

Technical Report for

Golden Gate Tank Removal

150 17th Street Oakland CA

9475

Accutest Job Number: C38857

Sampling Date: 03/11/15

Report to:

Golden Gate Tank Removal
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Total number of pages in report: **38**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



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Lab Director

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Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)
DoD ELAP (L-A-B L2242)

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Sample Summary

Golden Gate Tank Removal

Job No: C38857

150 17th Street Oakland CA
Project No: 9475

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C38857-1	03/11/15	00:00	03/11/15	SO	Soil	9475-W18' 6"
C38857-2	03/11/15	00:00	03/11/15	SO	Soil	9475-E18' 6"
C38857-3	03/11/15	00:00	03/11/15	SO	Soil	9475-SP

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C38857
Account: Golden Gate Tank Removal
Project: 150 17th Street Oakland CA
Collected: 03/11/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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C38857-1 9475-W18'6"

Xylene (total) ^a	1710 J	9600	960	ug/kg	SW846 8260B
TPH (C10-C28)	12600	830	210	mg/kg	SW846 8015B M
Barium	139	18		mg/kg	SW846 6010B
Chromium	31.9	0.89		mg/kg	SW846 6010B
Cobalt	9.9	0.89		mg/kg	SW846 6010B
Copper	7.0	2.2		mg/kg	SW846 6010B
Lead	2.4	1.8		mg/kg	SW846 6010B
Nickel	41.0	0.89		mg/kg	SW846 6010B
Vanadium	25.4	0.89		mg/kg	SW846 6010B
Zinc	21.2	1.8		mg/kg	SW846 6010B

C38857-2 9475-E18'6"

Xylene (total) ^a	1750 J	9500	950	ug/kg	SW846 8260B
TPH (C10-C28)	13800	1700	420	mg/kg	SW846 8015B M
Barium	89.7	18		mg/kg	SW846 6010B
Chromium	50.5	0.92		mg/kg	SW846 6010B
Cobalt	6.8	0.92		mg/kg	SW846 6010B
Copper	10.7	2.3		mg/kg	SW846 6010B
Lead	3.6	1.8		mg/kg	SW846 6010B
Nickel	41.0	0.92		mg/kg	SW846 6010B
Vanadium	32.2	0.92		mg/kg	SW846 6010B
Zinc	32.2	1.8		mg/kg	SW846 6010B

C38857-3 9475-SP

TPH (C10-C28)	297	17	4.2	mg/kg	SW846 8015B M
Lead	3.5	1.9		mg/kg	SW846 6010B

(a) Dilution required due to high concentration of non-target hydrocarbons.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: 9475-W18'6"		Date Sampled: 03/11/15
Lab Sample ID: C38857-1		Date Received: 03/11/15
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: 150 17th Street Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	L39703.D	1	03/11/15	TN	n/a	n/a	VL1199
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.22 g	5.0 ml	5.0 ul
Run #2			

VOA Halogenated and Aromatic List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4800	480	ug/kg	
75-27-4	Bromodichloromethane	ND	4800	480	ug/kg	
75-25-2	Bromoform	ND	4800	480	ug/kg	
108-90-7	Chlorobenzene	ND	4800	480	ug/kg	
75-00-3	Chloroethane	ND	4800	960	ug/kg	
67-66-3	Chloroform	ND	4800	480	ug/kg	
56-23-5	Carbon tetrachloride	ND	4800	480	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4800	480	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4800	480	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4800	480	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4800	480	ug/kg	
124-48-1	Dibromochloromethane	ND	4800	480	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4800	960	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4800	1100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4800	480	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4800	480	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4800	480	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4800	480	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4800	480	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4800	480	ug/kg	
100-41-4	Ethylbenzene	ND	4800	480	ug/kg	
74-83-9	Methyl bromide	ND	4800	960	ug/kg	
74-87-3	Methyl chloride	ND	4800	960	ug/kg	
75-09-2	Methylene chloride	ND	19000	4800	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4800	960	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4800	480	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4800	480	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4800	480	ug/kg	
127-18-4	Tetrachloroethylene	ND	4800	570	ug/kg	
108-88-3	Toluene	ND	4800	480	ug/kg	
79-01-6	Trichloroethylene	ND	4800	480	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4800	960	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-W18' 6"	
Lab Sample ID: C38857-1	Date Sampled: 03/11/15
Matrix: SO - Soil	Date Received: 03/11/15
Method: SW846 8260B	Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA	

