June 28, 2017

Kevin Hom
Senior Hazardous Materials Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: **Underground Storage Tank Overspill Cleanup Report**
Emeryville Marina
3310 Powel Street, Emeryville, CA 94608

Dear Mr. Hom,

This report documents the removal of contaminated soil surrounding a 25,000-gallon underground storage tank (UST) at the Emeryville Marina located at 3310 Powel Street in Emeryville, California (**Figure 1**). The site operator is SHM Emeryville LLC. Cook Environmental Services, Inc. acted as the general contractor on this project and collected confirmation soil samples upon completion of remedial activities. Soils were excavated, transported and disposed of by Fremouw Environmental Services, Inc. (FES). A representative from Armour Petroleum Services (APS) was onsite to ensure that buried electrical conduit and petroleum product lines were not damaged during remedial activities. Steven Plunkett of Alameda County Environmental Health (ACEH) was present to witness activities on behalf of the county CUPA. The site is an active marina. No permits were required to complete these activities. Underground Service Alert (USA Norcal) was notified 48 hours prior to excavation activities.

The Emeryville Marina operates and maintains a 25,000-gallon UST, which is located approximately 130 feet north of the harbor office. The UST is sectioned off into a 5,000-gallon compartment, a 5,000-gallon gasoline compartment and a 15,000-gallon diesel compartment.

On May 23, 2017, an overspill event occurred while filling the UST with diesel fuel. Reportedly, the 5,000-gallon diesel compartment was filled to capacity such that diesel fuel was released from the fill hose of the tanker truck as it disengaged from the UST. Reportedly, 20 gallons of diesel spilled onto the concrete pad overlying the UST. A site inspection was conducted by APS and FES on May 24, 2017. They observed that the hydrocarbon spill migrated from concrete pad to the unpaved area surrounding the UST at several locations.

On June 13, 2017, remediation activities commenced. Four primary areas surrounding the UST exhibited stained soils and a strong hydrocarbon odor. The locations of these four areas (E-1 through E-4) are presented on **Figure 2**. FES excavated contaminated soil from these areas using a pick, a digging bar and shovels. APS provided oversight when digging adjacent to electrical conduit and product piping. Excavation E-3 was located immediately adjacent to a 2-inch diameter electrical conduit. Two flexible conduits were located in excavation E-4, which is

a narrow area between the concrete pad overlying the UST and a small concrete pad supporting an electrical panel. Shovels were not used in Excavation E-4. A digging bar and a shop vacuum were used to remove contaminated soil.

Soils were excavated from E-1 and E-2 until soils at the base of the excavation exhibited no hydrocarbon odor. Sample E-1 was collected from the base of the excavation at a depth of approximately 8 inches below grade (bg). Sample E-2 was collected from the base of the excavation at a depth of approximately 9 inches bg. Excavation E-3 was located in close proximity to an expansion joint in the concrete pad overlying the UST. This expansion joint was a preferential pathway for the diesel spill. A concrete sidewalk is also located immediately west of E-3. This area was significantly impacted by the spill as evidence by very strong hydrocarbon odor down to a depth of 4 feet bg. A buried 2-inch diameter gray electrical conduit is located approximately one foot north of the edge of the concrete pad. Sample E-3 was collected from the bottom of the excavation at 4 feet bg. Excavation E-4 was dug to depth of 5 inches bg. Photographs of the UST pad and the four excavations are included in **Attachment A**.

Four 55-gallon drums were filled with contaminated soil. The waste material was transported under manifest and disposed of as non-RCRA hazardous waste at the Yuma YES LLC disposal facility in Yuma, AZ. A copy of the hazardous waste manifest if provided in **Attachment B**.

Confirmation soil samples were collected from the base of each excavation to document residual hydrocarbon concentrations after removal of the grossly contaminated material. One soil sample was collected from the base of each excavation using a stainless steel tube. After the tube was filled completely, the ends were sealed with Teflon film and plastic caps. The tube was then labeled and placed on ice and transported to McCampbell Analytical (CA ELAP #1644) in Pittsburg, CA that same day. Samples were collected and transported under EPA chain of custody protocols. Samples were analyzed for TPH-g, TPH-d and TPH-mo by EPA method 8015mod and for benzene, toluene, ethylbenzene, xylenes, MtBE and naphthalene by EPA method 8260B.

