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By Alameda County Environmental Health 10:37 am, Oct 16, 2015

October 13, 2015

Mr. Mark Detterman  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6540

I, Reid Settlemer, hereby authorize ERAS Environmental, Inc. to submit the Waste Disposal 3037-3115 Adeline St., Oakland in Oakland, California, dated October 13, 2015 to the Alameda County Health Care Services Agency.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

*B Reid Settlemer*

Reid Settlemer  
RWW Properties LLC  
6114 LaSalle Avenue, #535  
Oakland, CA 94611  
reid@rww-llc.com



Environmental, Inc.

1533 B Street

Hayward, CA 94541

(510) 247-9885 Facsimile: (510) 886-5399

[info@eras.biz](mailto:info@eras.biz)

October 13, 2015

Mr. John Murray  
John Murray Productions  
1196 32<sup>nd</sup> Street  
Oakland, CA 94608

and

Mr. Reid Settlemier  
RWW Properties LLC  
6114 LaSalle Avenue, #535  
Oakland, CA 94611

**Subject: Waste Disposal  
3037-3115 Adeline Street, Oakland, California  
ERAS Project Number 14-002-04**

Dear Mr. Murray and Mr. Settlemier:

ERAS Environmental, Inc. (ERAS) is pleased to present the results of the waste disposal at 3037-3115 Adeline Street in Oakland, California (the "Property").

On September 3th, 2015 ERAS obtained a composite sample from one soil drum located on the Property and submitted the sample to McCampbell Analytical, Inc. of Pittsburg California.

The sample was analyzed for total petroleum hydrocarbons as gasoline range organics (TPH-gro<sup>1</sup>) and diesel range organics (TPH-dro) by EPA method 8015, total oil and grease (TOG) by EPA method 413.2, volatile organic compounds (VOC's) by EPA method 8260, semi volatile organic compounds (SVOC's) by EPA method 8270, CAM 17 Metals, and STLC for chromium. The laboratory results are included as **Attachment A**.

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<sup>1</sup> TPH-gro, TPH-dro, and TPH-oro are methods that compare analytical results to standards for gasoline, diesel and motor oil, respectively. Therefore analytical results are estimates of quantities based on what would be expected for the range of hydrocarbon results for the standard. Gasoline range organics (gro) are those hydrocarbon compounds that are in the range of C6 to C10, diesel range organics (dro) are those hydrocarbon compounds that are in the range of C10 to C23, and oil range organics (oro) are those hydrocarbon compounds that are in the range of C18 to C36. There can be overlap in reporting methods as well as identification of compounds that fall within the standard that may not necessarily be derived from gasoline, diesel, or oil.

**3037-3115 Adeline Street, Oakland**

**October 13, 2015**

**Page 2**

The laboratory results were provided to Integrated Waste Management (IWM) and on October 1, 2015 the waste was removed and disposed of at Republic Services Vasco Road Landfill in Livermore, California as non-hazardous waste. A copy of the disposal certificate is included as **Attachment B**.

If you have questions or comments regarding this report please contact Andrew Savage at 510-247-9885 x302, or by e-mail [andrew@eras.biz](mailto:andrew@eras.biz).

ERAS thanks you for the opportunity to serve you.

Sincerely,  
ERAS Environmental, Inc.



Andrew Savage  
Project Geologist

**Attachments**

- A Laboratory Results
- B Disposal Certificate

ATTACHMENT A  
LABORATORY RESULTS



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1509191

**Report Created for:** ERAS Environmental, Inc.

1533 B Street  
Hayward, CA 94541

**Project Contact:** Andrew Savage

**Project P.O.:**

**Project Name:** 14063D; 3037-3115 Adeline Street

**Project Received:** 09/04/2015

Analytical Report reviewed & approved for release on 09/14/2015 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.*





## Glossary of Terms & Qualifier Definitions

**Client:** ERAS Environmental, Inc.  
**Project:** 14063D; 3037-3115 Adeline Street  
**WorkOrder:** 1509191

### Glossary Abbreviation

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)
DUP	Duplicate
EDL	Estimated Detection Limit
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.
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
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

### Analytical Qualifiers

a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



## **Glossary of Terms & Qualifier Definitions**

**Client:** ERAS Environmental, Inc.  
**Project:** 14063D; 3037-3115 Adeline Street  
**WorkOrder:** 1509191

### **Quality Control Qualifiers**

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.



# Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/10/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3550\_TRPH  
**Analytical Method:** E413.2  
**Unit:** mg/Kg

