: Tim Wisdom

Company: Pacific Gas and Electric Company – Gateway Generating Station

Period Covered: Period ending December 31, 2019

Industrial User Checklist for self –monitoring reports, as specified by the wastewater discharge permit issued by Delta Diablo Sanitation District:

Self-monitoring reports

☒ Flow discharge summary (Discharge Permit Section E.1.h.) (See Attachment 4)

☐ Calibration of flow meters, as required. (Section E.1.g.) (Submitted in Q2 2019 SMR)

☒ Monitoring results- All required tests completed, results reviewed, results included, QA/QC, chain of custody (section F.7.) (See Attachment 8)

☒ Certification statement included (See Attachment 1)

Violations (if applicable)

☐ All wastewater discharge exceedance are reported during this reporting period

☐ Delta Diablo was contacted. (See Additional Notes below)

☐ A follow-up report on characterization re-sampling was submitted on

☐ Corrective actions to resolve violation:

☐ Other violations - i.e. Reporting, spills to sewer, or prohibited discharges

Additional Notes:

None

Significant changes

Anticipated changes that may alter the nature, quality, or volume of the wastewater discharged. Planned changes shall be submitted at least 90-days prior to implementation and shall include a detailed description of this change. (None)

Attachment 3
Industrial Monitoring Report Summary

INDUSTRIAL MONITORING REPORT SUMMARY (Combined Site Flow: FAC - Control Manhole Local Limits: E-001)

IU NAME : PG&E Gateway Generating Station
 ADDRESS: 3225 Wilbur Avenue
 CITY : Antioch

ID #: 0208841-C
 TYPE: Power Generation Plant

SIC: 4911

DATE	11/13/2019	11/14/2019	11/14/2019					
TYPE	G	G	C 24					
STATION	E-001	E-001	E-001					
SMP.BY	Muskan	Muskan	Muskan					
PURPOSE	Compliance Quarterly (Q4)	Compliance Quarterly (Q4)	Compliance Quarterly (Q4)					

Units: mg/L

PARAMETERS

LIMITS

FLOW, DAILY (gal)	51,120							
FLOW, MONTH (gal)								
pH	6-10 s.u.	7.12						
BOD				ND(<4.0)				
COD				19.0				
TDS				343.0				
TSS				ND(<1.0)				
Arsenic	0.15			0.00066				
Cadmium	0.1			ND(<0.0005)				
Chromium	0.5			ND(<0.0005)				
Copper	0.5			0.0044				
Iron				ND(<0.1)				
Lead	0.5			ND(<0.0005)				
Mercury	0.003			ND(<0.0002)				
Molybdenum				0.055				
Nickel	0.5			0.0012				
Selenium	0.25			ND(<0.0005)				
Silver	0.2			ND(<0.0005)				
Zinc	1.00			0.150				
Cyanide	0.2		0.0350					
Phenol	1.00		0.037					
Ammonia	200		53					
O&G Petro/Min (E1664A w/ Silica)	100	ND(<5.0)	ND(<5.0)					
O&G Animal/Vegetable Oil	300	7.8	ND(<5.0)					
TTO EPA 608								
TTO EPA 624								
TTO EPA 625								
TTO	2.00							
Sulfide								
Sulfate								

Comments: ND = Non-Detect, NSD = No Structures Detected, MFL = Millions of Fibers per Liter

In accordance with Footnote 2 of the table located in Section (D)(1) of the permit, PG&E is reporting the Oil & Grease (O&G) as follows: Petroleum/Mineral includes the silica gel (i.e. SGT-HEM) and Animal/Vegetable does not include silica gel

Attachment 4
Discharge Flow Data

PG&E Gateway Generating Station

Discharge Flow Data

October 2019-December 2019

Date	Industrial Flow				Sanitary Flow				Site Total (Gallons)
	Instantaneous Flow (GPM)	Time Over 39.05 GPM (minutes)	Did it ever go over 39.05 GPM for 15 mins?	Daily Total (Gallons)	Instantaneous Flow (GPM)	Time Meter went Bad Quality (minutes)	Did it ever go over 39.05 GPM for 15 mins?	Daily Total (Gallons)	
10/1/2019	34.8	0.0	NO	23,531	0.0	0	NO		23,531
10/2/2019	34.8	0.0	NO	27,913	19.9	0	NO	375	28,288
10/3/2019	35.1	0.0	NO	19,376	0.1	0	NO	14	19,389
10/4/2019	34.8	0.0	NO	21,454	20.6	0	NO	405	21,859
10/5/2019	34.7	0.0	NO	27,433	0.1	0	NO	9	27,442
10/6/2019	35.0	0.0	NO	32,014	0.0	0	NO		32,014
10/7/2019	35.0	0.0	NO	43,101	21.1	0	NO	420	43,521
10/8/2019	35.0	0.0	NO	30,431	0.1	0	NO	3	30,434
10/9/2019	34.7	0.0	NO	36,393	21.2	0	NO	414	36,807
10/10/2019	34.8	0.0	NO	26,134	0.0	0	NO	414	26,548
10/11/2019	34.5	0.0	NO	48,601	19.9	0	NO	394	48,994
10/12/2019	34.4	0.0	NO	17,440	0.1	0	NO		17,440
10/13/2019	35.1	0.0	NO	21,320	0.0	0	NO		21,320
10/14/2019	35.1	0.0	NO	22,942	19.9	0	NO	395	23,337
10/15/2019	35.0	0.0	NO	29,112	0.0	0	NO		29,112
10/16/2019	34.8	0.0	NO	39,265	19.4	0	NO	406	39,671
10/17/2019	34.8	0.0	NO	37,985	19.3	0	NO	389	38,374
10/18/2019	34.8	0.0	NO	31,971	0.1	0	NO	5	31,976
10/19/2019	35.1	0.0	NO	25,143	0.1	0	NO		25,143
10/20/2019	34.8	0.0	NO	13,490	20.0	0	NO	403	13,892
10/21/2019	34.5	0.0	NO	21,637	0.1	0	NO	2	21,638
10/22/2019	35.2	0.0	NO	14,664	21.2	0	NO	403	15,067
10/23/2019	35.1	0.0	NO	30,560	19.9	0	NO	414	30,974
10/24/2019	34.7	0.0	NO	48,993	0.0	0	NO		48,993
10/25/2019	35.0	0.0	NO	17,579	20.0	0	NO	395	17,974
10/26/2019	35.1	0.0	NO	30,687	0.1	0	NO	15	30,702
10/27/2019	34.9	0.0	NO	30,792	0.0	0	NO		30,792
10/28/2019	34.9	0.0	NO	16,191	0.0	0	NO		16,191
10/29/2019	35.0	0.0	NO	22,155	19.9	0	NO	398	22,553
10/30/2019	34.9	0.0	NO	23,265	19.7	0	NO	404	23,668
10/31/2019	34.9	0.0	NO	19,953	20.1	0	NO	405	20,358

Max Daily Flow (Limit: 51,120):

48,994

Monthly Total:

858,003

11/1/2019	34.9	0.0	NO	18,995	0.1	0	NO	7	19,002
11/2/2019	35.0	0.0	NO	30,085	20.3	0	NO	407	30,492
11/3/2019	34.7	1.0	NO	48,195	0.1	1	NO	1	48,196
11/4/2019	34.8	0.0	NO	26,848	0.0	0	NO		26,848
11/5/2019	34.8	0.0	NO	27,170	20.7	0	NO	412	27,582
11/6/2019	35.3	1.0	NO	17,707	19.6	1	NO	411	18,118
11/7/2019	35.0	0.0	NO	26,841	0.1	0	NO	7	26,848
11/8/2019	34.9	0.0	NO	30,867	20.1	0	NO	409	31,277
11/9/2019	34.6	0.0	NO	15,736	0.0	0	NO	1	15,736
11/10/2019	35.0	0.0	NO	21,725	0.0	0	NO	1	21,726
11/11/2019	34.8	0.0	NO	13,672	20.4	0	NO	377	14,049
11/12/2019	34.7	0.0	NO	7,222	0.0	0	NO	2	7,224
11/13/2019	34.8	0.0	NO	27,814	20.5	0	NO	505	28,319
11/14/2019	34.6	0.0	NO	39,083	0.1	0	NO	15	39,099
11/15/2019	35.0	0.0	NO	24,412	20.7	0	NO	372	24,784
11/16/2019	34.5	0.0	NO	26,295	0.1	0	NO		26,295
11/17/2019	34.7	0.0	NO	26,207	0.0	0	NO		26,207
11/18/2019	34.9	0.0	NO	12,931	20.3	0	NO	395	13,326
11/19/2019	34.5	0.0	NO	33,595	20.2	0	NO	409	34,004