Soil sample results are presented in **Table 1** and the laboratory analytical report is provided in **Attachment C**. Results in Table 1 are compared to environmental screening limits for shallow soils (<3m) established by the San Francisco Bay Regional Water Quality Control Board (Table A-1, December 2013). Results are also compared to threshold values for soil samples listed in the Low Threat Underground Storage Tank Case Closure Policy for commercial and industrial land use as well as for utility worker dermal contact exposure. ESL thresholds for TPH-g and TPH-d were exceeded in samples E-3 and E-4. These were the only constituents that exceeded ESL thresholds in any of the samples. It is important to note that ESLS do not equate to regulatory cleanup goals. These are thresholds that, if exceeded, should be explored further to determine if the site conceptual model (SCM) could result in using a higher cleanup goal. Groundwater in this area holds no potential for potable water as San Francisco Bay is approximately 75 feet east of the UST. The potable water supply in this area is provided by East Bay Municipal District. There was no evidence of hydrocarbons leaching into water in the nearby marina.

Additional excavation in E-3 was not possible since pea-gravel from the UST excavation ran into this excavation at a depth of 4 feet bg. We recommend no further action with regard to the remedial effort at this site.

This completes this overspill cleanup report. Please contact me if you have questions or comments in regard to this report.

Very truly yours,

Cook Environmental Services, Inc.

Tim Cook, P.E.
Principal Engineer

cc: Mr. John Swick, SHM Emeryville LLC
Ms. Michelle Shadows, SHM Emeryville LLC
Mr. Chris Runnels, Mansfield Energy Corp.

TABLE

TABLE 1. SOIL ANALYTICAL RESULTS
Emeryville Marina, 3310 Powel Street, Emeryville, CA 94608

Sample ID	Location	Sample Date	Depth (fbg)	TPH-d	TPH-mo	TPH-g	Benzene	Toluene	Ethyl-benzene	Xylenes	Naph-thalene	MtBE
E-1	*south side of UST*	06/13/17	0.75	8.2	30	1.7	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
E-2	*east side of UST*	06/13/17	0.8	20	24	4.7	<0.0050	0.012	<0.0050	0.031	<0.0050	<0.0050
E-3	*north side of UST*	06/13/17	4	**2900**	1,800	**130**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
E-4	*east side of UST*	06/13/17	0.5	**2400**	790	**180**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
ESL Guidance [1]				230	5,100	100	0.044	2.9	3.3	2.3	1.2	0.023
LTCP Commercial Dermal (0' to 5') [2]				*NE*	*NE*	*NE*	*8.2*	*NE*	*89*	*NE*	*45*	*NE*
LTCP Commercial Volatilization (5' to 10') [3]				*NE*	*NE*	*NE*	*12*	*NE*	*134*	*NE*	*45*	*NE*
LTCP Utility Worker Derma(0' to 10') [4]				*NE*	*NE*	*NE*	*14*	*NE*	*314*	*NE*	*219*	*NE*

Footnotes:

[1] *Environmental Screening Levels established by SFBRWQCB, Interim Final(Rev 3), February 22, 2016*

[2] *Assumes soil is 0' to 5' below grade. Exposure based on direct contact with soil*

[3] *Assumes soil is 5' to 10' below grade. Exposure based on volatilization to outdoor air*

[4] *Assumes soil is 0' to 10' below grade. Exposure based on direct contact of utility worker with soil*

all units are milligrams per kilogram (parts per million)

< - less than laboratory reporting limit

ESL - environmental screening level as established by the San Francisco Bay Regional Water Quality Control Board, Lookup Tables, December 2013