VOA Halogenated and Aromatic List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	4800	960	ug/kg	
1330-20-7	Xylene (total)	1710	9600	960	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to high concentration of non-target hydrocarbons.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 9475-W18' 6"	
Lab Sample ID: C38857-1	Date Sampled: 03/11/15
Matrix: SO - Soil	Date Received: 03/11/15
Method: SW846 8015B M SW846 3550B	Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH321282.D	50	03/11/15	AG	03/11/15	OP11843	GHH1481
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	5.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	12600	830	210	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
630-01-3	Hexacosane	84%		37-122%		

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-W18'6"	Date Sampled: 03/11/15
Lab Sample ID: C38857-1	Date Received: 03/11/15
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Arsenic	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Barium	139	18	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Beryllium	< 0.89	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.89	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Chromium	31.9	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Cobalt	9.9	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Copper	7.0	2.2	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Lead	2.4	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Mercury	< 0.038	0.038	mg/kg	1	03/12/15	03/12/15 EB	SW846 7471A ²	SW846 7471A ⁴
Molybdenum	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Nickel	41.0	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Selenium	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Silver	< 0.89	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Thallium	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Vanadium	25.4	0.89	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Zinc	21.2	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA4687
- (2) Instrument QC Batch: MA4689
- (3) Prep QC Batch: MP9228
- (4) Prep QC Batch: MP9233

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 9475-E18' 6"		
Lab Sample ID: C38857-2		Date Sampled: 03/11/15
Matrix: SO - Soil		Date Received: 03/11/15
Method: SW846 8260B		Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	L39704.D	1	03/11/15	TN	n/a	n/a	VL1199
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	5.0 ul
Run #2			

VOA Halogenated and Aromatic List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4800	480	ug/kg	
75-27-4	Bromodichloromethane	ND	4800	480	ug/kg	
75-25-2	Bromoform	ND	4800	480	ug/kg	
108-90-7	Chlorobenzene	ND	4800	480	ug/kg	
75-00-3	Chloroethane	ND	4800	950	ug/kg	
67-66-3	Chloroform	ND	4800	480	ug/kg	
56-23-5	Carbon tetrachloride	ND	4800	480	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4800	480	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4800	480	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4800	480	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4800	480	ug/kg	
124-48-1	Dibromochloromethane	ND	4800	480	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4800	950	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4800	1000	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4800	480	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4800	480	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4800	480	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4800	480	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4800	480	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4800	480	ug/kg	
100-41-4	Ethylbenzene	ND	4800	480	ug/kg	
74-83-9	Methyl bromide	ND	4800	950	ug/kg	
74-87-3	Methyl chloride	ND	4800	950	ug/kg	
75-09-2	Methylene chloride	ND	19000	4800	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4800	950	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4800	480	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4800	480	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4800	480	ug/kg	
127-18-4	Tetrachloroethylene	ND	4800	570	ug/kg	
108-88-3	Toluene	ND	4800	480	ug/kg	
79-01-6	Trichloroethylene	ND	4800	480	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4800	950	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-E18' 6"	
Lab Sample ID: C38857-2	Date Sampled: 03/11/15
Matrix: SO - Soil	Date Received: 03/11/15
Method: SW846 8260B	Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA	