## Total Recoverable Petroleum Oil & Grease with Silica Gel Clean-Up by IR Spectrometry

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	IR1	110057

Analytes	Result	RL	DF	Date Analyzed
TRPOG	310	15	1	09/10/2015 10:40

Surrogates	REC (%)	Limits	Date Analyzed
% SS	103	70-130	09/10/2015 10:40

Analyst(s): HN





# Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC18	109935

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	09/09/2015 13:05
tert-Amyl methyl ether (TAME)	ND	0.0050	1	09/09/2015 13:05
Benzene	ND	0.0050	1	09/09/2015 13:05
Bromobenzene	ND	0.0050	1	09/09/2015 13:05
Bromochloromethane	ND	0.0050	1	09/09/2015 13:05
Bromodichloromethane	ND	0.0050	1	09/09/2015 13:05
Bromoform	ND	0.0050	1	09/09/2015 13:05
Bromomethane	ND	0.0050	1	09/09/2015 13:05
2-Butanone (MEK)	ND	0.020	1	09/09/2015 13:05
t-Butyl alcohol (TBA)	ND	0.050	1	09/09/2015 13:05
n-Butyl benzene	ND	0.0050	1	09/09/2015 13:05
sec-Butyl benzene	ND	0.0050	1	09/09/2015 13:05
tert-Butyl benzene	ND	0.0050	1	09/09/2015 13:05
Carbon Disulfide	ND	0.0050	1	09/09/2015 13:05
Carbon Tetrachloride	ND	0.0050	1	09/09/2015 13:05
Chlorobenzene	ND	0.0050	1	09/09/2015 13:05
Chloroethane	ND	0.0050	1	09/09/2015 13:05
Chloroform	ND	0.0050	1	09/09/2015 13:05
Chloromethane	ND	0.0050	1	09/09/2015 13:05
2-Chlorotoluene	ND	0.0050	1	09/09/2015 13:05
4-Chlorotoluene	ND	0.0050	1	09/09/2015 13:05
Dibromochloromethane	ND	0.0050	1	09/09/2015 13:05
1,2-Dibromo-3-chloropropane	ND	0.0040	1	09/09/2015 13:05
1,2-Dibromoethane (EDB)	ND	0.0040	1	09/09/2015 13:05
Dibromomethane	ND	0.0050	1	09/09/2015 13:05
1,2-Dichlorobenzene	ND	0.0050	1	09/09/2015 13:05
1,3-Dichlorobenzene	ND	0.0050	1	09/09/2015 13:05
1,4-Dichlorobenzene	ND	0.0050	1	09/09/2015 13:05
Dichlorodifluoromethane	ND	0.0050	1	09/09/2015 13:05
1,1-Dichloroethane	ND	0.0050	1	09/09/2015 13:05
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	09/09/2015 13:05
1,1-Dichloroethene	ND	0.0050	1	09/09/2015 13:05
cis-1,2-Dichloroethene	ND	0.0050	1	09/09/2015 13:05
trans-1,2-Dichloroethene	ND	0.0050	1	09/09/2015 13:05
1,2-Dichloropropane	ND	0.0050	1	09/09/2015 13:05
1,3-Dichloropropane	ND	0.0050	1	09/09/2015 13:05
2,2-Dichloropropane	ND	0.0050	1	09/09/2015 13:05

(Cont.)



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**WorkOrder:** 1509191  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC18	109935
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	09/09/2015 13:05	
cis-1,3-Dichloropropene	ND	0.0050	1	09/09/2015 13:05	
trans-1,3-Dichloropropene	ND	0.0050	1	09/09/2015 13:05	
Diisopropyl ether (DIPE)	ND	0.0050	1	09/09/2015 13:05	
Ethylbenzene	ND	0.0050	1	09/09/2015 13:05	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	09/09/2015 13:05	
Freon 113	ND	0.0050	1	09/09/2015 13:05	
Hexachlorobutadiene	ND	0.0050	1	09/09/2015 13:05	
Hexachloroethane	ND	0.0050	1	09/09/2015 13:05	
2-Hexanone	ND	0.0050	1	09/09/2015 13:05	
Isopropylbenzene	ND	0.0050	1	09/09/2015 13:05	
4-Isopropyl toluene	ND	0.0050	1	09/09/2015 13:05	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	09/09/2015 13:05	
Methylene chloride	ND	0.0050	1	09/09/2015 13:05	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	09/09/2015 13:05	
Naphthalene	ND	0.0050	1	09/09/2015 13:05	
n-Propyl benzene	ND	0.0050	1	09/09/2015 13:05	
Styrene	ND	0.0050	1	09/09/2015 13:05	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	09/09/2015 13:05	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	09/09/2015 13:05	
Tetrachloroethene	ND	0.0050	1	09/09/2015 13:05	
Toluene	ND	0.0050	1	09/09/2015 13:05	
1,2,3-Trichlorobenzene	ND	0.0050	1	09/09/2015 13:05	
1,2,4-Trichlorobenzene	ND	0.0050	1	09/09/2015 13:05	
1,1,1-Trichloroethane	ND	0.0050	1	09/09/2015 13:05	
1,1,2-Trichloroethane	ND	0.0050	1	09/09/2015 13:05	
Trichloroethene	ND	0.0050	1	09/09/2015 13:05	
Trichlorofluoromethane	ND	0.0050	1	09/09/2015 13:05	
1,2,3-Trichloropropane	ND	0.0050	1	09/09/2015 13:05	
1,2,4-Trimethylbenzene	ND	0.0050	1	09/09/2015 13:05	
1,3,5-Trimethylbenzene	ND	0.0050	1	09/09/2015 13:05	
Vinyl Chloride	ND	0.0050	1	09/09/2015 13:05	
Xylenes, Total	ND	0.0050	1	09/09/2015 13:05	

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**WorkOrder:** 1509191  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC18	109935