NE- Not Established

values above ESLs are in **bold**

NA- not analyzed

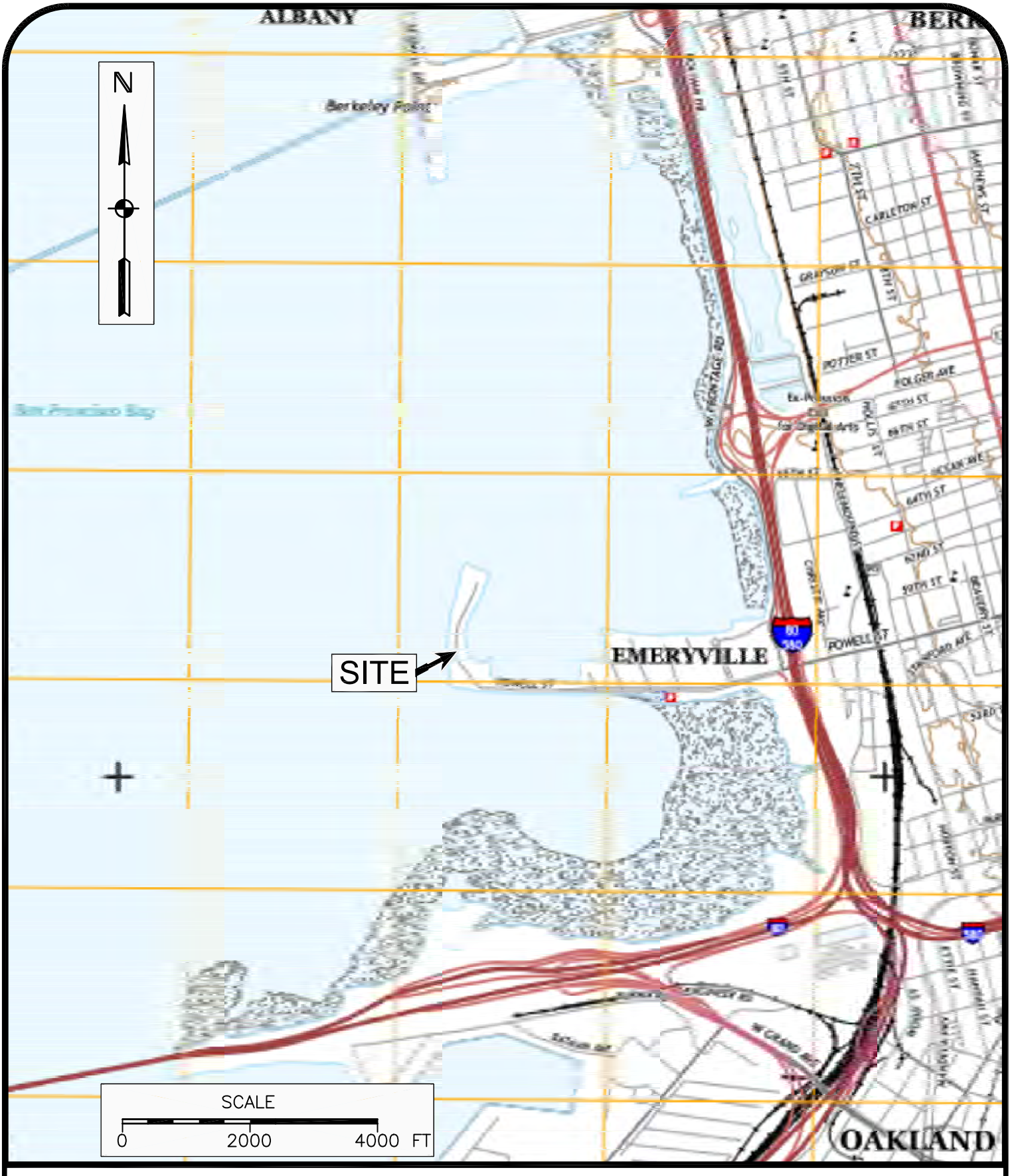
MtBE - Methyl tertiary butyl ether

TPH-d - total petroleum hydrocarbons as diesel

TPH-mo - total petroleum hydrocarbons as motor oil

TPH-g - total petroleum hydrocarbons as gasoline

FIGURES

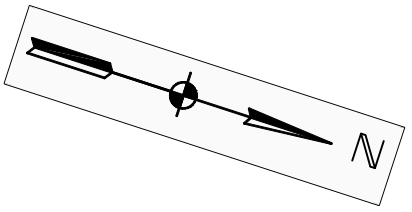


Cook Environmental Services, Inc.
1485 Treat Blvd. Ste. 203A
Walnut Creek, CA 94597
(925) 478-8390 work
(925) 787-6869 cell
tcook@cookenvironmental.com