VOA Halogenated and Aromatic List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	4800	950	ug/kg	
1330-20-7	Xylene (total)	1750	9500	950	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to high concentration of non-target hydrocarbons.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: 9475-E18' 6"	
Lab Sample ID: C38857-2	Date Sampled: 03/11/15
Matrix: SO - Soil	Date Received: 03/11/15
Method: SW846 8015B M SW846 3550B	Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH321283.D	100	03/11/15	AG	03/11/15	OP11843	GHH1481
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	5.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	13800	1700	420	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
630-01-3	Hexacosane	105%		37-122%		

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-E18' 6"		Date Sampled: 03/11/15
Lab Sample ID: C38857-2		Date Received: 03/11/15
Matrix: SO - Soil		Percent Solids: n/a ^a
Project: 150 17th Street Oakland CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Arsenic	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Barium	89.7	18	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Beryllium	< 0.92	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.92	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Chromium	50.5	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Cobalt	6.8	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Copper	10.7	2.3	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Lead	3.6	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Mercury	< 0.040	0.040	mg/kg	1	03/12/15	03/12/15 EB	SW846 7471A ²	SW846 7471A ⁴
Molybdenum	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Nickel	41.0	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Selenium	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Silver	< 0.92	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Thallium	< 1.8	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Vanadium	32.2	0.92	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³
Zinc	32.2	1.8	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA4687
- (2) Instrument QC Batch: MA4689
- (3) Prep QC Batch: MP9228
- (4) Prep QC Batch: MP9233

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 9475-SP		Date Sampled: 03/11/15
Lab Sample ID: C38857-3		Date Received: 03/11/15
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: 150 17th Street Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	L39702.D	1	03/11/15	TN	n/a	n/a	VL1199
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	250	25	ug/kg	
108-88-3	Toluene	ND	250	25	ug/kg	
100-41-4	Ethylbenzene	ND	250	25	ug/kg	
1330-20-7	Xylene (total)	ND	500	50	ug/kg	
91-20-3	Naphthalene	ND	250	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	90%		70-130%
460-00-4	4-Bromofluorobenzene	105%		70-130%

(a) All results reported on a wet weight basis.

(b) 4:1 composite.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-SP	Date Sampled: 03/11/15
Lab Sample ID: C38857-3	Date Received: 03/11/15
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3550B	
Project: 150 17th Street Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH321284.D	5	03/11/15	AG	03/11/15	OP11843	GHH1481
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	297	17	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	82%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 9475-SP Lab Sample ID: C38857-3 Matrix: SO - Soil Project: 150 17th Street Oakland CA	Date Sampled: 03/11/15 Date Received: 03/11/15 Percent Solids: n/a ^a
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Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	3.5	1.9	mg/kg	1	03/11/15	03/12/15 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4687

(2) Prep QC Batch: MP9228

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C38857 **Client:** GGTR **Project:** 150 17TH STREET
Date / Time Received: 3/11/2015 1:45:00 PM **Delivery Method:** Accutest Courier **Airbill #s:**

Cooler Temps (Initial/Adjusted): #1: (4.7/4.7):

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR1;	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y or N</u>	
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y or N</u>	
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	Intact	

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1
4

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1199-MB	L39686.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