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	98	70-130		09/09/2015 13:05
Toluene-d8	89	70-130		09/09/2015 13:05
4-BFB	99	70-130		09/09/2015 13:05
Benzene-d6	112	60-140		09/09/2015 13:05
Ethylbenzene-d10	110	60-140		09/09/2015 13:05
1,2-DCB-d4	105	60-140		09/09/2015 13:05

Analyst(s): KF



## Analytical Report

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**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC21	109973

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	10	5	09/09/2015 00:10
Acenaphthylene	ND	10	5	09/09/2015 00:10
Acetochlor	ND	10	5	09/09/2015 00:10
Anthracene	ND	10	5	09/09/2015 00:10
Benzidine	ND	52	5	09/09/2015 00:10
Benzo (a) anthracene	ND	10	5	09/09/2015 00:10
Benzo (b) fluoranthene	ND	10	5	09/09/2015 00:10
Benzo (k) fluoranthene	ND	10	5	09/09/2015 00:10
Benzo (g,h,i) perylene	ND	10	5	09/09/2015 00:10
Benzo (a) pyrene	ND	10	5	09/09/2015 00:10
Benzyl Alcohol	ND	52	5	09/09/2015 00:10
1,1-Biphenyl	ND	10	5	09/09/2015 00:10
Bis (2-chloroethoxy) Methane	ND	10	5	09/09/2015 00:10
Bis (2-chloroethyl) Ether	ND	10	5	09/09/2015 00:10
Bis (2-chloroisopropyl) Ether	ND	10	5	09/09/2015 00:10
Bis (2-ethylhexyl) Adipate	ND	10	5	09/09/2015 00:10
Bis (2-ethylhexyl) Phthalate	ND	10	5	09/09/2015 00:10
4-Bromophenyl Phenyl Ether	ND	10	5	09/09/2015 00:10
Butylbenzyl Phthalate	ND	10	5	09/09/2015 00:10
4-Chloroaniline	ND	20	5	09/09/2015 00:10
4-Chloro-3-methylphenol	ND	10	5	09/09/2015 00:10
2-Chloronaphthalene	ND	10	5	09/09/2015 00:10
2-Chlorophenol	ND	10	5	09/09/2015 00:10
4-Chlorophenyl Phenyl Ether	ND	10	5	09/09/2015 00:10
Chrysene	ND	10	5	09/09/2015 00:10
Dibenzo (a,h) anthracene	ND	10	5	09/09/2015 00:10
Dibenzofuran	ND	10	5	09/09/2015 00:10
Di-n-butyl Phthalate	ND	10	5	09/09/2015 00:10
1,2-Dichlorobenzene	ND	10	5	09/09/2015 00:10
1,3-Dichlorobenzene	ND	10	5	09/09/2015 00:10
1,4-Dichlorobenzene	ND	10	5	09/09/2015 00:10
3,3-Dichlorobenzidine	ND	20	5	09/09/2015 00:10
2,4-Dichlorophenol	ND	10	5	09/09/2015 00:10
Diethyl Phthalate	ND	10	5	09/09/2015 00:10
2,4-Dimethylphenol	ND	10	5	09/09/2015 00:10
Dimethyl Phthalate	ND	10	5	09/09/2015 00:10
4,6-Dinitro-2-methylphenol	ND	52	5	09/09/2015 00:10

(Cont.)



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**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

### Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC21	109973
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	250	5	09/09/2015 00:10	
2,4-Dinitrotoluene	ND	10	5	09/09/2015 00:10	
2,6-Dinitrotoluene	ND	10	5	09/09/2015 00:10	
Di-n-octyl Phthalate	ND	20	5	09/09/2015 00:10	
1,2-Diphenylhydrazine	ND	10	5	09/09/2015 00:10	
Fluoranthene	ND	10	5	09/09/2015 00:10	
Fluorene	ND	10	5	09/09/2015 00:10	
Hexachlorobenzene	ND	10	5	09/09/2015 00:10	
Hexachlorobutadiene	ND	10	5	09/09/2015 00:10	
Hexachlorocyclopentadiene	ND	52	5	09/09/2015 00:10	
Hexachloroethane	ND	10	5	09/09/2015 00:10	
Indeno (1,2,3-cd) pyrene	ND	10	5	09/09/2015 00:10	
Isophorone	ND	10	5	09/09/2015 00:10	
2-Methylnaphthalene	ND	10	5	09/09/2015 00:10	
2-Methylphenol (o-Cresol)	ND	10	5	09/09/2015 00:10	
3 & 4-Methylphenol (m,p-Cresol)	ND	10	5	09/09/2015 00:10	
Naphthalene	ND	10	5	09/09/2015 00:10	
2-Nitroaniline	ND	52	5	09/09/2015 00:10	
3-Nitroaniline	ND	52	5	09/09/2015 00:10	
4-Nitroaniline	ND	52	5	09/09/2015 00:10	
Nitrobenzene	ND	10	5	09/09/2015 00:10	
2-Nitrophenol	ND	52	5	09/09/2015 00:10	
4-Nitrophenol	ND	52	5	09/09/2015 00:10	
N-Nitrosodiphenylamine	ND	10	5	09/09/2015 00:10	
N-Nitrosodi-n-propylamine	ND	10	5	09/09/2015 00:10	
Pentachlorophenol	ND	52	5	09/09/2015 00:10	
Phenanthrene	ND	10	5	09/09/2015 00:10	
Phenol	ND	10	5	09/09/2015 00:10	
Pyrene	ND	10	5	09/09/2015 00:10	
1,2,4-Trichlorobenzene	ND	10	5	09/09/2015 00:10	
2,4,5-Trichlorophenol	ND	10	5	09/09/2015 00:10	
2,4,6-Trichlorophenol	ND	10	5	09/09/2015 00:10	

(Cont.)



# Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg

## Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC21	109973

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	116	30-130		09/09/2015 00:10
Phenol-d5	124	30-130		09/09/2015 00:10
Nitrobenzene-d5	100	30-130		09/09/2015 00:10
2-Fluorobiphenyl	94	30-130		09/09/2015 00:10
2,4,6-Tribromophenol	46	16-130		09/09/2015 00:10
4-Terphenyl-d14	94	30-130		09/09/2015 00:10

Analyst(s): HK

Analytical Comments: a3,a4



## Analytical Report

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**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	ICP-MS2	109931

Analytes	Result	RL	DF	Date Analyzed
Antimony	ND	0.50	1	09/09/2015 14:01
Arsenic	<b>4.3</b>	0.50	1	09/09/2015 14:01
Barium	<b>230</b>	5.0	1	09/09/2015 14:01
Beryllium	<b>0.57</b>	0.50	1	09/09/2015 14:01
Cadmium	<b>0.33</b>	0.25	1	09/09/2015 14:01
Chromium	<b>55</b>	0.50	1	09/09/2015 14:01
Cobalt	<b>13</b>	0.50	1	09/09/2015 14:01
Copper	<b>64</b>	0.50	1	09/09/2015 14:01
Lead	<b>19</b>	0.50	1	09/09/2015 14:01
Mercury	ND	0.050	1	09/09/2015 14:01
Molybdenum	<b>1.3</b>	0.50	1	09/09/2015 14:01
Nickel	<b>50</b>	0.50	1	09/09/2015 14:01
Selenium	ND	0.50	1	09/09/2015 14:01
Silver	ND	0.50	1	09/09/2015 14:01
Thallium	ND	0.50	1	09/09/2015 14:01
Vanadium	<b>44</b>	0.50	1	09/09/2015 14:01
Zinc	<b>110</b>	5.0	1	09/09/2015 14:01
<b>Surrogates</b>	<b>REC (%)</b>	<b>Limits</b>		
Terbium 159 norm	103	70-130		09/09/2015 14:01

Analyst(s): DVH



## Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**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
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC19	109934

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	25	1.0	1	09/09/2015 22:55
MTBE	---	0.050	1	09/09/2015 22:55
Benzene	---	0.0050	1	09/09/2015 22:55
Toluene	---	0.0050	1	09/09/2015 22:55
Ethylbenzene	---	0.0050	1	09/09/2015 22:55
Xylenes	---	0.0050	1	09/09/2015 22:55

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene_2	100	70-130	09/09/2015 22:55

**Analyst(s):** IA

**Analytical Comments:** d7





# Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/8/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

## Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	GC11B	109933

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	140	1.0	1	09/09/2015 13:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	108	70-130	09/09/2015 13:12

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



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/10/15  
**Date Analyzed:** 9/10/15  
**Instrument:** IR1  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 110057  
**Extraction Method:** SW3550\_TRPH  
**Analytical Method:** E413.2  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-110057  
 1509191-001AMS/MSD

### QC Summary Report for E413.2 / E418.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TRPOG	ND	146	15	156	-	94	70-130

**Surrogate Recovery**

% SS	154	163		150	103	109	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TRPOG	451	461	156	306.7	92	99	70-130	2.19	20

**Surrogate Recovery**

% SS	149	149	150		100	99	70-130	0.161	20
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## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109935  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109935  
 1509192-017AMS/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	0.0354	0.0050	0.050	-	71	53-116
Benzene	ND	0.0467	0.0050	0.050	-	93	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	0.129	0.050	0.20	-	65	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	0.0440	0.0050	0.050	-	88	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	0.0419	0.0040	0.050	-	84	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	0.0443	0.0040	0.050	-	89	58-135
1,1-Dichloroethene	ND	0.0458	0.0050	0.050	-	92	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	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109935  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109935  
 1509192-017AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0424	0.0050	0.050	-	85	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0393	0.0050	0.050	-	79	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	0.0387	0.0050	0.050	-	77	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	0.0484	0.0050	0.050	-	97	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	0.0444	0.0050	0.050	-	89	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	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109935  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109935  
 1509192-017AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.121	0.126		0.12	97	101	70-130
Toluene-d8	0.132	0.130		0.12	106	104	70-130
4-BFB	0.0118	0.0120		0.012	94	96	70-130
Benzene-d6	0.0918	0.0908		0.10	92	91	60-140
Ethylbenzene-d10	0.0988	0.100		0.10	99	100	60-140
1,2-DCB-d4	0.0742	0.0777		0.10	74	78	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)	0.0298	0.0320	0.050	ND	60,F1	64,F1	70-130	7.00	20
Benzene	0.0409	0.0427	0.050	ND	82	85	70-130	4.34	20
t-Butyl alcohol (TBA)	0.102	0.112	0.20	ND	51,F1	56,F1	70-130	9.37	20
Chlorobenzene	0.0391	0.0412	0.050	ND	78	82	70-130	5.14	20
1,2-Dibromoethane (EDB)	0.0348	0.0379	0.050	ND	70	76	70-130	8.37	20
1,2-Dichloroethane (1,2-DCA)	0.0377	0.0397	0.050	ND	75	79	70-130	5.24	20
1,1-Dichloroethene	0.0400	0.0413	0.050	ND	80	83	70-130	3.23	20
Diisopropyl ether (DIPE)	0.0360	0.0378	0.050	ND	72	76	70-130	4.89	20
Ethyl tert-butyl ether (ETBE)	0.0331	0.0353	0.050	ND	66,F1	71	70-130	6.36	20
Methyl-t-butyl ether (MTBE)	0.0328	0.0345	0.050	ND	66,F1	69,F1	70-130	5.09	20
Toluene	0.0415	0.0440	0.050	ND	83	88	70-130	5.83	20
Trichloroethene	0.0405	0.0427	0.050	ND	81	85	70-130	5.21	20