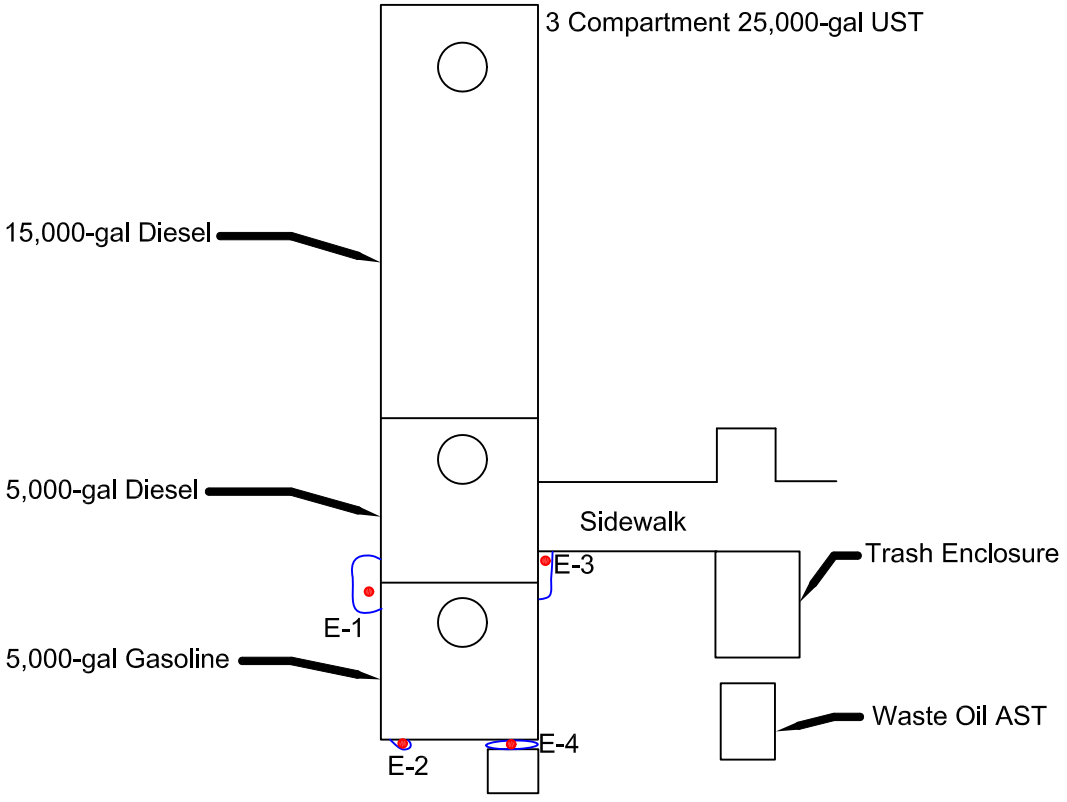
Site Location Map

Emeryville Marina
3310 Powell Street
Emeryville, CA 94608

Project : 1157	Figure : 1
Date: 6/25/17	
Scale: 1" = 2000 '	



ROADWAY



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Site Plan
Emeryville Marina
3310 Powell Street
Emeryville, CA 94608

Project : 1157	Figure : 2
Date: 6/25/17	
Scale: NTS	

APPENDIX A

Photographs

25,000-gal UST, looking west toward roadway, contaminated soil visible in left foreground (Area E-2)

UST looking north, stained soil in foreground between logs (Area E-1)

Stained soil at intersection of UST pad and sidewalk (Area E-3)

Note hydrocarbon stain in expansion joint leading off concrete pad

Excavating in Area E-1, south of UST

Another view of E-1

Excavation E-2, east of UST

Excavation E-3 on north side of UST, note 2” conduit in sidewall at 18” bg

Excavation E-4 between concrete pads, note flexible electrical conduits in trench

Another view of E-4

APPENDIX B

Hazardous Waste Manifest

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: CAL000418605

2. Page 1 of: 1

3. Emergency Response Phone: 800 424-9300 CHEMTREC

4. Manifest Tracking Number: 016711462 JJK

GENERATOR

5. Generator's Name and Mailing Address
SHM EMERYVILLE LLC DBA EMERYVILLE MARINA
3310 POWELL ST
EMERYVILLE CA 94608
Generator's Phone: 510 654-3716

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: FREMOUW ENVIRONMENTAL SERVICES INC
U.S. EPA ID Number: CAR000171017

7. Transporter 2 Company Name: WORLDWIDE RECOVERY SYSTEM INC
U.S. EPA ID Number: CAR000175422

8. Designated Facility Name and Site Address
YUMA YES LLC
2730 E 13TH ST
YUMA AZ 85365-1901
Facility's Phone: 928 344-9828
U.S. EPA ID Number: AZR000515924

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-RCRA HAZARDOUS WASTE, SOLID (OILY DEBRIS, ABSORBENT)	4	DM	2000	P	223
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)YES - Oily Debris ERG#171
1) 4X55g
#076431
HANDLERS TO BE 40HR TRAINED AND USE PPE.. ER Contract # 205907

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: x Alexandra Wood
Signature: [signature]
Month 06 Day 13 Year 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Lamy Ryland
Signature: [signature]
Month 06 Day 12 Year 17

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX C

Laboratory Analytical Report

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1706592

Report Created for: Cook Environmental Services, Inc.

1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597

Project Contact: Tim Cook
Project P.O.:
Project Name: 1157; Emeryville Marina

Project Received: 06/13/2017

Analytical Report reviewed & approved for release on 06/20/2017 by:

Angela Rydelius,
Laboratory 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.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Cook Environmental Services, Inc.
Project: 1157; Emeryville Marina
WorkOrder: 1706592

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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Glossary of Terms & Qualifier Definitions

Client: Cook Environmental Services, Inc.
Project: 1157; Emeryville Marina
WorkOrder: 1706592

Analytical Qualifiers

a2	Sample diluted due to cluttered chromatogram
a3	Sample diluted due to high organic content.
d7	Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e1/e2	Unmodified or weakly modified diesel is significant; and/or Diesel range compounds are significant; no recognizable pattern
e2	Diesel range compounds are significant; no recognizable pattern
e3	Aged diesel is significant
e4	Gasoline range compounds are significant.
e7	Oil range compounds are significant
e8/e11	Pattern resembles kerosene/kerosene range/jet fuel range; and/or Pattern resembles stoddard solvent/mineral spirit

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.
F3	The surrogate standard recovery and/or RPD is outside of acceptance limits.