PG&E Gateway Generating Station

Discharge Flow Data

October 2019-December 2019

Date	Industrial Flow				Sanitary Flow				Site Total (Gallons)
	Instantaneous Flow (GPM)	Time Over 39.05 GPM (minutes)	Did it ever go over 39.05 GPM for 15 mins?	Daily Total (Gallons)	Instantaneous Flow (GPM)	Time Meter went Bad Quality (minutes)	Did it ever go over 39.05 GPM for 15 mins?	Daily Total (Gallons)	
11/20/2019	35.0	0.0	NO	28,609	0.1	0	NO	2	28,612
11/21/2019	34.9	0.0	NO	30,791	20.6	0	NO	409	31,200
11/22/2019	35.1	0.0	NO	16,979	0.0	0	NO	4	16,983
11/23/2019	34.4	0.0	NO	20,144	20.4	0	NO	401	20,545
11/24/2019	35.0	0.0	NO	17,542	0.0	0	NO		17,542
11/25/2019	34.8	0.0	NO	23,932	21.5	0	NO	404	24,336
11/26/2019	35.0	0.0	NO	21,935	0.1	0	NO	6	21,940
11/27/2019	34.4	0.0	NO	12,959	20.9	0	NO	387	13,346
11/28/2019	34.5	0.0	NO	33,249	0.0	0	NO	4	33,253
11/29/2019	34.7	0.0	NO	14,774	0.0	0	NO		14,774
11/30/2019	35.0	0.0	NO	24,740	0.0	0	NO		24,740

Max Daily Flow (Limit: 51,120): 48,196

Monthly Total: 726,401

12/1/2019	34.8	0.0	NO	21,522	20.3	0	NO	401	21,923
12/2/2019	34.4	0.0	NO	15,379	0.0	0	NO		15,379
12/3/2019	34.4	0.0	NO	6,990	20.9	0	NO	385	7,375
12/4/2019	34.5	0.0	NO	14,274	18.5	0	NO	379	14,653
12/5/2019	34.8	0.0	NO	14,538	0.0	0	NO	0	14,538
12/6/2019	34.6	0.0	NO	23,326	19.5	0	NO	388	23,714
12/7/2019	34.6	0.0	NO	12,745	0.0	0	NO		12,745
12/8/2019	34.7	0.0	NO	36,781	0.0	0	NO		36,781
12/9/2019	34.5	0.0	NO	23,040	20.6	0	NO	404	23,444
12/10/2019	34.5	0.0	NO	19,823	20.6	0	NO	404	20,227
12/11/2019	34.8	0.0	NO	22,080	0.0	0	NO	8	22,088
12/12/2019	34.8	0.0	NO	25,896	19.8	0	NO	399	26,295
12/13/2019	34.5	0.0	NO	1,955	20.2	0	NO	402	2,356
12/14/2019	34.5	0.0	NO	28,380	0.1	0	NO	6	28,385
12/15/2019	34.6	0.0	NO	19,759	0.0	0	NO		19,759
12/16/2019	34.8	0.0	NO	31,903	20.5	0	NO	379	32,282
12/17/2019	35.1	0.0	NO	36,871	0.0	0	NO		36,871
12/18/2019	34.4	0.0	NO	14,430	19.9	0	NO	374	14,804
12/19/2019	34.9	0.0	NO	6,756	17.3	0	NO	377	7,133
12/20/2019	34.9	0.0	NO	28,673	0.0	0	NO		28,673
12/21/2019	35.0	0.0	NO	25,187	0.0	0	NO		25,187
12/22/2019	34.5	0.0	NO	29,376	18.4	0	NO	396	29,772
12/23/2019	34.8	0.0	NO	14,397	0.0	0	NO		14,397
12/24/2019	34.4	0.0	NO	6,444	0.0	0	NO		6,444
12/25/2019	34.6	0.0	NO	22,058	20.5	0	NO	405	22,462
12/26/2019	34.7	0.0	NO	27,775	0.0	0	NO		27,775
12/27/2019	34.9	0.0	NO	43,702	20.7	0	NO	397	44,099
12/28/2019	35.0	0.0	NO	19,809	0.1	0	NO		19,809
12/29/2019	34.5	0.0	NO	3,585	0.0	0	NO		3,585
12/30/2019	34.6	0.0	NO	45,358	20.2	0	NO	383	45,742
12/31/2019	34.6	0.0	NO	28,312	20.4	0	NO	403	28,715

Max Daily Flow (Limit: 51,120): 45,742

Monthly Total: 677,412

Attachment 5
Monthly Flow Data

Industrial Flow Reporting Form for Delta Diablo

SIU Name: **PG&E Gateway Generating Station**

Address: 3225 Wilbur Avenue, Antioch, CA 94509

City: Antioch

Contact Name: Tim Wisdom

Flow Meter: Sewer Final Effluent ☒ X ☐ City Water Meter ☐

(The data are based on flowmeter readings as recorded by the plant's "Pi Historian" data acquisition/handling system)

Year: **2019**

Month	Flow (gallons)	Due Date
January		
February		
March		
April		
May		
June		
July		
August		
September		
October	858,003	1/15/2020
November	726,401	1/15/2020
December	677,412	1/15/2020

Note:

1) Flow data is based on the sewer final effluent flow meter or the City water meter if no effluent flow meter is at the industrial facility.

2) The flow data documentation shall continue to be submitted in the regularly scheduled self-monitoring reports.

Attachment 6
WSAC Operating Hours Report

PG&E Gateway Generating Station

WSAC Operating Hours Report
October 2019 to December 2019

WSAC Operation	
Month	Hours of Operation
January-19	
February-19	
March-19	
April-19	
May-19	
June-19	
July-19	
August-19	
September-19	
October-19	192.42
November-19	37.42
December-19	0.00

Attachment 7
Cycles of Concentration

PG&E Gateway Generating Station

WSAC Average Daily Blowdown Cycles Report
October 2019 to December 2019

WSAC Operation	
Month	Average Daily Blowdown Cycles
January-19	
February-19	
March-19	
April-19	
May-19	
June-19	
July-19	
August-19	
September-19	
October-19	4.19
November-19	2.65
December-19	(No WSAC Operation)

Average Daily Blowdown Cycles calculated using the ratio of specific conductivities between the three WSAC basins (average) relative to the makeup water.

Attachment 8
Laboratory Results
Quarterly Monitoring of Combined Site Stream
(E-001)



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1911687 **Amended:** 11/21/2019

Revision: 1

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue
Antioch, CA 94509

Project Contact: Angel Espiritu

Project P.O.:

Project: Quarterly Sampling (November 2019)

Project Received: 11/14/2019

Analytical Report reviewed & approved for release on 11/21/2019 by:

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.





Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station
Project: Quarterly Sampling (November 2019)
WorkOrder: 1911687

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
LQL	Lowest Quantitation Level
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: 11/14/19 13:30
Date Prepared: 11/18/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: E1664A_SG
Analytical Method: E1664A
Unit: mg/L

Hexane Extractable Material (HEM; Oil & Grease) with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001B	Water	11/13/2019 10:25	O&G	189122

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
SGT-HEM	ND	5.0	1	11/19/2019 15:20

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001E	Water	11/14/2019 11:45	O&G	189122

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
SGT-HEM	ND	5.0	1	11/19/2019 15:25

Analyst(s): HN



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/19/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: E1664A
Analytical Method: E1664A
Unit: mg/L

Hexane Extractable Material (HEM; Oil & Grease) without Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001A	Water	11/13/2019 10:25	O&G	189045

Analytes	Result	RL	DF	Date Analyzed
HEM	7.8	5.0	1	11/20/2019 09:00

Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001E	Water	11/14/2019 11:45	O&G	189045

Analytes	Result	RL	DF	Date Analyzed
HEM	ND	5.0	1	11/20/2019 09:05

Analyst(s): HN



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/19/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: SM4500-NH3 BG
Analytical Method: SM4500-NH3 BG
Unit: mg/L

Ammonia as N

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001C	Water	11/14/2019 11:45	WC_SKALAR 111919A1_96	189106

Analytes	Result	RL	DF	Date Analyzed
Ammonia, total as N	53	1.0	10	11/19/2019 11:56

Analyst(s): RB



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 1/14/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: SM5210B
Analytical Method: SM5210 B-2001
Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Comp)	1911687-002A	Water	11/14/2019 11:40	WetChem	188910

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
BOD	ND	4.0	1	11/19/2019 09:39

Analyst(s): AL



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/20/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
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
E-001 (Grab)	1911687-001D	Water	11/14/2019 11:45	WC_SKALAR 112019B1_23	189230

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
Total Cyanide	35	1.0	1	11/20/2019 14:44

Analyst(s): NM



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/18/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: SM5220 D-1997
Analytical Method: SM5220 D-1997
Unit: mg/L

Chemical Oxygen Demand (COD) as mg O₂ /L

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Comp)	1911687-002B	Water	11/14/2019 11:40	SPECTROPHOTOMETER	189073

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
COD	19	10	1	11/18/2019 14:02