<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.125	0.125	0.12		100	100	70-130	0	20
Toluene-d8	0.128	0.129	0.12		103	103	70-130	0	20
4-BFB	0.0114	0.0118	0.012		91	94	70-130	3.64	20
Benzene-d6	0.0833	0.0861	0.10		83	86	60-140	3.25	20
Ethylbenzene-d10	0.0916	0.0912	0.10		92	91	60-140	0.430	20
1,2-DCB-d4	0.0703	0.0715	0.10		70	72	60-140	1.67	20



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109973  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109973  
 1509143-002AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	4.70	0.25	5	-	94	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	5.55	0.25	5	-	111	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	5.31	0.25	5	-	106	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	4.48	0.25	5	-	90	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109973  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109973  
 1509143-002AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrotoluene	ND	5.14	0.25	5	-	103	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.80	1.3	5	-	76	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	5.34	0.25	5	-	107	30-130
Pentachlorophenol	ND	2.53	1.3	5	-	51	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	4.99	0.25	5	-	100	30-130
Pyrene	ND	4.92	0.25	5	-	98	30-130
1,2,4-Trichlorobenzene	ND	4.90	0.25	5	-	98	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15  
**Instrument:** GC21  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109973  
**Extraction Method:** SW3550B  
**Analytical Method:** SW8270C  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109973  
 1509143-002AMS/MSD

### QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
2-Fluorophenol	5.95	5.66		5	119	113	30-130
Phenol-d5	6.43	6.03		5	129	121	30-130
Nitrobenzene-d5	5.51	5.54		5	110	111	30-130
2-Fluorobiphenyl	4.64	4.62		5	93	92	30-130
2,4,6-Tribromophenol	4.05	4.61		5	81	92	16-130
4-Terphenyl-d14	4.86	4.90		5	97	98	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	4.98	5.17	5	ND	100	103	30-130	3.65	30
4-Chloro-3-methylphenol	5.92	5.99	5	ND	118	120	30-130	1.16	30
2-Chlorophenol	5.88	5.90	5	ND	118	118	30-130	0	30
1,4-Dichlorobenzene	4.64	4.69	5	ND	93	94	30-130	0.997	30
2,4-Dinitrotoluene	5.46	5.72	5	ND	109	114	30-130	4.64	30
4-Nitrophenol	4.25	4.59	5	ND	85	92	30-130	7.89	30
N-Nitrosodi-n-propylamine	5.59	5.47	5	ND	112	109	30-130	2.15	30
Pentachlorophenol	3.89	4.19	5	ND	78	84	30-130	7.42	30
Phenol	5.38	5.37	5	ND	108	107	30-130	0.0995	30
Pyrene	5.25	5.20	5	ND	105	104	30-130	1.04	30
1,2,4-Trichlorobenzene	5.03	5.11	5	ND	101	102	30-130	1.66	30

<b>Surrogate Recovery</b>									
2-Fluorophenol	6.14	6.12	5		123	122	30-130	0.287	30
Phenol-d5	6.41	6.44	5		128	129	30-130	0.372	30
Nitrobenzene-d5	5.76	5.81	5		115	116	30-130	0.828	30
2-Fluorobiphenyl	4.88	5.00	5		98	100	30-130	2.53	30
2,4,6-Tribromophenol	4.81	5.19	5		96	104	16-130	7.53	30
4-Terphenyl-d14	5.16	5.06	5		103	101	30-130	1.99	30





## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/9/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109931  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109931  
 1509191-001AMS/MSD

### QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.8	0.50	50	-	102	75-125
Arsenic	ND	51.6	0.50	50	-	103	75-125
Barium	ND	492	5.0	500	-	98	75-125
Beryllium	ND	50.1	0.50	50	-	100	75-125
Cadmium	ND	49.8	0.25	50	-	100	75-125
Chromium	ND	50.0	0.50	50	-	100	75-125
Cobalt	ND	49.4	0.50	50	-	99	75-125
Copper	ND	53.2	0.50	50	-	106	75-125
Lead	ND	50.8	0.50	50	-	102	75-125
Mercury	ND	1.30	0.050	1.25	-	104	75-125
Molybdenum	ND	50.8	0.50	50	-	102	75-125
Nickel	ND	53.4	0.50	50	-	107	75-125
Selenium	ND	51.6	0.50	50	-	103	75-125
Silver	ND	51.9	0.50	50	-	104	75-125
Thallium	ND	48.0	0.50	50	-	96	75-125
Vanadium	ND	50.6	0.50	50	-	101	75-125
Zinc	ND	512	5.0	500	-	102	75-125
<b>Surrogate Recovery</b>							
Terbium 159 norm	511	486		500	102	97	70-130

(Cont.)