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW5030B
Date Prepared:	6/13/17	**Analytical Method:**	SW8260B
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-1	1706592-001A	Soil	06/13/2017	GC28	140362

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/17/2017 17:38
Ethylbenzene	ND	0.0050	1	06/17/2017 17:38
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/17/2017 17:38
Naphthalene	ND	0.0050	1	06/17/2017 17:38
Toluene	ND	0.0050	1	06/17/2017 17:38
Xylenes, Total	ND	0.0050	1	06/17/2017 17:38

Surrogates	REC (%)	Limits	
Dibromofluoromethane	107	70-130	06/17/2017 17:38
Toluene-d8	112	70-130	06/17/2017 17:38
4-BFB	93	70-130	06/17/2017 17:38
Benzene-d6	100	60-140	06/17/2017 17:38
Ethylbenzene-d10	112	60-140	06/17/2017 17:38
1,2-DCB-d4	84	60-140	06/17/2017 17:38

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-2	1706592-002A	Soil	06/13/2017	GC28	140362

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.0050	1	06/17/2017 18:23
Ethylbenzene	ND	0.0050	1	06/17/2017 18:23
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/17/2017 18:23
Naphthalene	ND	0.0050	1	06/17/2017 18:23
Toluene	**0.012**	0.0050	1	06/17/2017 18:23
Xylenes, Total	**0.031**	0.0050	1	06/17/2017 18:23

Surrogates	REC (%)	Limits	
Dibromofluoromethane	108	70-130	06/17/2017 18:23
Toluene-d8	111	70-130	06/17/2017 18:23
4-BFB	93	70-130	06/17/2017 18:23
Benzene-d6	97	60-140	06/17/2017 18:23
Ethylbenzene-d10	110	60-140	06/17/2017 18:23
1,2-DCB-d4	81	60-140	06/17/2017 18:23

Analyst(s): AK

(Cont.)

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW5030B
Date Prepared:	6/13/17	**Analytical Method:**	SW8260B
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-3	1706592-003A	Soil	06/13/2017	GC16	140362

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.25	50	06/17/2017 19:10
Ethylbenzene	ND	0.25	50	06/17/2017 19:10
Methyl-t-butyl ether (MTBE)	ND	0.25	50	06/17/2017 19:10
Naphthalene	ND	0.25	50	06/17/2017 19:10
Toluene	ND	0.25	50	06/17/2017 19:10
Xylenes, Total	ND	0.25	50	06/17/2017 19:10

Surrogates	REC (%)	Limits	
Dibromofluoromethane	124	70-130	06/17/2017 19:10
Toluene-d8	109	70-130	06/17/2017 19:10
4-BFB	79	70-130	06/17/2017 19:10
Benzene-d6	97	60-140	06/17/2017 19:10
Ethylbenzene-d10	91	60-140	06/17/2017 19:10
1,2-DCB-d4	110	60-140	06/17/2017 19:10

Analyst(s): AK Analytical Comments: a2,a3

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-4	1706592-004A	Soil	06/13/2017	GC16	140362

Analytes	Result	RL	DF	Date Analyzed
Benzene	ND	0.25	50	06/17/2017 19:52
Ethylbenzene	ND	0.25	50	06/17/2017 19:52
Methyl-t-butyl ether (MTBE)	ND	0.25	50	06/17/2017 19:52
Naphthalene	ND	0.25	50	06/17/2017 19:52
Toluene	ND	0.25	50	06/17/2017 19:52
Xylenes, Total	ND	0.25	50	06/17/2017 19:52

Surrogates	REC (%)	Limits	
Dibromofluoromethane	126	70-130	06/17/2017 19:52
Toluene-d8	110	70-130	06/17/2017 19:52
4-BFB	85	70-130	06/17/2017 19:52
Benzene-d6	100	60-140	06/17/2017 19:52
Ethylbenzene-d10	80	60-140	06/17/2017 19:52
1,2-DCB-d4	92	60-140	06/17/2017 19:52

Analyst(s): AK Analytical Comments: a2,a3

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW5030B
Date Prepared:	6/13/17	**Analytical Method:**	SW8021B/8015Bm
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-1	1706592-001A	Soil	06/13/2017	GC19	140335

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**1.7**	1.0	1	06/15/2017 20:31
MTBE	---	0.050	1	06/15/2017 20:31
Benzene	---	0.0050	1	06/15/2017 20:31
Toluene	---	0.0050	1	06/15/2017 20:31
Ethylbenzene	---	0.0050	1	06/15/2017 20:31
Xylenes	---	0.015	1	06/15/2017 20:31