Method Blank Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1199-MB	L39686.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-130%
2037-26-5	Toluene-D8	89% 70-130%
460-00-4	4-Bromofluorobenzene	102% 70-130%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Blank Spike/Blank Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1199-BS	L39683.D	1	03/11/15	TN	n/a	n/a	VL1199
VL1199-BSD	L39684.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	43.0	108	42.8	107	0	81-119/20
75-27-4	Bromodichloromethane	40	45.7	114	45.8	115	0	79-124/20
75-25-2	Bromoform	40	39.4	99	38.8	97	2	76-128/21
108-90-7	Chlorobenzene	40	38.5	96	38.2	96	1	82-121/20
75-00-3	Chloroethane	40	43.1	108	44.6	112	3	80-126/21
67-66-3	Chloroform	40	48.9	122	48.1	120	2	82-123/20
56-23-5	Carbon tetrachloride	40	44.2	111	43.9	110	1	82-127/22
75-34-3	1,1-Dichloroethane	40	46.1	115	45.4	114	2	80-123/20
75-35-4	1,1-Dichloroethylene	40	45.0	113	44.7	112	1	76-123/19
107-06-2	1,2-Dichloroethane	40	43.3	108	43.6	109	1	76-132/21
78-87-5	1,2-Dichloropropane	40	41.3	103	41.1	103	0	80-121/20
124-48-1	Dibromochloromethane	40	38.6	97	38.6	97	0	76-121/21
75-71-8	Dichlorodifluoromethane	40	38.2	96	41.2	103	8	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	47.4	119	46.4	116	2	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	45.4	114	45.3	113	0	81-124/21
541-73-1	m-Dichlorobenzene	40	38.2	96	39.3	98	3	79-123/23
95-50-1	o-Dichlorobenzene	40	38.1	95	38.8	97	2	79-124/22
106-46-7	p-Dichlorobenzene	40	37.8	95	39.3	98	4	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	46.5	116	46.1	115	1	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	38.5	96	38.6	97	0	81-123/22
100-41-4	Ethylbenzene	40	39.7	99	38.8	97	2	80-119/21
74-83-9	Methyl bromide	40	44.8	112	46.6	117	4	82-124/20
74-87-3	Methyl chloride	40	44.9	112	48.1	120	7	60-132/26
75-09-2	Methylene chloride	40	42.7	107	42.6	107	0	75-119/20
1634-04-4	Methyl Tert Butyl Ether	40	47.5	119	47.0	118	1	79-127/19
91-20-3	Naphthalene	40	38.9	97	38.9	97	0	78-125/23
71-55-6	1,1,1-Trichloroethane	40	49.8	125	48.4	121	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	37.0	93	37.2	93	1	77-126/20
79-00-5	1,1,2-Trichloroethane	40	37.1	93	37.1	93	0	79-123/20
127-18-4	Tetrachloroethylene	40	37.1	93	35.7	89	4	80-125/25
108-88-3	Toluene	40	37.3	93	37.0	93	1	80-117/21
79-01-6	Trichloroethylene	40	44.1	110	44.0	110	0	81-122/20
75-69-4	Trichlorofluoromethane	40	46.8	117	48.2	121	3	77-133/22
75-01-4	Vinyl chloride	40	44.7	112	48.4	121	8	71-133/23
1330-20-7	Xylene (total)	120	118	98	115	96	3	81-122/22

* = Outside of Control Limits.

5.2.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1199-BS	L39683.D	1	03/11/15	TN	n/a	n/a	VL1199
VL1199-BSD	L39684.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	108%	104%	70-130%
2037-26-5	Toluene-D8	92%	89%	70-130%
460-00-4	4-Bromofluorobenzene	107%	106%	70-130%

* = Outside of Control Limits.