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/9/15  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109931  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109931  
 1509191-001AMS/MSD

### QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	49.7	48.6	50	ND	99	96	75-125	2.16	20
Arsenic	51.8	50.7	50	4.312	95	93	75-125	2.03	20
Barium	654	646	500	233.5	84	83	75-125	1.14	20
Beryllium	46.8	46.1	50	0.5707	92	91	75-125	1.51	20
Cadmium	48.4	48.0	50	0.3323	96	95	75-125	0.933	20
Chromium	105	98.9	50	54.87	99	88	75-125	5.57	20
Cobalt	52.1	55.1	50	12.54	79	85	75-125	5.63	20
Copper	NR	NR	50	63.66	NR	NR	75-125	NR	20
Lead	60.0	70.5	50	19.49	81	102	75-125	16.1	20
Mercury	1.32	1.30	1.25	ND	102	100	75-125	1.60	20
Molybdenum	48.1	47.1	50	1.312	94	92	75-125	2.04	20
Nickel	104	99.2	50	50.08	109	98	75-125	5.07	20
Selenium	47.6	47.6	50	ND	95	95	75-125	0	20
Silver	48.2	47.6	50	ND	96	95	75-125	1.21	20
Thallium	48.8	47.9	50	ND	97	95	75-125	1.88	20
Vanadium	95.9	94.2	50	44.44	103	99	75-125	1.84	20
Zinc	570	606	500	114.1	91	98	75-125	6.19	20
<b>Surrogate Recovery</b>									
Terbium 159 norm	509	496	500		102	99	70-130	2.61	20



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/9/15  
**Instrument:** GC19  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109934  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109934  
 1509218-003AMS/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	0.505	0.40	0.60	-	84	70-130
MTBE	ND	0.115	0.050	0.10	-	115	70-130
Benzene	ND	0.111	0.0050	0.10	-	111	70-130
Toluene	ND	0.112	0.0050	0.10	-	112	70-130
Ethylbenzene	ND	0.116	0.0050	0.10	-	116	70-130
Xylenes	ND	0.371	0.0050	0.30	-	124	70-130

**Surrogate Recovery**

2-Fluorotoluene_2	0.123	0.117		0.10	123	117	70-130
-------------------	-------	-------	--	------	-----	-----	--------

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND	NR	NR	-	NR	
MTBE	NR	NR		ND	NR	NR	-	NR	
Benzene	NR	NR		ND	NR	NR	-	NR	
Toluene	NR	NR		ND	NR	NR	-	NR	
Ethylbenzene	NR	NR		ND	NR	NR	-	NR	
Xylenes	NR	NR		ND	NR	NR	-	NR	

**Surrogate Recovery**

2-Fluorotoluene_2	NR	NR			NR	NR	-	NR	
-------------------	----	----	--	--	----	----	---	----	--



## Quality Control Report

**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/8/15  
**Date Analyzed:** 9/8/15 - 9/9/15  
**Instrument:** GC2B, GC9b  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 109933  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-109933  
 1509192-016AMS/MSD

### QC Report for SW8015B w/SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	39.1	1.0	40	-	98	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
<b>Surrogate Recovery</b>							
C9	28.2	26.0		25	113	104	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	57.5	56.9	40	14.07	109	107	70-130	1.14	30
<b>Surrogate Recovery</b>									
C9	28.6	28.6	25		114	114	70-130	0	30



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1509191

ClientCode: ERAS

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**

Andrew Savage  
ERAS Environmental, Inc.  
1533 B Street  
Hayward, CA 94541  
(510) 247-9885    FAX: (510) 886-5399

Email: info@eras.biz; andrew@eras.biz  
cc/3rd Party:  
PO:  
ProjectNo: 14063D; 3037-3115 Adeline Street

**Bill to:**

Kasey Cordoza  
ERAS Environmental, Inc.  
1533 B Street  
Hayward, CA 94541

**Requested TAT: 5 days;**

*Date Received: 09/04/2015*  
*Date Printed: 09/08/2015*

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
1509191-001	Drum 1,2,3	Soil	9/3/2015	<input type="checkbox"/>	A	A	A	A	A	A						

**Test Legend:**

1	413IR_SG_S	2	8260B_S	3	8270_S	4	CAM17MS_S
5	G-MBTEX_S	6	TPH(D)WSG_S	7		8	
9		10		11		12	

The following SampID: 001A contains testgroup.