Surrogates	REC (%)	Limits	
2-Fluorotoluene	90	62-126	06/15/2017 20:31

Analyst(s): HD Analytical Comments: d7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-2	1706592-002A	Soil	06/13/2017	GC19	140335

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**4.7**	1.0	1	06/15/2017 21:03
MTBE	---	0.050	1	06/15/2017 21:03
Benzene	---	0.0050	1	06/15/2017 21:03
Toluene	---	0.0050	1	06/15/2017 21:03
Ethylbenzene	---	0.0050	1	06/15/2017 21:03
Xylenes	---	0.015	1	06/15/2017 21:03

Surrogates	REC (%)	Limits	
2-Fluorotoluene	83	62-126	06/15/2017 21:03

Analyst(s): HD Analytical Comments: d7

(Cont.)

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW5030B
Date Prepared:	6/13/17	**Analytical Method:**	SW8021B/8015Bm
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-3	1706592-003A	Soil	06/13/2017	GC3	140335

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**130**	25	25	06/20/2017 13:21
MTBE	---	1.2	25	06/20/2017 13:21
Benzene	---	0.12	25	06/20/2017 13:21
Toluene	---	0.12	25	06/20/2017 13:21
Ethylbenzene	---	0.12	25	06/20/2017 13:21
Xylenes	---	0.38	25	06/20/2017 13:21

Surrogates	REC (%)	Limits	
2-Fluorotoluene	86	62-126	06/20/2017 13:21

Analyst(s): HD Analytical Comments: d7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-4	1706592-004A	Soil	06/13/2017	GC3	140335

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**180**	10	10	06/20/2017 14:26
MTBE	---	0.50	10	06/20/2017 14:26
Benzene	---	0.050	10	06/20/2017 14:26
Toluene	---	0.050	10	06/20/2017 14:26
Ethylbenzene	---	0.050	10	06/20/2017 14:26
Xylenes	---	0.15	10	06/20/2017 14:26

Surrogates	REC (%)	Limits	
2-Fluorotoluene	96	62-126	06/20/2017 14:26

Analyst(s): HD Analytical Comments: d7

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW3550B
Date Prepared:	6/13/17	**Analytical Method:**	SW8015B
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-1	1706592-001A	Soil	06/13/2017	GC6A	140368

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**8.2**	2.0	2	06/17/2017 11:34
TPH-Motor Oil (C18-C36)	**30**	10	2	06/17/2017 11:34

Surrogates	REC (%)	Limits	
C9	83	78-109	06/17/2017 11:34

Analyst(s): TK Analytical Comments: e7,e1/e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-2	1706592-002A	Soil	06/13/2017	GC6A	140368

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**20**	1.0	1	06/17/2017 04:27
TPH-Motor Oil (C18-C36)	**24**	5.0	1	06/17/2017 04:27

Surrogates	REC (%)	Limits	
C9	88	78-109	06/17/2017 04:27

Analyst(s): TK Analytical Comments: e7,e2,e4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-3	1706592-003A	Soil	06/13/2017	GC6A	140368

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2900**	50	50	06/17/2017 07:41
TPH-Motor Oil (C18-C36)	**1800**	250	50	06/17/2017 07:41

Surrogates	REC (%)	Limits	
C9	87	78-109	06/17/2017 07:41

Analyst(s): TK Analytical Comments: e3,e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Received:	6/13/17 13:50	**Extraction Method:**	SW3550B
Date Prepared:	6/13/17	**Analytical Method:**	SW8015B
Project:	1157; Emeryville Marina	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
E-4	**1706592-004A**	**Soil**	**06/13/2017**	**GC9b**	**140368**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2400**	50	50	06/19/2017 10:27
TPH-Motor Oil (C18-C36)	**790**	250	50	06/19/2017 10:27