Analyst(s): AL



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/14/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: E245.2
Analytical Method: E245.2
Unit: µg/L

Mercury by Cold Vapor Atomic Absorption

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Comp)	1911687-002E	Water	11/14/2019 11:40	AA1 _13	188906

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
Mercury	ND	0.20	1	11/15/2019 12:11

Analyst(s): JC



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/14/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
E-001 (Comp)	1911687-002F	Water	11/14/2019 11:40		ICP-MS2 056SMPL.D	188882
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Arsenic	0.66		0.50	1		11/15/2019 14:16
Cadmium	ND		0.50	1		11/15/2019 14:16
Chromium	ND		0.50	1		11/15/2019 14:16
Copper	4.4		0.50	1		11/15/2019 14:16
Iron	ND		100	1		11/15/2019 14:16
Lead	ND		0.50	1		11/15/2019 14:16
Molybdenum	55		0.50	1		11/15/2019 14:16
Nickel	1.2		1.0	1		11/15/2019 14:16
Selenium	ND		0.50	1		11/15/2019 14:16
Silver	ND		0.50	1		11/15/2019 14:16
Zinc	150		20	1		11/15/2019 14:16
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	106		70-130			11/15/2019 14:16
<u>Analyst(s):</u> MIG						



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/18/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: E420.4
Analytical Method: E420.4
Unit: µg/L

Phenolics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Grab)	1911687-001C	Water	11/14/2019 11:45	WC_SKALAR 111819A1_27	189063

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
Phenolics	37	2.0	1	11/18/2019 11:23

Analyst(s): NM



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/14/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C-1997
Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Comp)	1911687-002C	Water	11/14/2019 11:40	WetChem	188938

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
Total Dissolved Solids	343	10.0	1	11/15/2019 11:20

Analyst(s): AL



Analytical Report

Client: PG&E Gateway Generating Station
Date Received: 11/14/19 13:30
Date Prepared: 11/15/19
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D-1997
Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001 (Comp)	1911687-002D	Water	11/14/2019 11:40	WetChem	188987

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DE</u>	<u>Date Analyzed</u>
Total Suspended Solids	ND	1.00	1	11/15/2019 20:23

Analyst(s): HAD



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/19/19
Date Analyzed: 11/19/19
Instrument: O&G
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189122
Extraction Method: E1664A_SG
Analytical Method: E1664A
Unit: mg/L
Sample ID: MB/LCS/LCSD-189122

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
SGT-HEM	ND	0.72	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
SGT-HEM	8.7	8.2	10.42	83	79	64-132	6.16	30



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/18/19
Date Analyzed: 11/18/19
Instrument: O&G
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189045
Extraction Method: E1664A
Analytical Method: E1664A
Unit: mg/L
Sample ID: MB/LCS/LCSD-189045

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
HEM	ND	1.2	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
HEM	17	17	20.83	83	84	78-114	1.04	30



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/19/19
Date Analyzed: 11/19/19
Instrument: WC_SKALAR
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189106
Extraction Method: SM4500-NH3 BG
Analytical Method: SM4500-NH3 BG
Unit: mg/L
Sample ID: MB/LCS/LCSD-189106
1911687-001CMS/MSD

QC Summary Report for SM4500-NH3

Analyte	MB Result	MDL	RL			
Ammonia, total as N	ND	0.092	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Ammonia, total as N	4.5	4.2	4	113	105	88-113	8.09	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Ammonia, total as N	1	NR	NR	4	53	NR	NR	88-113	NR	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 1/14/19 - 11/14/19
Date Analyzed: 11/19/19
Instrument: WetChem
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 188910
Extraction Method: SM5210B
Analytical Method: SM5210 B-2001
Unit: mg/L
Sample ID: MB/LCS/LCSD-188910
1911687-002A

QC Summary Report for BOD

Analyte	MB Result	MDL	RL			
BOD	ND	4.0	4.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
BOD	190	180	198	97	89	80-120	8.13	16

Analyte	SAMP Result	DUP Result		RPD	RPD Limit
BOD	ND	ND		N/A	10



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/20/19
Date Analyzed: 11/20/19
Instrument: WC_SKALAR
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189230
Extraction Method: SM4500-CN⁻ E
Analytical Method: SM4500-CN⁻ CE
Unit: µg/L
Sample ID: MB/LCS/LCSD-189230

QC Summary Report for SM4500-CN⁻ CE

Analyte	MB Result	MDL	RL			
Total Cyanide	ND	0.77	1.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide	39	39	40	97	98	80-120	1.49	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/18/19
Date Analyzed: 11/18/19
Instrument: SPECTROPHOTOMETER
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189073
Extraction Method: SM5220 D-1997
Analytical Method: SM5220 D-1997
Unit: mg/L
Sample ID: MB/LCS/LCSD-189073

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	7.2	10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	91	92	100	91	92	90-110	1.09	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/14/19
Date Analyzed: 11/15/19
Instrument: AA1
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 188906
Extraction Method: E245.2
Analytical Method: E245.2
Unit: µg/L
Sample ID: MB/LCS/LCSD-188906
1911687-002EMS/MSD

QC Summary Report for Mercury

Analyte	MB Result	MDL	RL			
Mercury	ND	0.14	0.20	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Mercury	1.8	1.7	2	92	87	85-115	4.81	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Mercury	1	1.8	1.6	2	ND	89	82	80-120	7.28	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Mercury	ND	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/14/19
Date Analyzed: 11/14/19
Instrument: ICP-MS3
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 188882
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-188882

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.12	0.50	-	-	-
Cadmium	ND	0.060	0.50	-	-	-
Chromium	ND	0.36	0.50	-	-	-
Copper	ND	0.43	0.50	-	-	-
Iron	ND	58	100	-	-	-
Lead	ND	0.32	0.50	-	-	-
Molybdenum	ND	0.21	0.50	-	-	-
Nickel	ND	0.58	1.0	-	-	-
Selenium	ND	0.18	0.50	-	-	-
Silver	ND	0.042	0.50	-	-	-
Zinc	ND	11	20	-	-	-

Surrogate Recovery

Terbium	550	500	110	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	52	54	50	105	107	85-115	2.09	20
Cadmium	52	53	50	104	106	85-115	1.11	20
Chromium	51	52	50	102	104	85-115	1.55	20
Copper	53	53	50	106	106	85-115	0	20
Iron	5100	5200	5000	102	103	85-115	0.622	20
Lead	51	51	50	103	102	85-115	0.409	20
Molybdenum	46	45	50	91	91	85-115	0	20
Nickel	53	52	50	105	105	85-115	0	20
Selenium	56	55	50	112	110	85-115	1.79	20
Silver	49	49	50	98	98	85-115	0	20
Zinc	530	530	500	107	106	85-115	0.356	20

Surrogate Recovery

Terbium	570	560	500	113	112	70-130	1.28	20
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Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/18/19
Date Analyzed: 11/18/19
Instrument: WC_SKALAR
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 189063
Extraction Method: E420.4
Analytical Method: E420.4
Unit: µg/L
Sample ID: MB/LCS/LCSD-189063

QC Summary Report for E420.4

Analyte	MB Result	MDL	RL			
Phenolics	ND	1.6	2.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Phenolics	37	39	40	93	98	80-120	5.09	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/14/19
Date Analyzed: 11/15/19
Instrument: WetChem
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 188938
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C-1997
Unit: mg/L
Sample ID: MB/LCS/LCSD-188938

QC Summary Report for Total Dissolved Solids

Analyte	MB Result	MDL	RL			
Total Dissolved Solids	ND	10.0	10.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Dissolved Solids	976	995	1000	98	100	80-120	1.93	10



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/15/19
Date Analyzed: 11/15/19
Instrument: WetChem
Matrix: Water
Project: Quarterly Sampling (November 2019)

WorkOrder: 1911687
BatchID: 188987
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D-1997
Unit: mg/L
Sample ID: MB/LCS/LCSD-188987

QC Summary Report for Total Suspended Solids

Analyte	MB Result	MDL	RL			
Total Suspended Solids	ND	1.00	1.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Suspended Solids	88.5	92.5	100	88	92	80-120	4.42	10



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1911687

ClientCode: PGEA

☐ WaterTrax☐ WriteOn☐ EDF☐ Excel☐ EQuIS☒ Email☐ HardCopy☐ ThirdParty☐ J-flag☐ Detection Summary☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@Pge.com; J5Ld@pge.com; t1WY@
PO:
Project: Quarterly Sampling (November 2019)

Bill to:

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

Requested TATs: 5 days;
7 days;

Date Received: 11/14/2019

Date Logged: 11/14/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1911687-001	E-001 (Grab)	Water	11/13/2019 10:25	☐	B	A								A		
1911687-001	E-001 (Grab)	Water	11/14/2019 11:45	☐	E	E	C		D				C			
1911687-002	E-001 (Comp)	Water	11/14/2019 11:40	☐				A		B	E	F		A	C	D

Test Legend:

1	1664A_SG_W
5	CN_SM4500CE_W
9	PHENOLICS_W

2	1664A_W
6	COD_W
10	PRDisposal Fee

3	AMMONIA-SM4500BG_W
7	HG_W
11	TDS_W

4	BOD_W
8	METALSMS_TTLC_W
12	TSS_W

Project Manager: Angela Rydelius

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.