**Prepared by: Maria Venegas**

**Comments:**

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



## WORK ORDER SUMMARY

**Client Name:** ERAS ENVIRONMENTAL, INC.  
**Project:** 14063D; 3037-3115 Adeline Street  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Andrew Savage  
**Contact's Email:** info@eras.biz; andrew@eras.biz

**Work Order:** 1509191  
**Date Received:** 9/4/2015

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
1509191-001A	Drum 1,2,3	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	3 / (3:1)	Brass tube 2"x3"	<input type="checkbox"/>	9/3/2015	5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			E413.2 (TROG w/ S.G. Clean-Up)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

**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.

1509191

# CHAIN OF CUSTODY FORM

**McCampbell Analytical, Inc**  
**1534 Willow Pass Rd.**  
**Pittsburg, CA 94565**  
**877.252.9262**  
**925.252.9269 - fax**

Turnaround Time:  Rush  24Hr  48 Hr  72 Hr  5 Day  
 Geotracker:  PDF  Excel  Write On (DW)

Report To: ERAS Bill To: ERAS  
 Company: ERAS Environmental, Inc.

Telephone: 510-247-9885 Fax: 510-886-5399  
 Email: info@eras.biz

Project # 14063D  
 Project location 3037-3115 Adeline Street  
 Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative					
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None	
Drum 1 of 3		9/3/2015	12:30	1	Tube	X						X		
Drum 2 of 3		9/3/2015	12:30	1	Tube	X						X		
Drum 3 of 3		9/3/2015	12:30	1	Tube	X						X		

Analysis Requested												Other	Comments	
TPH-gro by 8015														
TPH-dro by 8015 with silica gel														
TOG by 413.2														
VOC's by 8260														
SVOC's by 8270														
CAM 17 Metals														

ICE/le 3.8  
 GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_  
 VOAS | O&G | METALS | OTHER  
 PRESERVATION \_\_\_\_\_

RELINQUISHED BY:		RECEIVED BY:	
Relinquished by:	Date: <u>9-4-15</u>	Time: <u>1655</u>	Received by:
Relinquished by:	Date: <u>9/4</u>	Time: <u>1850</u>	Received by:
Relinquished by:	Date:	Time:	Received by:

ICE/le Condition	_____	Comments: Please PDF
Head space absent	_____	
Dechlorinated in lab	_____	
Appropriate containers	_____	
Preserved in Lab	_____	
Preservation	VOA's   O&G   METALS   OTHER pH<2	



### Sample Receipt Checklist

Client Name: **ERAS Environmental, Inc.** Date and Time Received: **9/4/2015 6:50:00 PM**  
 Project Name: **14063D; 3037-3115 Adeline Street** LogIn Reviewed by: **Maria Venegas**  
 WorkOrder No: **1509191** Matrix: Soil Carrier: Benjamin Yslas (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   
 Sample/Temp Blank temperature Temp: 3.8°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

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments:





# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1509191 A

**Report Created for:** ERAS Environmental, Inc.

1533 B Street  
Hayward, CA 94541

**Project Contact:** Andrew Savage

**Project P.O.:**

**Project Name:** 14063D; 3037-3115 Adeline Street

**Project Received:** 09/04/2015

Analytical Report reviewed & approved for release on 09/21/2015 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.*





## Glossary of Terms & Qualifier Definitions

**Client:** ERAS Environmental, Inc.  
**Project:** 14063D; 3037-3115 Adeline Street  
**WorkOrder:** 1509191

### Glossary Abbreviation

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)
DUP	Duplicate
EDL	Estimated Detection Limit
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.
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
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

### Analytical Qualifiers

a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant



## Glossary of Terms & Qualifier Definitions

**Client:** ERAS Environmental, Inc.  
**Project:** 14063D; 3037-3115 Adeline Street  
**WorkOrder:** 1509191

### Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.



# Analytical Report

**Client:** ERAS Environmental, Inc.  
**Date Received:** 9/4/15 18:50  
**Date Prepared:** 9/15/15  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L

## STLC Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drum 1,2,3	1509191-001A	Soil	09/03/2015	ICP-JY	110291

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.24	0.050	1	09/18/2015 09:21

Analyst(s): BBO



## Quality Control Report

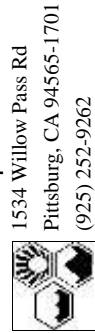
**Client:** ERAS Environmental, Inc.  
**Date Prepared:** 9/15/15  
**Date Analyzed:** 9/18/15  
**Instrument:** ICP-JY  
**Matrix:** Soil  
**Project:** 14063D; 3037-3115 Adeline Street

**WorkOrder:** 1509191  
**BatchID:** 110291  
**Extraction Method:** CA Title 22  
**Analytical Method:** SW6010B  
**Unit:** mg/L  
**Sample ID:** MB/LCS-110291  
 1509191-001AMS/MSD

### QC Summary Report for Metals (STLC)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Chromium	ND	1.01	0.050	1	-	101	75-125

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Chromium	1.29	1.27	1	0.2422	104	103	70-130	1.09	30



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1509191 A ClientCode: ERAS

WaterTrax  
  WriteOn  
  EDF  
  Excel  
  Fax  
  Email  
  HardCopy  
  ThirdParty  
  J-flag

**Report to:**  
 Andrew Savage  
 ERAS Environmental, Inc.  
 1533 B Street  
 Hayward, CA 94541  
 (510) 247-9885    FAX: (510) 886-5399