Surrogates	REC (%)	Limits	
C26	126	70-130	06/19/2017 10:27

Analyst(s): TK

Analytical Comments: e1/e2,e8/e11

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Quality Control Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Prepared:	6/13/17	**BatchID:**	140362
Date Analyzed:	6/13/17 - 6/14/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	1157; Emeryville Marina	**Sample ID:**	MB/LCS-140362 1706573-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0488	0.0050	0.050	-	98	53-116
Benzene	ND	0.0498	0.0050	0.050	-	100	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.212	0.050	0.20	-	106	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0462	0.0050	0.050	-	92	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0507	0.0040	0.050	-	101	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0521	0.0040	0.050	-	104	58-135
1,1-Dichloroethene	ND	0.0472	0.0050	0.050	-	94	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Prepared:	6/13/17	**BatchID:**	140362
Date Analyzed:	6/13/17 - 6/14/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	1157; Emeryville Marina	**Sample ID:**	MB/LCS-140362 1706573-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0497	0.0050	0.050	-	99	52-129
Ethanol	ND	3.30	0.50	2.5	-	132, F2	40-113
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0503	0.0050	0.050	-	101	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0519	0.0050	0.050	-	104	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0508	0.0050	0.050	-	102	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0455	0.0050	0.050	-	91	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Prepared:	6/13/17	**BatchID:**	140362
Date Analyzed:	6/13/17 - 6/14/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	1157; Emeryville Marina	**Sample ID:**	MB/LCS-140362 1706573-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1491	0.151		0.12	119	121	70-130
Toluene-d8	0.1636	0.164		0.12	131,F3	131, F3	70-130
4-BFB	0.01409	0.0151		0.012	113	121	70-130
Benzene-d6	0.1153	0.107		0.10	115	107	60-140
Ethylbenzene-d10	0.1362	0.124		0.10	136	124	60-140
1,2-DCB-d4	0.09068	0.0876		0.10	91	88	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0462	0.0449	0.050	ND	92	90	53-116	2.74	20
Benzene	0.0470	0.0499	0.050	ND	94	100	63-137	6.05	20
t-Butyl alcohol (TBA)	0.196	0.196	0.20	ND	98	98	41-135	0	20
Chlorobenzene	0.0426	0.0436	0.050	ND	85	87	77-121	2.46	20
1,2-Dibromoethane (EDB)	0.0418	0.0419	0.050	ND	84	84	67-119	0	20
1,2-Dichloroethane (1,2-DCA)	0.0446	0.0468	0.050	ND	89	94	58-135	4.60	20
1,1-Dichloroethene	0.0423	0.0450	0.050	ND	85	90	42-145	6.28	20
Diisopropyl ether (DIPE)	0.0489	0.0502	0.050	ND	98	100	52-129	2.71	20
Ethanol	3.38	1.57	2.5	ND	135,F1	63	40-113	73.1,F1	20
Ethyl tert-butyl ether (ETBE)	0.0482	0.0498	0.050	ND	96	100	53-125	3.13	20
Methyl-t-butyl ether (MTBE)	0.0489	0.0499	0.050	ND	98	100	58-122	2.14	20
Toluene	0.0463	0.0474	0.050	ND	93	95	76-130	2.46	20
Trichloroethene	0.0408	0.0432	0.050	ND	82	86	72-132	5.59	20
Surrogate Recovery									
Dibromofluoromethane	0.149	0.150	0.12		119	120	70-130	0.560	20
Toluene-d8	0.159	0.156	0.12		127	125	70-130	1.95	20
4-BFB	0.0138	0.0134	0.012		110	108	70-130	2.28	20
Benzene-d6	0.100	0.106	0.10		101	106	60-140	5.26	20
Ethylbenzene-d10	0.114	0.117	0.10		114	117	60-140	2.43	20
1,2-DCB-d4	0.0771	0.0785	0.10		77	78	60-140	1.83	20

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Quality Control Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Prepared:	6/12/17	**BatchID:**	140335
Date Analyzed:	6/14/17	**Extraction Method:**	SW5030B
Instrument:	GC7	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Soil	**Unit:**	mg/Kg
Project:	1157; Emeryville Marina	**Sample ID:**	MB/LCS-140335 1706552-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.547	0.40	0.60	-	91	82-118
MTBE	ND	0.0822	0.050	0.10	-	82	61-119
Benzene	ND	0.0980	0.0050	0.10	-	98	77-128
Toluene	ND	0.0938	0.0050	0.10	-	94	74-132
Ethylbenzene	ND	0.106	0.0050	0.10	-	106	84-127
Xylenes	ND	0.324	0.015	0.30	-	108	86-129
Surrogate Recovery							
2-Fluorotoluene	0.0851	0.0911		0.10	85	91	75-134

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.549	0.551	0.60	ND	92	92	58-129	0	20
MTBE	0.0905	0.0940	0.10	ND	86	90	47-118	3.75	20
Benzene	0.0844	0.0854	0.10	ND	84	85	55-129	1.27	20
Toluene	0.0838	0.0832	0.10	ND	84	83	56-130	0.704	20
Ethylbenzene	0.0945	0.0960	0.10	ND	94	96	63-129	1.60	20
Xylenes	0.298	0.303	0.30	ND	98	100	64-131	1.85	20
Surrogate Recovery									
2-Fluorotoluene	0.0811	0.0860	0.10		81	86	62-126	5.78	20