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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 STATION

Project: Quarterly Sampling (November 2019)

Work Order: 1911687

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 11/14/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1911687-001A	E-001 (Grab)	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	2	1LA w/ HCl	☐	11/13/2019 10:25	5 days	Trace	☐	
1911687-001B	E-001 (Grab)	Water	E1664A (SGT- HEM; Non-polar Material)	2	1LA w/ HCl	☐	11/13/2019 10:25	5 days	Trace	☐	
1911687-001C	E-001 (Grab)	Water	E420.4 (Phenolics)	1	500mL aG w/ H2SO4	☐	11/14/2019 11:45	5 days	Trace	☐	
			SM4500-NH3 BG (Ammonia Nitrogen)			☐		5 days	Trace	☐	
1911687-001D	E-001 (Grab)	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3	☐	11/14/2019 11:45	5 days	Trace	☐	
1911687-001E	E-001 (Grab)	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	2	1LA w/ HCl	☐	11/14/2019 11:45	5 days	Trace	☐	
			E1664A (SGT- HEM; Non-polar Material)			☐		5 days	Trace	☐	
1911687-002A	E-001 (Comp)	Water	SM5210B (BOD)	1	1L HDPE, unprsv.	☐	11/14/2019 11:40	7 days	Trace	☐	
1911687-002B	E-001 (Comp)	Water	SM5220D (COD)	2	aVOA w/ H2SO4	☐	11/14/2019 11:40	5 days	Trace	☐	
1911687-002C	E-001 (Comp)	Water	SM2540C (TDS)	1	500mL HDPE, unprsv.	☐	11/14/2019 11:40	5 days	Trace	☐	
1911687-002D	E-001 (Comp)	Water	SM2540D (TSS)	1	1L HDPE, unprsv.	☐	11/14/2019 11:40	5 days	Trace	☐	
1911687-002E	E-001 (Comp)	Water	E245.2 (Mercury)	1	250mL HDPE w/ HNO3	☐	11/14/2019 11:40	5 days	Trace	☐	
1911687-002F	E-001 (Comp)	Water	E200.8 (Metals) <Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Molybdenum, Nickel, Selenium, Silver, Zinc>	1	250mL HDPE w/ HNO3	☐	11/14/2019 11:40	5 days	Trace	☐	

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 Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☐ PDF ☐ Excel ☐ Write On (DW) ☐
☐ Check if sample is effluent and "J" flag is required

Report To: Angel Espiritu

Bill To: PG&E Gateway

Analysis Request

Remarks

Company: PG&E Gateway Generating Station

E-Mail: abe4@pge.com, AIHE@pge.com, J5Ld@pge.com, tlWY@pge.com

Tel: (925) 522-7838, (510) 861-1597 (Cell) Fax: ()

Project Name: Quarterly Sampling (November 2019)

Project Location: Combined Site Flow

Sampler Signature: *Musker Environmental Sampling*

SAMPLE ID	LOCATION / Field Point Name	Sample Type Composite / Grab	SAMPLING		# Containers	Type Containers	Matrix		METHOD PRESERVED								Cyanide sodium preservative ABC E	Metals by 200.8 Selenium	Oil/Grease and with	Total Ph	Ammonia	Mercury	Metals (2 copper, lead, Molybdenum)	BOD (5)	COD (5)	TDS (5)	TSS (5)
			Date	Time			Waste Water	Sewer Water	None	ICE	H ₂ SO ₄	NaOH	HCL	HNO ₃	Other												
E-001		G	11/13/19	10:25	2	1L Amb	X			X			X				X										
E-001		G	11/14/19	11:45	2	1L Amb	X			X			X				X										
E-001		G	11/14/19	11:45	1	500ml Amb	X			X	X							X	X								
E-001		G	11/14/19	11:45	1	250-ml Poly	X			X		X			X												
E-001		C	11/14/19	11:40	1	1L Poly	X		X	X												X					
E-001		C	11/14/19	11:40	2	43-ml VOA	X			X	X												X				
E-001		C	11/14/19	11:40	1	500-ml poly	X		X	X														X			
E-001		C	11/14/19	11:40	1	1L poly	X		X	X															X		
E-001		C	11/14/19	11:40	1	250-ml Poly	X			X				X					X								
E-001		C	11/14/19	11:40	1	250-ml poly	X			X				X			X				X						

Relinquished By: *[Signature]*

Date: 11/14/19

Time: 13:30

Received By: *[Signature]*

Relinquished By: *[Signature]*

Date:

Time:

Received By: *[Signature]*

Relinquished By:

Date:

Time:

Received By:

ICE/t° *1.6C*

COMMENTS:

GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____

VOAS O&G METALS OTHER
PRESERVATION pH<2



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **Quarterly Sampling (November 2019)**

Date and Time Received: **11/14/2019 13:30**

Date Logged: **11/14/2019**

Received by: **Kena Ponce**

Logged by: **Kena Ponce**

WorkOrder No: **1911687** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 1.6°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☒ No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes ☒ No ☐	NA ☐

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒

Comments:



McC Campbell Analytical, Inc.

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Analytical Report

WorkOrder: 1911688

Report Created for: PG&E Gateway Generating Station

3225 Wilbur Avenue
Antioch, CA 94509

Project Contact: Sanjiv Gill

Project P.O.:

Project: pH Sampling (November 2019)

Project Received: 11/14/2019

Analytical Report reviewed & approved for release on 11/20/2019 by:

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.





Glossary of Terms & Qualifier Definitions

Client: PG&E Gateway Generating Station
Project: pH Sampling (November 2019)
WorkOrder: 1911688

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
LQL	Lowest Quantitation Level
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: 11/14/19 13:30
Date Prepared: 11/14/19
Project: pH Sampling (November 2019)

WorkOrder: 1911688
Extraction Method: SM4500H+B-2000
Analytical Method: SM4500H+B
Unit: pH units

pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-001	1911688-001A	Water	11/13/2019 10:10	WetChem	188911

Analytes	Result	Accuracy	DE	Date Analyzed
pH	7.12	±0.05	1	11/14/2019 10:28

Analyst(s): HAD



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Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax ☐ WriteOn ☐ EDF

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1911688

ClientCode: PGEA

☐ Excel ☐ EQulS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:

Sanjiv Gill
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: sanjivgill@comcast.net
cc/3rd Party:
PO:
Project: pH Sampling (November 2019)

Bill to:

Sanjiv Gil
Muskan Environmental Services
1674 Bay Court
Yuba City, CA 95993

Requested TAT: 5 days;

Date Received: 11/14/2019

Date Logged: 11/14/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1911688-001	E-001	Water	11/13/2019 10:10	☐	A	A										

Test Legend:

1	PH_W_SANJIV	2	PRDisposal Fee	3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

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.



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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: pH Sampling (November 2019)

Work Order: 1911688

Client Contact: Sanjiv Gill

QC Level: LEVEL 2

Contact's Email: sanjivgill@comcast.net

Comments

Date Logged: 11/14/2019

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1911688-001A	E-001	Water	SM4500H+B (Field pH)	0	<NOT RECEIVED>	☐	11/13/2019 10:10	5 days		☐	

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.



TURN AROUND TIME

☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☐ **PDF** ☐ **Excel** ☐ **Write On (DW)** ☐
☐ Check if sample is effluent and "J" flag is required

Sampler Signature: Muskan Environmental Sampling

Remarks

[illegible]

Logbook for Field pH Samples

[illegible]



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **pH Sampling (November 2019)**

Date and Time Received: **11/14/2019 13:30**

Date Logged: **11/14/2019**

Received by: **Tina Perez**

Logged by: **Kena Ponce**

WorkOrder No: **1911688** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☐	No ☒	

Sample/Temp Blank temperature	Temp:		NA ☒
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☒
Sample labels checked for correct preservation?	Yes ☒	No ☐	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO ₃ : <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐	No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐	No ☐	NA ☒

Comments

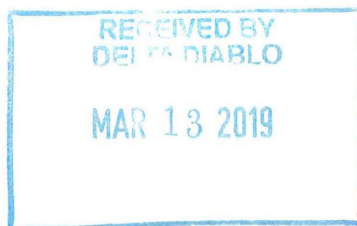
Gateway Generating Station
(00-AFC-1C)

Annual Compliance Report No. 11

Exhibit 4b
Communications with DD on Criteria
Pollutant Monitoring Waiver
(Condition of Certification SOIL&WATER-4)



**Pacific Gas and
Electric Company®**



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

Mar 13, 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: Closure Report on Cyanide Event of September 2018

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.