**Bill to:**  
 Kasey Cordoza  
 ERAS Environmental, Inc.  
 1533 B Street  
 Hayward, CA 94541

**Requested TAT:** 5 days;  
**Date Received:** 09/04/2015  
**Date Add-On:** 09/15/2015  
**Date Printed:** 09/15/2015

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

1509191-001		Drum 1,2,3	Soil	9/3/2015	<input type="checkbox"/>	A													
-------------	--	------------	------	----------	--------------------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--

**Test Legend:**

1	METALS_STLC_S	2		3		4	
5		6		7		8	
9		10		11		12	

**Prepared by:** Maria Venegas  
**Add-On Prepared By:** Maria Venegas

**Comments:** STLC Cr added 9/15/15 STAT.

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



## WORK ORDER SUMMARY

**Client Name:** ERAS ENVIRONMENTAL, INC.  
**Project:** 14063D; 3037-3115 Adeline Street  
**Comments:** STLC Cr added 9/15/15 STAT.

**QC Level:** LEVEL 2  
**Client Contact:** Andrew Savage  
**Contact's Email:** info@eras.biz; andrew@eras.biz

**Work Order:** 1509191  
**Date Received:** 9/4/2015  
**Date Add-On:** 9/15/2015

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1509191-001A	Drum 1,2,3	Soil	SW6010B (Metals) (STLC) <Chromium>	3 / (3:1)	Brass tube 2"x3"	9/3/2015	5 days*		<input type="checkbox"/>	

**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.

1509191

## CHAIN OF CUSTODY FORM

**McC Campbell Analytical, Inc**  
**1534 Willow Pass Rd.**  
**Pittsburg, CA 94565**  
**877.252.9262**  
**925.252.9269 - fax**

Turnaround Time:	<input type="checkbox"/> Rush	<input type="checkbox"/> 24Hr	<input type="checkbox"/> 48 Hr	<input type="checkbox"/> 72 Hr	<input checked="" type="checkbox"/> 5 Day
Geotracker:	<input type="checkbox"/> PDF	<input type="checkbox"/> Excel	<input type="checkbox"/> Write On (DW)		

Analysis Requested	Other	Comments
TPH-gro by 8015 TPH-dro by 8015 with silica gel TOG by 413.2 VOC's by 8260 SVOC's by 8270 CAM 17 Metals <span style="color: yellow; font-weight: bold; font-size: 1.2em;">STLC CV 9/16/15 STAT</span>		
COMPOSITE		

Report To: ERAS      Bill To: ERAS  
 Company: ERAS Environmental, Inc.  
 Email: info@eras.biz  
 Telephone: 510-247-9885      Fax: 510-886-5399

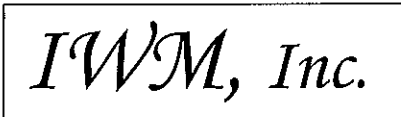
Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative					
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None	
Drum 1 of 3		9/3/2015	12:30	1	Tube	X							X	
Drum 2 of 3		9/3/2015	12:30	1	Tube	X							X	
Drum 3 of 3		9/3/2015	12:30	1	Tube	X							X	
		ICE/° <span style="color: blue; font-size: 1.5em;">3.0</span>				GOOD CONDITION			APPROPRIATE CONTAINERS					
						HEAD SPACE ABSENT			PRESERVED IN LAB					
						DECLORINATED IN LAB			PRESERVED IN LAB					
						VOA's   O&G   METALS   OTHER			PRESERVATION					

RELINQUISHED BY:			RECEIVED BY:		
Relinquished by:	Date: <u>9-4-15</u>	Time: <u>1655</u>	Received by:	Date:	Time:
Relinquished by:	Date: <u>9/4</u>	Time: <u>1830</u>	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

ICE/t° Condition _____	Comments: Please PDF
Head space absent _____	
Dechlorinated in lab _____	
Appropriate containers _____	
Preserved in Lab _____	
Preservation	VOA's   O&G   Metals   Other pH<2



ATTACHMENT B  
DISPOSAL CERTIFICATE



INTEGRATED WASTESTREAM MANAGEMENT, INC.  
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131  
PHONE: 408.433.1990 FAX: 408.433.9521

# CERTIFICATE OF DISPOSAL

Generator Name: John Murray Productions  
Address: 1196 32<sup>nd</sup> Street  
Oakland, CA 94608  
Contact: John Murray  
Phone: 510-594-2080 x16

Facility Name: Former Bronze Foundry  
Address: 3037-3115 Adeline Street  
Oakland, CA  
Facility Contact: Kasey Cordoza, Eras Environmental  
Phone: 510-247-9885 x301

IWM Job #:	<u>100360-DS</u>
Description of Waste:	<u>1 Drum(s) of</u> <u>Non-Hazardous</u> <u>Soil</u>
Removal Date:	<u>10/1/15</u>
Ticket #:	<u>RSVRL011015</u>


### Transporter Information

Name: IWM, Inc.  
Address: 1945 Concourse Drive  
San Jose, CA 95131  
Phone: (408) 433-1990

### Disposal Facility Information

Name: Republic Services Vasco Road Landfill  
Address: 4001 N. Vasco Road  
Livermore, CA 94550  
Phone: (925) 447-0491

**IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.**

William T. DeLon   
Authorized Representative (Print Name and Signature)

10/1/15  
Date