5.2.1
 5

Laboratory Control Sample Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1199-LCS	L39685.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
2037-26-5	Toluene-D8	89%	70-130%
460-00-4	4-Bromofluorobenzene	105%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C38849-8MS	L39696.D	1	03/11/15	TN	n/a	n/a	VL1199
C38849-8MSD	L39697.D	1	03/11/15	TN	n/a	n/a	VL1199
C38849-8	L39695.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Compound	C38849-8 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	2670	2720	102	2670	2760	103	1	81-119/20
75-27-4	Bromodichloromethane	ND	2670	3010	113	2670	2910	109	3	79-124/20
75-25-2	Bromoform	ND	2670	2520	94	2670	2460	92	2	76-128/21
108-90-7	Chlorobenzene	ND	2670	2420	91	2670	2460	92	2	82-121/20
75-00-3	Chloroethane	ND	2670	2810	105	2670	2850	107	1	80-126/21
67-66-3	Chloroform	ND	2670	3140	118	2670	3140	118	0	82-123/20
56-23-5	Carbon tetrachloride	ND	2670	2600	97	2670	2770	104	6	82-127/22
75-34-3	1,1-Dichloroethane	ND	2670	2920	109	2670	2940	110	1	80-123/20
75-35-4	1,1-Dichloroethylene	ND	2670	2690	101	2670	2870	108	6	76-123/19
107-06-2	1,2-Dichloroethane	ND	2670	2890	108	2670	2770	104	4	76-132/21
78-87-5	1,2-Dichloropropane	ND	2670	2690	101	2670	2650	99	1	80-121/20
124-48-1	Dibromochloromethane	ND	2670	2490	93	2670	2470	93	1	76-121/21
75-71-8	Dichlorodifluoromethane	ND	2670	2420	91	2670	2570	96	6	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND	2670	3030	114	2670	3000	112	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND	2670	2890	108	2670	2880	108	0	81-124/21
541-73-1	m-Dichlorobenzene	ND	2670	2370	89	2670	2450	92	3	79-123/23
95-50-1	o-Dichlorobenzene	ND	2670	2430	91	2670	2430	91	0	79-124/22
106-46-7	p-Dichlorobenzene	ND	2670	2380	89	2670	2410	90	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND	2670	2850	107	2670	2950	111	3	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND	2670	2480	93	2670	2460	92	1	81-123/22
100-41-4	Ethylbenzene	ND	2670	2410	90	2670	2530	95	5	80-119/21
74-83-9	Methyl bromide	ND	2670	2940	110	2670	2940	110	0	82-124/20
74-87-3	Methyl chloride	ND	2670	3160	118	2670	3320	124	5	60-132/26
75-09-2	Methylene chloride	ND	2670	2800	105	2670	2740	103	2	75-119/20
1634-04-4	Methyl Tert Butyl Ether	ND	2670	3190	120	2670	3090	116	3	79-127/19
91-20-3	Naphthalene	ND	2670	2520	94	2670	2480	93	2	78-125/23
71-55-6	1,1,1-Trichloroethane	ND	2670	3000	112	2670	3140	118	5	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND	2670	2400	90	2670	2370	89	1	77-126/20
79-00-5	1,1,2-Trichloroethane	ND	2670	2450	92	2670	2410	90	2	79-123/20
127-18-4	Tetrachloroethylene	ND	2670	2250	84	2670	2440	91	8	80-125/25
108-88-3	Toluene	ND	2670	2310	87	2670	2390	90	3	80-117/21
79-01-6	Trichloroethylene	ND	2670	2740	103	2670	2790	105	2	81-122/20
75-69-4	Trichlorofluoromethane	ND	2670	2950	111	2670	3070	115	4	77-133/22
75-01-4	Vinyl chloride	ND	2670	2620	98	2670	2740	103	4	71-133/23
1330-20-7	Xylene (total)	ND	8000	7280	91	8000	7570	95	4	81-122/22

* = Outside of Control Limits.

5.4.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C38849-8MS	L39696.D	1	03/11/15	TN	n/a	n/a	VL1199
C38849-8MSD	L39697.D	1	03/11/15	TN	n/a	n/a	VL1199
C38849-8	L39695.D	1	03/11/15	TN	n/a	n/a	VL1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C38857-1, C38857-2, C38857-3

CAS No.	Surrogate Recoveries	MS	MSD	C38849-8	Limits
1868-53-7	Dibromofluoromethane	106%	108%	102%	70-130%
2037-26-5	Toluene-D8	90%	89%	89%	70-130%
460-00-4	4-Bromofluorobenzene	108%	105%	102%	70-130%

* = Outside of Control Limits.

5.4.1
5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11843-MB	HH321291.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481

The QC reported here applies to the following samples:

Method: SW846 8015B M

C38857-1, C38857-2, C38857-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	90% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11843-BS	HH321289.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481
OP11843-BSD	HH321290.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481

The QC reported here applies to the following samples:

Method: SW846 8015B M

C38857-1, C38857-2, C38857-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	26.8	80	25.5	77	5	39-102/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	88%	87%	37-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C38857
Account: GGTRCASF Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11843-MS	HH321287.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481
OP11843-MSD	HH321288.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481
C38831-36	HH321286.D	1	03/12/15	AG	03/11/15	OP11843	GHH1481

The QC reported here applies to the following samples:

Method: SW846 8015B M

C38857-1, C38857-2, C38857-3

CAS No.	Compound	C38831-36 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	6.18	33.2	28.5	67	33.2	29.3	70	3	39-102/29

CAS No.	Surrogate Recoveries	MS	MSD	C38831-36	Limits
630-01-3	Hexacosane	84%	83%	78%	37-122%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38857
Account: GGTRCASF - Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

QC Batch ID: MP9228
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 03/11/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087	0.050	<2.0
Arsenic	2.0	.07	.07	0.0	<2.0
Barium	20	.04	.035	0.18	<20
Beryllium	1.0	.02	.012	-0.010	<1.0
Boron	10	.09	.2		
Cadmium	1.0	.02	.015	0.0	<1.0
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054	0.0	<1.0
Cobalt	1.0	.02	.022	-0.010	<1.0
Copper	2.5	.12	.19	0.27	<2.5
Iron	20	.64	1.6		
Lead	2.0	.07	.054	-0.020	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024	0.060	<2.0
Nickel	1.0	.02	.024	-0.010	<1.0
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23	-0.050	<2.0
Silicon		.12			
Silver	1.0	.03	.044	0.080	<1.0
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073	-0.19	<2.0
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025	0.010	<1.0
Zinc	2.0	.03	.098	0.54	<2.0

Associated samples MP9228: C38857-1, C38857-2, C38857-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38857
 Account: GGTRCASF - Golden Gate Tank Removal
 Project: 150 17th Street Oakland CA

QC Batch ID: MP9228
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 03/11/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	47.3	50	94.6	80-120
Arsenic	47.8	50	95.6	80-120
Barium	48.6	50	97.2	80-120
Beryllium	48.7	50	97.4	80-120
Boron				
Cadmium	48.5	50	97.0	80-120
Calcium				
Chromium	49.8	50	99.6	80-120
Cobalt	49.6	50	99.2	80-120
Copper	49.2	50	98.4	80-120
Iron				
Lead	47.6	50	95.2	80-120
Magnesium				
Manganese				
Molybdenum	48.5	50	97.0	80-120
Nickel	47.1	50	94.2	80-120
Potassium				
Selenium	47.2	50	94.4	80-120
Silicon				
Silver	46.4	50	92.8	80-120
Sodium				
Strontium				
Thallium	48.2	50	96.4	80-120
Tin				
Titanium				
Vanadium	48.8	50	97.6	80-120
Zinc	49.7	50	99.4	80-120

Associated samples MP9228: C38857-1, C38857-2, C38857-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.2
7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C38857
Account: GGTRCASF - Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

QC Batch ID: MP9233
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 03/12/15

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.042	.00035	.0043	0.0044	<0.042

Associated samples MP9233: C38857-1, C38857-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.1

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38857
 Account: GGTRCASF - Golden Gate Tank Removal
 Project: 150 17th Street Oakland CA

QC Batch ID: MP9233
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 03/12/15

Metal	C38831-5 Original MS	Spike HGPWS1	lot % Rec	QC Limits
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Mercury 0.027 0.18 0.152 101.0 75-125

Associated samples MP9233: C38857-1, C38857-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C38857
 Account: GGTRCASF - Golden Gate Tank Removal
 Project: 150 17th Street Oakland CA

QC Batch ID: MP9233
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 03/12/15

Metal	C38831-5 Original MSD	Spike lot	HGPWS1 % Rec	MSD RPD	QC Limit
Mercury	0.027	0.19	0.154	106.0	5.4 20

Associated samples MP9233: C38857-1, C38857-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.2.2
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C38857
Account: GGTRCASF - Golden Gate Tank Removal
Project: 150 17th Street Oakland CA

QC Batch ID: MP9233
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 03/12/15

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.16	0.167	96.0	80-120

Associated samples MP9233: C38857-1, C38857-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.2.3
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