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

9/27/2018: 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)

9/27/2018: 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)

10/30/2018: The first resampling 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.)

11/07/2018: The second resampling 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.)

11/24/2018: The third resampling on cyanide was collected and analyzed. The results indicated non-detectable (<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.)

12/04/2018: The fourth resampling on cyanide was collected and analyzed. The results in both un-preserved 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.)

12/11/2018: The fifth resampling on cyanide was collected and analyzed. The results in both un-preserved 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.)

12/14/2018: The sixth resampling 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.)

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

1/10/2019: The eighth resampling 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.)

1/16/2019: The ninth resampling 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 from 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.)

1/29/2019: 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.

2/7/2019: The tenth resampling 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.)

2/11/2019: The eleventh resampling 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.

2/25/2019: The twelfth resampling 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.)

2/27/2019: The thirteenth resampling 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.)

2/28/2019: The fourteenth resampling 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 abe4@pge.com. 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
To: '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 semi-annual 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)
ABE4@pge.com*

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,

Yen Cao

McC Campbell 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
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)



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Analytical Report

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 Collected	Instrument	Batch ID
I-001	1809780-001E	Water	09/19/2018 11:10	GC22 09211811.D	165139

Analytes	Result	MDL	RL	DF	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	REC (%)	Limits	
Decachlorobiphenyl	97	14-168	09/21/2018 15:03

Analyst(s): CK



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Analytical Report

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 Collected	Instrument	Batch ID
I-001	1809780-001C	Water	09/19/2018 11:10	GC28 09201815.D	165341

Analytes	Result	RL	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	REC (%)	Limits	
Dibromofluoromethane	115	78-141	09/20/2018 19:05

Analyst(s): JEM



Analytical Report

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: 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 11:10	GC10 09241810.D	165451
Analytes	Result	RL	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	

(Cont.)



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Analytical Report

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: 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 11:10	GC10 09241810.D	165451

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<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

Analyst(s): TK



Analytical Report

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	Matrix	Date Collected	Instrument	Batch ID
I-001	1809780-001D	Water	09/19/2018 11:10	GC17 09261824.D	165166
Analytes	Result	RL	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	

(Cont.)



Analytical Report

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	Matrix	Date Collected	Instrument	Batch ID
I-001	1809780-001D	Water	09/19/2018 11:10	GC17 09261824.D	165166
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
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

(Cont.)



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Analytical Report

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	Matrix	Date Collected	Instrument	Batch ID
I-001	1809780-001D	Water	09/19/2018 11:10	GC17 09261824.D	165166

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
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

Analyst(s): REB



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Analytical Report

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	09/19/2018 11:10	WC_SKALAR 092418A1_25	165431

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Cyanide	47	1.0	1	09/24/2018 12:48

Analyst(s): BM



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Analytical Report

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 Collected	Instrument	Batch ID
I-001	1809780-001F	Water	09/19/2018 11:10	AA1 _16	165200

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Mercury	ND	0.20	1	09/20/2018 11:20

Analyst(s): JC



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Analytical Report

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 Collected	Instrument	Batch ID
I-001	1809780-001F	Water	09/19/2018 11:10	ICP-MS1 124SMPL.D	165141

Analytes	Result	RL	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

Surrogates	REC (%)	Limits	
Terbium	101	70-130	09/21/2018 02:46

Analyst(s): ND



Quality Control Report

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	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

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Quality Control Report

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



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/20/18
Date Analyzed: 9/20/18
Instrument: GC28
Matrix: Water
Project: Semi-Annually Sampling (September 2018)

WorkOrder: 1809780
BatchID: 165341
Extraction Method: E624
Analytical Method: E624
Unit: µg/L
Sample ID: MB/LCS/LCSD-165341

QC Summary Report for E624

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acrolein (Propenal)	ND	5.0	-	-	-
Acrylonitrile	ND	2.0	-	-	-
2-Chloroethyl Vinyl Ether	ND	1.0	-	-	-
Surrogate Recovery					
Dibromofluoromethane	31.1		25	124	83-139

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acrolein (Propenal)	17.0	18.0	20	85	90	70-130	5.69	20
Acrylonitrile	15.9	16.0	20	80	80	70-130	0	20
2-Chloroethyl Vinyl Ether	22.5	22.2	20	112	111	70-130	1.36	20
Surrogate Recovery								
Dibromofluoromethane	30.0	29.8	25	120	119	83-139	0.666	20



Quality Control Report

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

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

QC Summary Report for E624

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	-	-	-

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Quality Control Report

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

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

QC Summary Report for E624

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

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Quality Control Report

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

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

QC Summary Report for E624

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

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Quality Control Report

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

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

QC Summary Report for E624

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



Quality Control Report

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

QC Summary Report for E625

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	-	-	-

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Quality Control Report

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

QC Summary Report for E625

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	-	-	-

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Quality Control Report

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

QC Summary Report for E625

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

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Quality Control Report

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

QC Summary Report for E625

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

(Cont.)



Quality Control Report

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

QC Summary Report for E625

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

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



Quality Control Report

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

QC Summary Report for E625

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



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/24/18
Date Analyzed: 9/24/18
Instrument: WC_SKALAR
Matrix: Water
Project: Semi-Annually Sampling (September 2018)

WorkOrder: 1809780
BatchID: 165431
Extraction Method: SM4500-CN⁻ E
Analytical Method: SM4500-CN⁻ CE
Unit: µg/L
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



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/19/18
Date Analyzed: 9/20/18
Instrument: AA1
Matrix: Water
Project: Semi-Annually Sampling (September 2018)

WorkOrder: 1809780
BatchID: 165200
Extraction Method: E245.2
Analytical Method: E245.2
Unit: µg/L
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 Limit
Mercury	1.76	1.76	2	88	88	85-115	0	20



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 9/18/18
Date Analyzed: 9/19/18
Instrument: ICP-MS2
Matrix: Water
Project: Semi-Annually Sampling (September 2018)

WorkOrder: 1809780
BatchID: 165141
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
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	750	101	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	52.6	52.5	50	105	105	85-115	0	20
Arsenic	50.4	49.5	50	101	99	85-115	1.92	20
Beryllium	53.0	52.9	50	106	106	85-115	0	20
Cadmium	51.7	51.5	50	103	103	85-115	0	20
Chromium	51.6	51.3	50	103	103	85-115	0	20
Copper	52.0	51.9	50	104	104	85-115	0	20
Lead	50.1	49.8	50	100	100	85-115	0	20
Mercury	1.20	1.18	1.25	96	94	85-115	2.02	20
Nickel	52.5	51.5	50	105	103	85-115	1.96	20
Selenium	51.7	50.0	50	103	100	85-115	3.36	20
Silver	51.8	51.1	50	104	102	85-115	1.36	20
Thallium	48.0	47.9	50	96	96	85-115	0	20
Zinc	517	515	500	103	103	85-115	0	20

Surrogate Recovery

Terbium	759	758	750	101	101	70-130	0	20
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1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1809780

ClientCode: PGEA

☐ WaterTrax☐ WriteOn☐ EDF☐ Excel☐ EQulS☒ Email☐ HardCopy☐ ThirdParty☐ J-flag☐ Detection Summary☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com; J5Ld@pge.com;
PO:
Project: Semi-Annually Sampling (September 2018)

Bill to:

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

Requested TATs: 15 days;
5 days;

Date Received: 09/19/2018

Date Logged: 09/19/2018

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1809780-001	I-001	Water	9/19/2018 11:10	☐	H	E	B	C	D	G	A	F	F			

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.



McC Campbell 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.mcccampbell.com / E-mail: main@mcccampbell.com

WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: Semi-Annually Sampling (September 2018)

Work Order: 1809780

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 9/19/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ 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 ⁻ CE (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, 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 Pesticides+PCBs w/ Florisil Clean-up)	1	1LA Narrow Mouth, Unpres	☐	9/19/2018 11:10	5 days	Present	☐	
1809780-001F	I-001	Water	E200.8 (PP13 Metals)	2	250mL HDPE w/ HNO3	☐	9/19/2018 11:10	5 days	Present	☐	
			E245.2 (Mercury)			☐		5 days	Present	☐	
1809780-001G	I-001	Water	Asbestos - E100.1, modified EPA Protocol (MFL)	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.

COMMENTS:
TTO (EPA 608), TTO (EPA 624),
TTO (EPA 625) see ATTACHED
Appendix A and analyze only listed
compounds

Sampling Containers for APPENDIX B

Date:	Time:	# Containers	Container Type	Preservative:	Composite/Grab
9/19/18	11:10	8	Amber Glass 1L	NP	Grab
9/19/18	11:10	2	VOA 40 mL	NP	Grab
9/19/18	11:10	2	VOA 40 mL	HCl	Grab
9/19/18	11:00	2	POLY 250 ml	HNO ₃	Composite
9/19/18	11:40	1	Amber Poly 250 mL (pretreated with sodium thiosulfate)	NaOH	Grab



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

Acrolein
Acrylonitrile
Benzene
Bromodichloromethane (Dichlorobromomethane)
Bromform
Bromomethane (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-Trichloroethane
1, 1, 2-Trichloroethane
Trichloroethene (TCE)
Trichlorofluoromethane
Vinyl chloride (Chloroethylene)

EPA Method 625 Compounds

Acenaphthene
Acenaphthylene
Anthracene
Benzidine
Benzo (a) anthracene
Benzo (a) pyrene
Benzo (b) fluoranthene
Benzo (g, h, i) perylene
Benzo (k) fluoranthene
Benzyl butyl phthalate
bis (2-Chloroethoxy) methane
bis (2-Chloroethyl) ether
bis (2-Chloroisopropyl) ether
bis (2-Ethylhexyl) phthalate
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
2-Chloronaphthalene
2-Chlorophenyl
4-Chlorophenyl phenyl ether
Chrysene
Dibenzo (a, h) anthracene
1, 2-Dichlorobenzene
1, 3-Dichlorobenzene
1, 4-Dichlorobenzene
3, 3'-Dichlorobenzidine

2, 4-Dichlorophenol
Diethyl phthalate
2, 4-Dimethylphenol
Dimethylphthalate
Di-n-butylphthalate
2, 4-Dinitrophenol
2, 4-Dinitrotoluene
2, 6-Dinitrotoluene
Di-n-octylphthalate
1, 2-Diphenylhydrazine Azo
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
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
1, 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 1232
PCB 1242
PCB 1248
PCB 1254
PCB 1260
Toxaphene

[Handwritten signature] 9/19/18 13:45
9/19/18 13:45

APPENDIX B

(for 40 CFR part 423 - 126 Priority Pollutants)

001	Acenaphthene	065	Di-N-Butyl Phthalate
002	Acrolein	066	Di-n-octyl Phthalate
003	Acrylonitrile	067	Diethyl Phthalate
004	Benzene	068	Dimethyl phthalate
005	Benzidine	069	1, 2-benzanthracene
006	Carbon tetrachloride		(benzo(a)anthracene)
	(tetrachloromethane)	070	Benzo(a)pyrene (3, 4-benzo-pyrene)
007	Chlorobenzene	071	3,4-Benzofluoranthene
008	1, 2, 4-trichlorobenzene		(benzo(b) fluoranthene)
009	Hexachlorobenzene	072	11,12-benzofluoranthene
010	1, 2-dichloroethane		(benzo(b) fluoranthene)
011	1, 1, 1-trichloroethane	073	Chrysene
012	Hexachloroethane	074	Acenaphthylene
013	1, 1-dichloroethane	075	Anthracene
014	1, 1, 2-trichloroethane	076	1, 12-benzoperylene (benzo(ghi) perylene)
015	1, 1, 2, 2-tetrachloroethane	077	Fluorene
016	Chloroethane	078	Phenanthrene
017	Bis (2-chloroethyl) ether	079	1, 2, 5, 6-dibenzanthracene
018	2-chloroethyl vinyl ether (mixed)		(dibenzo(a,h)anthracene)
019	2-chloronaphthalene	080	Indeno (1, 2, 3-cd) pyrene
020	2, 4, 6-trichlorophenol		(2, 3-o-pherynylene pyrene)
021	Parachlorometa cresol	081	Pyrene
022	Chloroform (trichloromethane)	082	Tetrachloroethylene
023	2-chlorophenol	083	Toluene
024	1,2-dichlorobenzene (benzo(b)fluoranthene)	084	Trichloroethylene
025	1,3-dichlorobenzene (benzo(b)fluoranthene)	085	Vinyl chloride (chloroethylene)
026	1, 4-dichlorobenzene	086	Aldrin
027	3, 3-dichlorobenzidine	087	Dieldrin
028	1, 1-dichloroethylene	088	Chlordane (technical mixture and metabolites)
029	1, 2-trans-dichloroethylene	089	4, 4-DDT
030	2, 4-dichlorophenol	090	4, 4-DDE (p, p-DDX)
031	1, 2-dichloropropane	091	4, 4-DDD (p, p-TDE)
032	1, 2-dichloropropylene	092	Alpha-endosulfan
	(1, 3-dichloropropene)	093	Beta-endosulfan
033	2, 4-dimethylphenol	094	Endosulfan sulfate
034	2, 4-dinitrotoluene	095	Endrin
035	2, 6-dinitrotoluene	096	Endrin aldehyde
036	1, 2-diphenylhydrazine	097	Heptachlor
037	Ethylbenzene	098	Heptachlor epoxide
038	Fluoranthene		(BHC-hexachlorocyclohexane)
039	4-chlorophenyl phenyl ether	099	Alpha-BHC
040	4-bromophenyl phenyl ether	100	Beta-BHC
041	Bis(2-chloroisopropyl) ether	101	Gamma-BHC (lindane)
042	Bis(2-chloroethoxy) methane	102	Delta-BHC
043	Methylene chloride (dichloromethane)		(PCB-polychlorinated bi-phenyls)
044	Methyl chloride (dichloromethane)	103	PCB-1242 (Arochlor 1242)
045	Methyl bromide (bromomethane)	104	PCB-1254 (Arochlor 1254)
046	Bromoform (tribromomethane)	105	PCB-1221 (Arochlor 1221)
047	Dichlorobromomethane	106	PCB-1232 (Arochlor 1232)
048	Chlorodibromomethane	107	PCB-1248 (Arochlor 1248)
049	Hexachlorobutadiene	108	PCB-1260 (Arochlor 1260)
050	Hexachloromyclopentadiene	109	PCB-1016 (Arochlor 1016)
051	Isophorone	110	Toxaphene
052	Naphthalene	111	Antimony
053	Nitrobenzene	112	Arsenic
054	2-Nitrophenol	113	Asbestos
055	4-nitrophenol	114	Beryllium
056	2, 4-dinitrophenol	115	Cadmium
057	4, 6-dinitro-o-cresol	116	Chromium
058	N-nitrosodimethylamine	117	Copper
059	N-nitrosodiphenylamine	118	Cyanide, (Total)
060	N-nitrosodi-n-propylamine	119	Lead
061	Pentachlorophenol	120	Mercury
062	Phenol	121	Nickel
063	Bis(2-ethylhexyl) phthalate	122	Selenium
064	Butyl benzyl phthalate	123	Silver
		124	Thallium
		125	Zinc
		126	2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)

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



Sample Receipt Checklist

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

Date and Time Received: **9/19/2018 13:45**

Date Logged: **9/19/2018**

Received by: **Tina Perez**

Logged by: **Kena Ponce**

WorkOrder No: **1809780** Matrix: Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 5.6°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐ No ☐	NA ☒
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐ No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
--	--	--

Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒
--	--	--

Comments:

Attachment 2

Summary of Cyanide Resampling Results

GGG - Summary of Cyanide Resampling Results

	Resample #1: 10/30/2018 - @ Tiger Pit		Resample #2: 11/07/2018 @ Tiger Pit		Resample #3: 11/24/2018 @ Tiger Pit		Resample #4: 12/04/2018 @ Tiger Pit		Resample #5: 12/11/2018 @ Tiger Pit		Resample #6: 12/14/2018 @ Tiger Pit		Resample #7: 12/18/2018 @ Tiger Pit	
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.

Sampler Laboratory	Resample #8 1/10/2019		Resample #9 (1/16/2019)	Resample #10 (2/7/2019)	Resample #11 (2/11/2019)		Resample #12 (2/25/2019)	Resample #13 (2/27/2019)	Resample #14 (2/28/2019)
	No Preservative	No Preservative	No Preservative	No Preservative	No Preservative		No Preservative	No Preservative	No Preservative
	Enthalpy	Doug Welch	Muskan	Muskan	Muskan		Muskan	Doug Welch	Muskan
	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)		
HRSO IP A			ND (<10)						
HRSO IP B			ND (<10)						
Phosphate 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



McC Campbell 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:

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.





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 Collected	Instrument	Batch ID
Tiger Pit-Amber	1810E56-001A	Water	10/30/2018 07:55	WC_SKALAR 103018A1_35	167499

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	21	1.0	1	10/30/2018 11:17

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tiger Pit-Clear	1810E56-002A	Water	10/30/2018 07:55	WC_SKALAR 103018A1_36	167499

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	14	1.0	1	10/30/2018 11:20

Analyst(s): NM



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 10/30/18
Date Analyzed: 10/30/18
Instrument: WC_SKALAR
Matrix: Water
Project: Resample 1 (10/30/18)

WorkOrder: 1810E56
BatchID: 167499
Extraction Method: SM4500-CN⁻ E
Analytical Method: SM4500-CN⁻ CE
Unit: µg/L
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



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax

☐ WriteOn

☐ EDF

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1810E56
ClientCode: PGEA
☐ Excel

☐ EQulS

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com; J5Ld@pge.com; tlWY@p
PO:
Project: Resample 1 (10/30/18)

Bill to:

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

Requested TAT: 1 day;
Date Received: 10/30/2018
Date Logged: 10/30/2018

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					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.



McC Campbell 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 STATION

Project: Resample 1 (10/30/18)

Work Order: 1810E56

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 10/30/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ 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 (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3	☐	10/30/2018 7:55	1 day	None	☐	
1810E56-002A	Tiger Pit-Clear	Water	SM4500-CN ⁻ CE (Cyanide, 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.



RUSH

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

☒ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

GeoTracker EDF ☐ **PDF** ☐ **Excel** ☐ **Write On (DW)** ☐
☐ Check if sample is effluent and "J" flag is required

Report To: Angel Espiritu	Bill To: PG&E Gateway
---------------------------	-----------------------

Company: PG&E Gateway Generating Station

E-Mail: abe4@pge.com, A1HE@pge.com, J5Ld@pge.com, tlWY@pge.com, DJH2@pge.com

Tel: (925) 522-7838, (510) 861-1597 (Cell) Fax: ()

Project Name: Resample 1 (10/30/18)

Project Location: Tiger Pit, Source Water

Sampler Signature: Muskan Environmental Sample

Analysis Request

Remarks

[illegible]

Cyanide (TOTAL) (Pretreated with sodium thiosulfate before preserving) by SM 4500 CN-ABCE

TOTO (USEPA 624-Volatile Organic Compounds)

TTO (USEPA 625- Semi Volatile Organic Compounds)

TTO (USEPA 608 – Organochlorine Pesticides and PCBs)

126 Priority Pollutants (see Appendix B analyze only listed compounds)

X

 $\wedge$

X—

Relinquished By:

Date: _____

Time:

Received By:

Relinquished By:

Date:

Time:

Received By:

ICE/t° 5.5 wet

GOOD CONDITION_____

HEAD SPACE ABSENT

DECHLORINATED IN LAB.
APPROPRIATE CONTAINERS

APPROPRIATE CONTAINERS.

COMMENTS:

**TTO (EPA 608), TTO (EPA 624),
TTO (EPA 625) see ATTACHED
Appendix A and analyze only listed
compounds**



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **Resample 1 (10/30/18)**

Date and Time Received **10/30/2018 10:00**

Date Logged: **10/30/2018**

Received by: **Jena Alfaro**

Logged by: **Agustina Venegas**

WorkOrder No: **1810E56** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 5.5°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☒ No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐ No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
--	--	--

Free Chlorine tested 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



**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

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**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.





ANALYTICAL RESULTS

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

Lab ID	T101182001	Date Collected	10/30/2018 07:55	Matrix	Water			
Sample ID	TIGER PIT (NAOH PRESERVED)	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-99/11			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-99/11			Analyzed by:	BCP		
Cyanide	9.7 ug/L	3	1		10/30/18 16:12	WCO 14042		





QUALITY CONTROL DATA

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

Analysis Description:	Cyanide, Total Analysis	QC Batch:	WCO/14042
Analysis Method:	SM 4500-CN C/E-99/11	QC Batch Method:	SM 4500-CN C/E-99/11

METHOD BLANK: 850434

Parameter	Blank Result	Reporting Limit	Units	Qualifiers
Cyanide	ND	3	ug/L	

LABORATORY CONTROL SAMPLE: 850435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% REC Limits	Qualifier
Cyanide	ug/L	20	19.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 850436 850437

Parameter	Units	T101182001 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide	ug/L	20	40	52.7	58.6	82	97	80-120	11	20	





ENVIRONMENTAL ANALYSES

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



**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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1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com





ENTHALPY

ANALYTICAL



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

Sample ID
TIGER PIT
TIGER PIT

Lab ID
304625-001
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.

Signature: _____

Date: 10/31/2018

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

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

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

ea

Formerly Curtis & Tompkins Labs

Phone (510) 486-0900
Fax (510) 486-0532

Sampler: Muskan Environmental Smp

Project Name: Resample 1 (10/30/18)

Report To: Angel Espiritu

Company: PAE Gateway Generating Station

EDD Format: Report Level ☒ II ☐ III ☐ IV

Telephone: (925) 522-7838

Turnaround Time: ☒ RUSH☐ Standard

Email: abek@pge.com

[illegible]

Notes: Sample sent
on ICE

containers:
500 ml poly
500 ml poly

**SAMPLE
RECEIPT**

- ☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:

DATE: 10/20/18 TIME: 09:30

DATE: 10-30-18 TIME: 10:08

DATE 10-30 TIME: 1:30^{pm}

RECEIVED BY:

DATE: 10-30-18 TIME: 9:30 AM

DATE 10-30 TIME: 1108

DATE: 10/30/16 TIME: 11:32

ANALYTICAL REQUEST

XX	Cyanide (total) (pre-treated with sodium thiosulfate) 6.66 percent
XX	by SM 4500 CN-ARF

Chain of Custody #

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 304625
 Date Received: _____

Client: PG+E
 Project: _____



Section 2: Samples received in a cooler? ☐ Yes, how many? _____ ☒ No (skip Section 3 below)

If no cooler Sample Temp (°C): 9.9 using IR Gun # ☐ A, or ☒ B

☒ Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened 10/30/18 By (print) AC (sign) [Signature]

Shipping Info (if applicable) _____

Are custody seals present? ☒ No, or ☐ Yes. If yes, where? ☐ on cooler, ☐ on samples, ☐ on package

☐ Date: _____ How many _____ ☐ Signature, ☐ Initials, ☐ None

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 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: _____

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?	☒	☐	☐
If YES, who was called? _____ By _____ Date: _____	☒	☐	☐

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>HCL 31225</u> , pH strip lot# _____, pH strip lot# _____			
Preservative added:			
☐ H2SO4 lot# _____ added to samples _____ on/at _____			
☐ HCL lot# _____ added to samples _____ on/at _____			
☐ HNO3 lot# _____ added to samples _____ on/at _____			
☐ NaOH lot# <u>164374</u> added to samples <u>1B</u> on/at <u>10/30/18 12:57</u>			

Section 6:
 Explanations/Comments: _____

Date Logged in 10/30/18 By (print) AC (sign) [Signature]
 Date Labeled 10/30/18 By (print) AC (sign) [Signature]

Enthalpy Sample Preservation for 304625

Sample	pH: <2	>9	>12	Other
-001a	[]	[]	[]	_____
b	[]	[]	☒	_____

Analyst:

Date: 10/30/18

Page 1 of 1

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

Total 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:	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
BLANK	QC953688	ND	0.010	0.0031

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

Batch QC Report

Total 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:	ZZZZZZZZZZ	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

Attachment 4

Analytical Report on Resampling #2



McC Campbell 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:

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.





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, Total

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tiger Pit-Amber	1811249-001A	Water	11/07/2018 08:06	WC_SKALAR 110718A1_21	167990

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	ND	1.0	1	11/07/2018 11:36

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tiger Pit-Clear	1811249-002A	Water	11/07/2018 08:06	WC_SKALAR 110718A1_24	167990

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	ND	1.0	1	11/07/2018 11:47

Analyst(s): NM



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/7/18
Date Analyzed: 11/7/18
Instrument: WC_SKALAR
Matrix: Water
Project: Resample 2 (11/7/18)

WorkOrder: 1811249
BatchID: 167990
Extraction Method: SM4500-CN⁻ E
Analytical Method: SM4500-CN⁻ CE
Unit: µg/L
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



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax

☐ WriteOn

☐ EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1811249

ClientCode: PGEA

☐ Excel

☐ EQulS

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com; J5Ld@pge.com; tlWY@p
PO:
Project: Resample 2 (11/7/18)

Bill to:

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

Requested TAT: 1 day;

Date Received: 11/07/2018

Date Logged: 11/07/2018

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	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.



McC Campbell 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.mcccampbell.com / E-mail: main@mcccampbell.com

WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: Resample 2 (11/7/18)

Work Order: 1811249

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 11/7/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1811249-001A	Tiger Pit-Amber	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3	☐	11/7/2018 8:06	1 day		☐	
1811249-002A	Tiger Pit-Clear	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL HDPE 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.



CHAIN OF CUSTODY RECORD
TURN AROUND TIME ☒ ☐ ☐ ☐

GeoTracker EDF ☐ **PDF** ☐ **Excel** ☐ **Write On (DW)** ☐
☐ Check if sample is effluent and "J" flag is required

Company: PG&E Gateway Generating Station

E-Mail: abe4@pge.com, A1HE@pge.com, J5Ld@pge.com, tlWY@pge.com, DJH2@pge.com

Tel: (925) 522-7838, (510) 861-1597 (Cell) Fax: ()

Project Name: Resample 2 (11/7/18)

Project Location: Tiger Pit, Source Water

Sampler Signature: Muskan Environmental Sampling

Analysis Request

Remarks

Cyanide (TOTAL) (Pretreated with sodium thiosulfate before preserving) by SM 4500 CN-ABCE

TTTO (USEPA 624-Volatile Organic Compounds)

TTO (USEPA 625- Semi Volatile Organic Compounds)

TTTO (USEPA 608 – Organochlorine Pesticides and PCBs)

126 Priority Pollutants (see Appendix B analyze only listed compounds)

ICE/t° 5.0/16
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____

COMMENTS:
TTO (EPA 608), TTO (EPA 624),
TTO (EPA 625) see ATTACHED
Appendix A and analyze only listed
compounds



Sample Receipt Checklist

Client Name: **PG&E Gateway Generating Station**
Project: **Resample 2 (11/7/18)**

Date and Time Received: **11/7/2018 09:45**
Date Logged: **11/7/2018**
Received by: **Jena Alfaro**
Logged by: **Agustina Venegas**

WorkOrder No: **1811249** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 noted by Client on COC?	Yes ☒	No ☐	
Date and Time of collection noted by Client on COC?	Yes ☒	No ☐	
Sampler's name noted on COC?	Yes ☒	No ☐	
COC agrees with Quote?	Yes ☐	No ☐	NA ☒

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☒
Shipping container/cooler in good condition?	Yes ☒	No ☐	
Samples in proper containers/bottles?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☒	No ☐	NA ☐
Samples Received on Ice?	Yes ☒	No ☐	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 5.6°C	NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐ No ☐	NA ☒
Sample labels checked for correct preservation?	Yes ☒ No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐ No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
--	--	--

Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒
--	--	--

Comments:



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



**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

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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 Nitrate and/or Nitrite was detected in the sample. Sample was treated with Sulfamic Acid prior to analysis.
- 2 The sample was received unpreserved. At the time of the analysis, the measured pH of the sample was 10.





ANALYTICAL RESULTS

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

Lab ID	T110273001	Date Collected	11/7/2018 08:06	Matrix	Water
Sample ID	TIGER PIT (NAOH PRESERVED)	Date Received	11/7/2018 09:58		

Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis	Analytical Method:	SM 4500-CN C/E-99/11				Analyzed by:	BCP	
Cyanide	J2.5 ug/L	3	0.90	1		11/07/18 16:47	WCO 14067	1

Lab ID	T110273002	Date Collected	11/7/2018 08:06	Matrix	Water
Sample ID	TIGER PIT (UNPRESERVED)	Date Received	11/7/2018 09:58		

Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Cyanide, Total Analysis	Analytical Method:	SM 4500-CN C/E-99/11				Analyzed by:	BCP	
Cyanide	J1.1 ug/L	3	0.90	1		11/07/18 16:47	WCO 14067	1.2





QUALITY CONTROL DATA

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

Analysis Description:	Cyanide, Total Analysis	QC Batch:	WCO/14067
Analysis Method:	SM 4500-CN C/E-99/11	QC Batch Method:	SM 4500-CN C/E-99/11

METHOD BLANK: 851944

Parameter	Blank Result	Reporting Limit	MDL	Units	Qualifiers
Cyanide	ND	3	0.9	ug/L	

LABORATORY CONTROL SAMPLE: 851945

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% REC Limits	Qualifier
Cyanide	ug/L	20	20.2	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 851946 851947

Parameter	Units	T110110002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Cyanide	ug/L	1.6	40	40.9	42.9	98	103	80-120	4.8	20	1



**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

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

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(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com



**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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ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 304800 ANALYTICAL REPORT

Pacific Gas & Electric
4801 Oakport Street
Oakland, CA 94601

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

Sample ID
TIGER PIT
TIGER PIT

Lab ID
304800-001
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.

Signature: _____

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

Date: 11/08/2018

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

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

Formerly Curtis & Tompkins

Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

Page 1 of 1

Chain of Custody # :

C&T LOGIN #

304800

Project No:

Project Name: Resample 2 (11/7/18)

Rpt Level: II

Turnaround Time: ~~Standard~~ Rush

Sampler: Muskan Environmental

Report To: Angel Espiritu

Company : PG&E Gateway Generation Station

Telephone: (925) 522-7838

Email: abe4@pge.com

amide (total) (pre-treated with 500ul water this solution before preserving) by 5M 4500 CN-19BCE

Analytical Request

[illegible]

Notes: Sample sent
on ice

containers:
500 ml pol y
500 ml pol x

SAMPLE RECEIPT

☐ Intact ☐ Cold
☐ On Ice ☐ Ambient

RELINQUISHED BY:

11/17/12 DATE/TIME

4/7/18 - 9:47
DATE/TIME

1051
DATE/TIME

RECEIVED BY:

11/7/18-8:50
DATE/TIME

11-7 941
DATE/TIME

11/7/18 10:51
DATE/TIME

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 304800
 Date Received: 11/7/18

Client: PGEO
 Project: _____



Section 2: Samples received in a cooler? ☐ Yes, how many? _____ ☒ No (skip Section 3 below)

If no cooler Sample Temp (°C): 14.4 using IR Gun # ☒ A, or ☐ 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) [Signature]

Shipping info (if applicable) _____

Are custody seals present? ☒ No, or ☐ Yes. If yes, where? ☐ on cooler, ☐ on samples, ☐ on package

☐ Date: _____ How many _____ ☐ Signature, ☐ Initials, ☐ None

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 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: _____

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?	☒	☐	☐
If YES, who was called? _____ By _____ Date: _____	☒	☐	☐

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>HCL3725</u> , pH strip lot# _____, pH strip lot# _____			
Preservative added:			
☐ H2SO4 lot# _____ added to samples _____ on/at _____			
☐ HCL lot# _____ added to samples _____ on/at _____			
☐ HNO3 lot# _____ added to samples _____ on/at _____			
☐ NaOH lot# _____ added to samples _____ on/at _____			

Section 6:

Explanations/Comments: _____

Date Logged in 11/7/18

By (print) AL (sign) [Signature]

Date Labeled 11/7/18

By (print) AL (sign) [Signature]

Enthalpy Sample Preservation for 304800

Sample	pH: <2	>9	>12	Other
-001a	☐	☐	☒	_____
-002a	☐	☐	☐	_____

Analyst: 

Date: 11/7/11

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

Client Sample ID : TIGER PIT	Laboratory Sample ID :	304800-002
------------------------------	------------------------	------------

No Detections

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:	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 ID	Result	RL
SAMPLE	304800-001	ND	0.010
SAMPLE	304800-002	ND	0.010
BLANK	QC954755	ND	0.010

ND= Not Detected
RL= Reporting Limit

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

Attachment 5

Analytical Report on Resampling #3



McC Campbell 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:

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.





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, Total

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tiger Pit-Amber	1811249-001A	Water	11/07/2018 08:06	WC_SKALAR 110718A1_21	167990

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	ND	1.0	1	11/07/2018 11:36

Analyst(s): NM

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Tiger Pit-Clear	1811249-002A	Water	11/07/2018 08:06	WC_SKALAR 110718A1_24	167990

Analytes	Result	RL	DF	Date Analyzed
Total Cyanide	ND	1.0	1	11/07/2018 11:47

Analyst(s): NM



Quality Control Report

Client: PG&E Gateway Generating Station
Date Prepared: 11/7/18
Date Analyzed: 11/7/18
Instrument: WC_SKALAR
Matrix: Water
Project: Resample 2 (11/7/18)

WorkOrder: 1811249
BatchID: 167990
Extraction Method: SM4500-CN⁻ E
Analytical Method: SM4500-CN⁻ CE
Unit: µg/L
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



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1811249

ClientCode: PGEA

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQulS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:

Angel Espiritu
PG&E Gateway Generating Station
3225 Wilbur Avenue
Antioch, CA 94509
(925) 459-7212 FAX:

Email: abe4@pge.com
cc/3rd Party: A1HE@pge.com; J5Ld@pge.com; tlWY@p
PO:
Project: Resample 2 (11/7/18)

Bill to:

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

Requested TAT: 1 day;

Date Received: 11/07/2018

Date Logged: 11/07/2018

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	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	2		3		4	
5		6		7		8	
9		10		11		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.



McC Campbell 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.mcccampbell.com / E-mail: main@mcccampbell.com

WORK ORDER SUMMARY

Client Name: PG&E GATEWAY GENERATING STATION

Project: Resample 2 (11/7/18)

Work Order: 1811249

Client Contact: Angel Espiritu

QC Level: LEVEL 2

Contact's Email: abe4@pge.com

Comments:

Date Logged: 11/7/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1811249-001A	Tiger Pit-Amber	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL aHDPE w/ NaOH + Na2S2O3	☐	11/7/2018 8:06	1 day		☐	
1811249-002A	Tiger Pit-Clear	Water	SM4500-CN ⁻ CE (Cyanide, Total)	1	250mL HDPE 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.