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Quality Control Report

Client:	Cook Environmental Services, Inc.	**WorkOrder:**	1706592
Date Prepared:	6/13/17	**BatchID:**	140368
Date Analyzed:	6/14/17	**Extraction Method:**	SW3550B
Instrument:	GC9a	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	1157; Emeryville Marina	**Sample ID:**	MB/LCS-140368 1706610-001AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	40.0	1.0	40	-	100	79-133
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	23.69	23.6		25	95	94	77-109

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		97	NR	NR	-	NR	-
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	-

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1706592 **ClientCode: CESW**

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

Report to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597
(925) 478-8394 FAX: 925-478-8390

Email: tcook@cookenvironmental.com
cc/3rd Party:
PO:
ProjectNo: 1157; Emeryville Marina

Bill to:
Tim Cook
Cook Environmental Services, Inc.
1485 Treat Blvd, Ste. 203A
Walnut Creek, CA 94597

Requested TAT: 5 days;

Date Received: **06/13/2017**
Date Logged: **06/13/2017**

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
1706592-001	E-1	Soil	6/13/2017 00:00	☐	A	A	A	A								
1706592-002	E-2	Soil	6/13/2017 00:00	☐	A	A		A								
1706592-003	E-3	Soil	6/13/2017 00:00	☐	A	A		A								
1706592-004	E-4	Soil	6/13/2017 00:00	☐	A	A		A								

Test Legend:

1	8260VOC_S	2	G-MBTEX_S	3	PREDF REPORT	4	TPH(DMO)_S
5		6		7		8	
9		10		11		12	

Prepared by: Kena Ponce

The following SampIDs: 001A, 002A, 003A, 004A contain testgroup Multi Range_S.

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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WORK ORDER SUMMARY

Client Name: COOK ENVIRONMENTAL SERVICES, INC. **Project:** 1157; Emeryville Marina; Emeryville **Work Order:** 1706592
Client Contact: Tim Cook **QC Level:** LEVEL 2
Contact's Email: tcook@cookenvironmental.com **Comments:** **Date Logged:** 6/13/2017

☐ 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
1706592-001A	E-1	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Stainless Steel tube 2"x6"	☐	6/13/2017	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>			☐		5 days		☐	
1706592-002A	E-2	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Stainless Steel tube 2"x6"	☐	6/13/2017	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>			☐		5 days		☐	
1706592-003A	E-3	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Stainless Steel tube 2"x6"	☐	6/13/2017	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>			☐		5 days		☐	
1706592-004A	E-4	Soil	Multi-Range TPH(g,d,mo) by EPA 8015Bm	1	Stainless Steel tube 2"x6"	☐	6/13/2017	5 days		☐	
			SW8260B (VOCs) <Benzene, Ethylbenzene, Methyl-t-butyl ether (MTBE), Naphthalene, Toluene, Xylenes, Total>			☐		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.

1706592

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH☐ 24 HR☐ 48 HR☐ 72 HR☐ 5 DAY■ 10 DAY☐

GeoTracker EDF■ PDF☐ EDD☐ Write On (DW)☐ EQuIS☐

Effluent Sample Requiring "J" flag☐ UST Clean Up Fund Project☐ ; Claim #_____

Report To: Tim Cook **Bill To:** Same

Company: Cook Environmental Services, Inc.
1485 Treat Blvd, Ste 203A
Walnut Creek, CA 94597 **E-Mail:** tcook@cookenvironmental.com

Tele: (925) 478-8390 **Fax:** ( )

Project #: 1157 **Project Name:** Emeryville Marina

Project Location: Emeryville **Purchase Order#**

Sampler Signature: Tim Cook

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea \ Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	Multi -range TPH (8015 mod)	MtBE / BTEX Naphthalene ONLY (8260B)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	Naphthalene, BTEX and MtBE(8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)					
E-1		6/13		1					X							X	X																		
E-2		"		"					X							X	X																		
E-3		"		"					X							X	X																		
E-4		"		"					X							X	X																		

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By:	Date:	Time:	Received By:
Tim Cook	6/13	1:25p	
	6-13	1358	

ICE/t° 6.4
GOOD CONDITION____
HEAD SPACE ABSENT____
DECHLORINATED IN LAB____
APPROPRIATE CONTAINERS____
PRESERVED IN LAB____

COMMENTS:

VOAS O&G METALS OTHER HAZARDOUS:
PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Cook Environmental Services, Inc.**	Date and Time Received	**6/13/2017 13:50**
Project Name:	**1157; Emeryville Marina; Emeryville**	Date Logged:	**6/13/2017**
		Received by:	Kena Ponce
WorkOrder №:	**1706592** Matrix: Soil	Logged by:	Kena Ponce
Carrier:	David Shaver (MAI Courier)		

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	☐	

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 ☐
Sample/Temp Blank temperature	Temp: 6.4°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; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments: