

Salisbury Avenue Associates, LLC
11 Saint Lucia Place
Tiburon, California 94920

January 26, 2017

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

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By Alameda County Environmental Health 11:36 am, Jan 30, 2017

**Subject: Acknowledgement Statement for the Groundwater Monitoring Report at 2145
35th Avenue, Oakland, California, 94601, dated January 26, 2017**

Dear Mark:

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached Groundwater Monitoring Report at 2145 35th Avenue, Oakland, California, 94601, dated January 26, 2017 and submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

Managing Partner of
Salisbury Avenue Associates, LLC


Charles Thomas Shurstad



GROUNDWATER MONITORING REPORT

8th Sampling Event, January 17, 2017

For the Site Located at:

2145 35TH Avenue

Oakland, California 94601

Prepared for:

Salisbury Avenue Associates LLC

11 Saint Lucia Place

Tiburon, California 94920

Prepared by:

Eagle Environmental Construction (EEC)

1485 Bayshore Boulevard, Suite 374

San Francisco, CA 94124

January 26, 2017

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1.0 Introduction

This groundwater monitoring report is for the former gasoline service station located at 2145 35th Avenue, Oakland, California (Figure 1). This is the eighth sampling event since the four monitoring wells were installed in July 2012.

In the fourth, fifth, sixth, seventh, and eight monitoring events, the following was implemented:

- Eliminated the full suite analysis of Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8270sim due to the fact that only Naphthalene was detected. The remaining PAHs were non-detected in past analysis. Resumed the analysis of Naphthalene by using EPA Method 8260B.
- Lead was not detected in any of the wells. Maximum Nickel concentration to date was detected below the drinking water MCL of 100 µg/l. Nickel was detected in the initial three sampling events at 6.6 µg/l, 9.7 µg/l, and 8.7 µg/l, in Monitoring well MW-4. No other contaminant was detected in monitoring well MW-4. It appears that Nickel at this site is not related to the fuel leak and may be naturally occurring. Therefore, we discontinued the analysis for metals in the monitoring wells at this site.

2.0 Groundwater Sampling Activities

The wells were purged and sampled on January 17, 2017. EEC Engineer, Sami Malaeb, performed the well purging and sampling. The well sampling logs are presented in Appendix A. The depth to water in the wells was measured and recorded after removing the well caps and letting the wells stabilize for approximately 15 minutes. Subsequently, each well was purged of at least three casing volumes and until conductivity, temperature, and pH stabilized. The well purge water was transferred to a 55-gallon, DOT-approved, steel drum. The drum was temporarily stored onsite pending transport and disposal to a licensed facility.

After purging the wells, groundwater samples were collected by using disposable bailers. The water samples were discharged directly into laboratory cleaned 40-millileter volatile organic analysis (VOA) vials with HCL preservative to prevent loss of any volatile constituents. The vials were filled slowly and in such a manner that the meniscus extended above the top of the VOA vial. After the vials were filled and capped, they were inverted to ensure there is no headspace or entrapped air bubbles. The groundwater VOAs were labeled and placed in a cooler chilled to approximately 4°C. Equipment wash and rinse water were transferred to a 55-gallon storage drum. The drum was sealed with a steel lid and labeled. All containers, VOAs and amber jars were obtained from the laboratory and filled with water from the bailer for the analyses.

The water samples were placed on ice, in an ice cooler, accompanied by a completed chain of custody. The samples were sent to Curtis & Tompkins Laboratory in Berkeley and analyzed for the following:

- Total Petroleum Hydrocarbons as Gasoline (TPH-G) by EPA Method 8015B;
- Total Petroleum Hydrocarbons as Stoddard Solvent (TPHss) by EPA Method 8015B;
- Total Petroleum Hydrocarbons as Diesel (TPH-D) by EPA Method 8015B;
- Total Recoverable Petroleum Hydrocarbons (TRPH) as Motor Oil and Hydraulic Oil , EPA Method 8015; and
- Volatile Organics by the GC/MS EPA Method 8260B, MTBE, BTEX, and Naphthalene

3.0 Waste Management

A total of one (1) purge water drum was generated from the purging and sampling activities onsite. The drum is stored onsite pending profiling and disposal.

4.0 Groundwater Elevations and Flow Direction

The groundwater flow direction and gradient were calculated based on the depth to groundwater from top of casing in each well and the surveyed top of casing elevations. The well data are presented in the attached Table 1. The calculated groundwater flow direction was to the south at a gradient of 0.80% (Figure 2).

5.0 Conclusions

The laboratory report is included in Appendix B. Tables 2 through 4 summarize the analytical results. Laboratory analyses of groundwater samples collected from the monitoring wells indicated the following:

- Due to the recent rainfall, depth to water decreased by an average of 1.18 ft from last August 2016. That is, the water table was higher by an average of 1.18 ft. The rise to water table did not significantly impact the analytical findings in general in MW-1, MW-3, and MW-4. There is an increase of TPH-G concentration in MW-2 from 3,800 ppb in August 2016 to 6,000 ppb in January 2017. Benzene stayed below 100 ppb at 60 ppb in MW-2 (Table 2).
- Floating product or sheen was not observed in any of the wells.

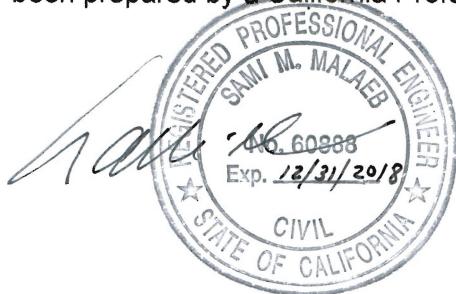
- Similar to the previous sampling events, all the analyzed petroleum hydrocarbons were either non-detected or non-significant in monitoring wells MW-1, MW-3, and MW-4 (Table 2).
- Consistent with the previous sampling events, the most petroleum hydrocarbon impact was detected in monitoring well MW-2, downgradient from the former sources onsite; USTs, piping, and fuel dispenser (Table 2).

6.0 Recommendations

MW-3 was grouted and closed on January 25, 2017. At the request of ACEH, groundwater monitoring will continue on semi-annual basis for the remaining 3 wells (MW-1, MW-2, and MW-4).

Thank you for your cooperation. If you have any questions, please call at (925) 858-9608 or email Sami Malaeb at s.malaeb@comcast.net.

All engineering information, conclusions, and recommendations contained in this report have been prepared by a California Professional Engineer.



Sami Malaeb, P.E.,QSP/QSD

Project Manager

TABLES

TABLE 1 WELL DATA AND GROUNDWATER ELEVATIONS

TABLE 2 SUMMARY OF CHEMICAL ANALYSES OF GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS –PETROLEUM HYDROCARBONS-BTEX AND MTBE

TABLE 3 SUMMARY OF CHEMICAL ANALYSES OF GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS –POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)

TABLE 4 SUMMARY OF CHEMICAL ANALYSES OF GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS –LUFT FIVE METALS

TABLE 1
WELL DATA AND GROUNDWATER ELEVATIONS
2145 35th Avenue
Oakland, California

DATE	WELL INFORMATION	MW-1	MW-2	MW-3	MW-4
07/18/2012	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	10.13	10.92	11.01	10.85
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	84.08	83.51	83.60	84.06
12/06/2012	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	7.98	10.40	10.40	9.25
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	86.23	84.03	84.21	85.66
03/21/2013	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	9.88	10.77	10.83	10.66
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	84.33	83.66	83.78	84.25
06/21/2013	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	10.09	10.87	10.95	10.84
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	84.12	83.56	83.66	84.07
12/10/2013	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	9.84	10.70	10.79	10.64
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	84.37	83.73	83.82	84.27
12/04/2014	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	8.11	9.82	9.98	9.40
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	86.10	84.61	84.63	85.51
08/10/2016	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	10.47	11.02	11.10	11.15
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	83.74	83.41	83.51	83.76
01/17/2017	Casing Diameter (in)	2	4	4	2
	Total Well Depth (ft)	18	16	18	18
	Depth to Water (ft)	9.15	10.14	10.28	10.00
	Top of Casing Elevation	94.21	94.43	94.61	94.91
	Top of Water Elevation	85.06	84.29	84.33	84.91

TABLE 2
SUMMARY OF CHEMICAL ANALYSES
GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS
PETROLEUM HYDROCARBONS, BTEX, and MTBE
2145 35th Avenue, Oakland, California

Sample ID	Date Sampled	TPH-G ⁽¹⁾ (µg/l) ⁽²⁾	TPH-ss ⁽³⁾ (µg/l)	TPH-D ⁽⁴⁾ (µg/l)	TPH as Motor Oil (µg/l)	TPH as Hydraulic Oil (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl benzene (µg/l)	Total Xylenes (µg/l)	MTBE ⁽⁵⁾ (µg/l)	Naphthalene (µg/l)
MW-1	07/09/2012	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/06/2012	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	03/21/2013	ND<50	ND<50	ND<49	ND<290	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	06/21/2013	ND<50	ND<50	100 (Y) ⁽⁶⁾	ND<290	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/10/2013	ND<50	ND<50	ND<49	ND<290	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/04/2014	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	08/10/2016	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	01/17/2017	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0	
MW-2	07/09/2012	3,800	3,900 (Y)	1,200 (Y)	ND<300	660 (Y)	82	42	350	189.4	ND<0.5	44
	12/06/2012	5,000	3,300 (Y)	2,300	ND<300	1,500 (Y)	92	42	460	179.6	ND<0.5	62
	03/21/2013	4,500	3,000	1,800 Y	ND<300	1,000(Y)	77	31	230	115.4	ND<1.7	25
	06/21/2013	4,300	2,900	1,700 (Y)	ND<300	1,100 (Y)	50	24	210	96	ND<1.7	21
	12/10/2013	3,300	2,300 (Y)	1,500 (Y)	ND<300	710 (Y)	40	21	140	63	ND<1.7	6.7
	12/04/2014	4,600	3,200 (Y)	3,900	ND<300	1,300 (Y)	53	24	200	75.2	ND<1.7	30
	08/10/2016	3,800	3,100 (Y)	590 (Y)	ND<300	ND<300	61	28	38	31.2	ND<0.5	3.5
	01/17/2017	6,000	3,400 (Y)	530 (Y)	ND<300	ND<300	60	29	140	50.4	ND<0.5	28
MW-3	07/09/2012	85Y	86Y	180 (Y)	ND<300	ND<300	0.8	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/06/2012	1,200	800Y	2,000	ND<300	1,600 (Y)	36	0.8	9.2	1.1	ND<0.5	120
	03/21/2013	130 (Y)	91Y	140 (Y)	ND<300	ND<290	1.8	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	06/21/2013	ND<50	ND<50	210 (Y)	ND<300	340 (Y)	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/10/2013	ND<50	ND<50	54 (Y)	ND<300	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/04/2014	54 (Y)	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	08/10/2016	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	01/17/2017	68Y	ND<50	52 (Y)	ND<300	ND<300	1.3	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
MW-4	07/09/2012	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/06/2012	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	03/21/2013	ND<50	ND<50	ND<49	ND<290	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	06/21/2013	ND<50	ND<50	76 (Y)	ND<290	ND<290	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/10/2013	ND<50	ND<50	ND<51	ND<310	ND<310	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	12/04/2014	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	08/10/2016	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0
	01/17/2017	ND<50	ND<50	ND<50	ND<300	ND<300	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<2.0

Sample ID	Date Sampled	TPH-G ⁽¹⁾ ($\mu\text{g/l}$) ⁽²⁾	TPH-ss ⁽³⁾ ($\mu\text{g/l}$)	TPH-D ⁽⁴⁾ ($\mu\text{g/l}$)	TPH as Motor Oil ($\mu\text{g/l}$)	TPH as Hydraulic Oil ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE ⁽⁵⁾ ($\mu\text{g/l}$)	Naphthalene ($\mu\text{g/l}$)
Groundwater Screening Levels, Low-Threat Underground Storage Tank Case Closure Policy, Appendix 3, Figure A ⁽⁷⁾		NA ⁽⁷⁾	NA	NA	NA	NA	100	NA	NA	NA	NA	NA

TPH-G⁽¹⁾ = Total petroleum hydrocarbons as gasoline by EPA Method 8015B

($\mu\text{g/l}$)⁽²⁾ = Microgram per liter

TPH-ss⁽³⁾ = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8015B

TPH-D⁽⁴⁾ = Total petroleum hydrocarbons as diesel by EPA Method 8015B

MTBE⁽⁵⁾ = Methyl Tertiary Butyl Ether

(Y)⁽⁶⁾ = Sample exhibits chromatographic pattern which does not resemble standard;

NA⁽⁷⁾ = Not Applicable

TABLE 3
SUMMARY OF CHEMICAL ANALYSES
GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)
2145 35th Avenue
Oakland, California

Sample ID	Date Sampled	Naphtha-lene (µg/l) ⁽¹⁾	Acenaphthylene (µg/l)	Acenaphthene (µg/l)	Fluorene (µg/l)	Phenanthrene (µg/l)	Anthracene (µg/l)	Fluoranthene (µg/l)	Pyrene (µg/l)	Benzo(a)Anthracene (µg/l)	Chrysene (µg/l)	Benzo(b)Fluoranthene (µg/l)	Benzo(k)Fluoranthene (µg/l)	Benzo(a)pyrene (µg/l)	Indeno(1,2,3-cd)pyrene (µg/l)	Dibenz(a,h)Anthracene (µg/l)	Benzo(g,h,i)Perylene (µg/l)
MW-1	07/09/2012	<2.0	N/A ⁽²⁾	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/06/2012	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	03/21/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	06/21/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/10/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/04/2014	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	08/10/2016	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MW-2	07/09/2012	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/06/2012	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	03/21/2013	27	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
	06/21/2013	21	N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/10/2013	6.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/04/2014	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	08/10/2016	3.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MW-3	07/09/2012	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/06/2012	120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	03/21/2013	0.6	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
	06/21/2013	<2.0	N/A*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/10/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/04/2014	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	08/10/2016	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MW-4	07/09/2012	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/06/2012	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	03/21/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	06/21/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/10/2013	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	12/04/2014	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	08/10/2016	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
MW-4	01/17/2017	<2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Sample ID	Date Sampled	Naphtha-lene ($\mu\text{g/l}$) ⁽¹⁾	Acenaphthylene ($\mu\text{g/l}$)	Acenaphcene ($\mu\text{g/l}$)	Fluorrene ($\mu\text{g/l}$)	Phenanthrene ($\mu\text{g/l}$)	Anthracene ($\mu\text{g/l}$)	Fluoranthene ($\mu\text{g/l}$)	Pyrene ($\mu\text{g/l}$)	Benzo(a)Anthracene ($\mu\text{g/l}$)	Chrysene ($\mu\text{g/l}$)	Benzo(b)Fluoranthene ($\mu\text{g/l}$)	Benzo(k)Fluoranthene ($\mu\text{g/l}$)	Benzo(a)pyrene ($\mu\text{g/l}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/l}$)	Dibenz(a,h)Anthracene ($\mu\text{g/l}$)	Benzo(g,h,i)Perylene ($\mu\text{g/l}$)
Groundwater Vapor Intrusion Human Health Risk Levels (residential) ⁽³⁾	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

*Stopped analyzing for full suite PAHs due to the fact only Naphthalene was detected in previous sampling and analysis.

($\mu\text{g/l}$)⁽¹⁾ = Microgram per liter

N/A⁽²⁾ = Not applicable or not analyzed for.

⁽³⁾ = Tier 1 Environmental Screening Levels (ESLs), Groundwater Screening Levels, Summary of Groundwater ESLs, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final (Feb. 2016, Rev. 3).

-- = Not listed

Bold = Concentration presented in bold where such a value is at or exceeds one of the environmental screening levels (ESLs) listed

TABLE 4
SUMMARY OF CHEMICAL ANALYSES
GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS
LUFT FIVE METALS
2145 35th Avenue
Oakland, California

Sample ID	Date Sampled	Cadmium (Cd) (µg/l) ⁽¹⁾	Chromium (Cr) (µg/l)	Lead (Pb) (µg/l)	Nickel (Ni) (µg/l)	Zinc (Zn) (µg/l)
MW-1	07/09/2012	<5.0	<5.0	<5.0	<5.0	<20
	12/06/2012	<5.0	<5.0	<5.0	7.6	<20
	03/21/2013	N/A ⁽²⁾	N/A	<5.0	5.5	NA
	06/21/2013*	N/A	N/A	N/A	N/A	N/A
	08/10/2016	N/A	N/A	N/A	N/A	N/A
	01/17/2017	N/A	N/A	N/A	N/A	N/A
MW-2	07/09/2012	<5.0	<5.0	<5.0	<5.0	<20
	12/06/2012	<5.0	<5.0	<5.0	<5.0	<20
	03/21/2013	N/A	N/A	<5.0	<5.0	NA
	06/21/2013*	N/A	N/A	N/A	N/A	N/A
	08/10/2016	N/A	N/A	N/A	N/A	N/A
	01/17/2017	N/A	N/A	N/A	N/A	N/A
MW-3	07/09/2012	<5.0	<5.0	<5.0	<5.0	<20
	12/06/2012	<5.0	<5.0	<5.0	6.1	<20
	03/21/2013	N/A	N/A	<5.0	5.1	NA
	06/21/2013*	N/A	N/A	N/A	N/A	N/A
	08/10/2016	N/A	N/A	N/A	N/A	N/A
	01/17/2017	N/A	N/A	N/A	N/A	N/A
MW-4	07/09/2012	<5.0	<5.0	<5.0	6.6	<20
	12/06/2012	<5.0	<5.0	<5.0	9.7	<20
	03/21/2013	N/A	N/A	<5.0	8.7	NA
	06/21/2013*	N/A	N/A	N/A	N/A	N/A
	08/10/2016	N/A	N/A	N/A	N/A	N/A
	01/17/2017	N/A	N/A	N/A	N/A	N/A
Groundwater Screening Levels, MCL⁽³⁾		5.0	50	15	100	5,000

*Stopped analyzing for LUFT 5 metals due to non-detected to non-significant levels in the water.

(µg/l)⁽¹⁾ = Microgram per liter

N/A⁽²⁾ = Not applicable or not analyzed for the indicated compound

(3) = Screening Levels, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Summary of Groundwater ESLs (Feb. 2016 (Rev. 3)

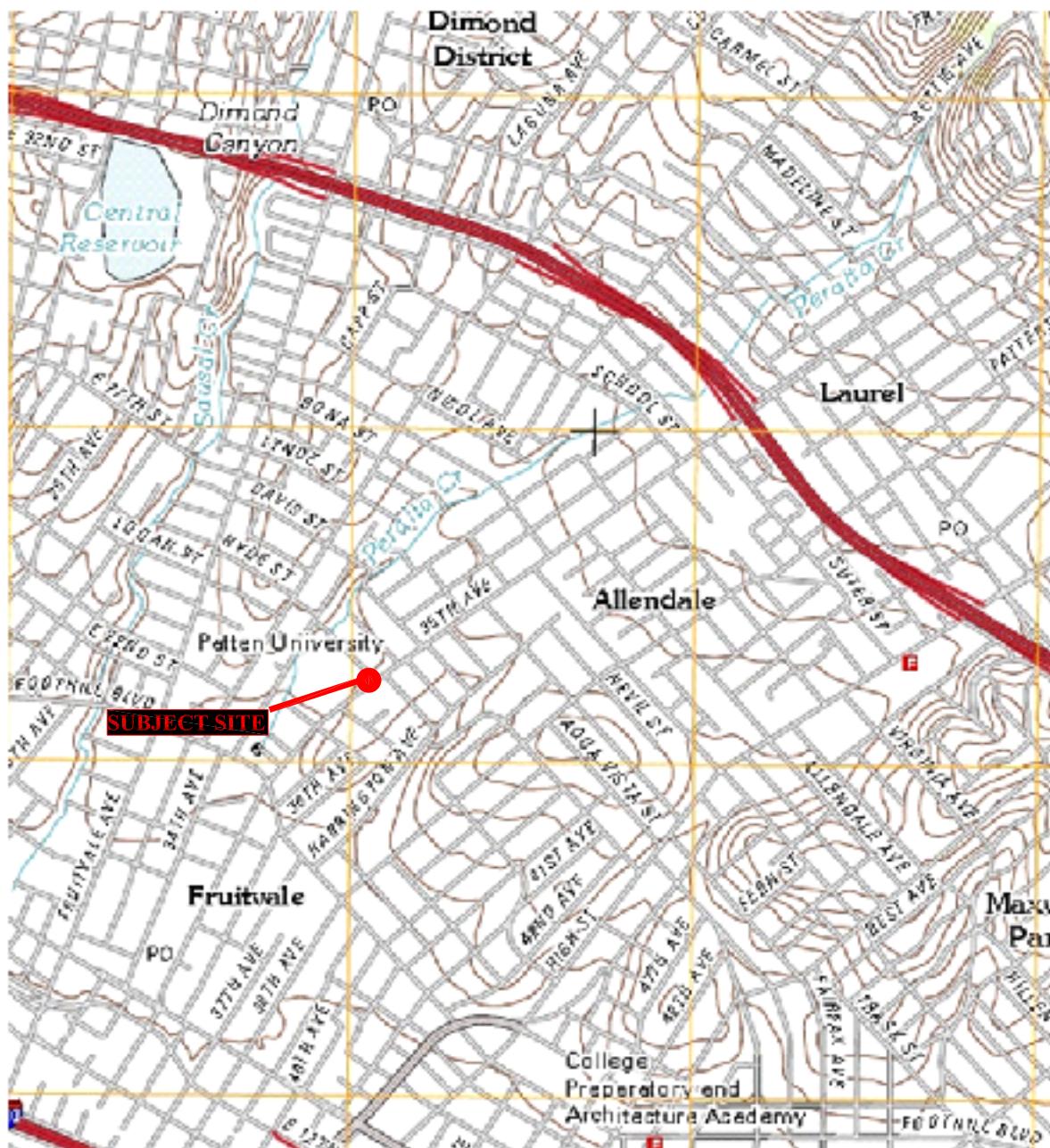
FIGURES

FIGURE 1 SITE LOCATION

FIGURE 2 WELL LOCATIONS AND GROUNDWATER FLOW DIRECTIONS AND GRADIENT

OAKLAND EAST QUADRANGLE
CALIFORNIA
7.5-MINUTE SERIES

OAKLAND EAST, CA
2012



SCALE 1:24 000



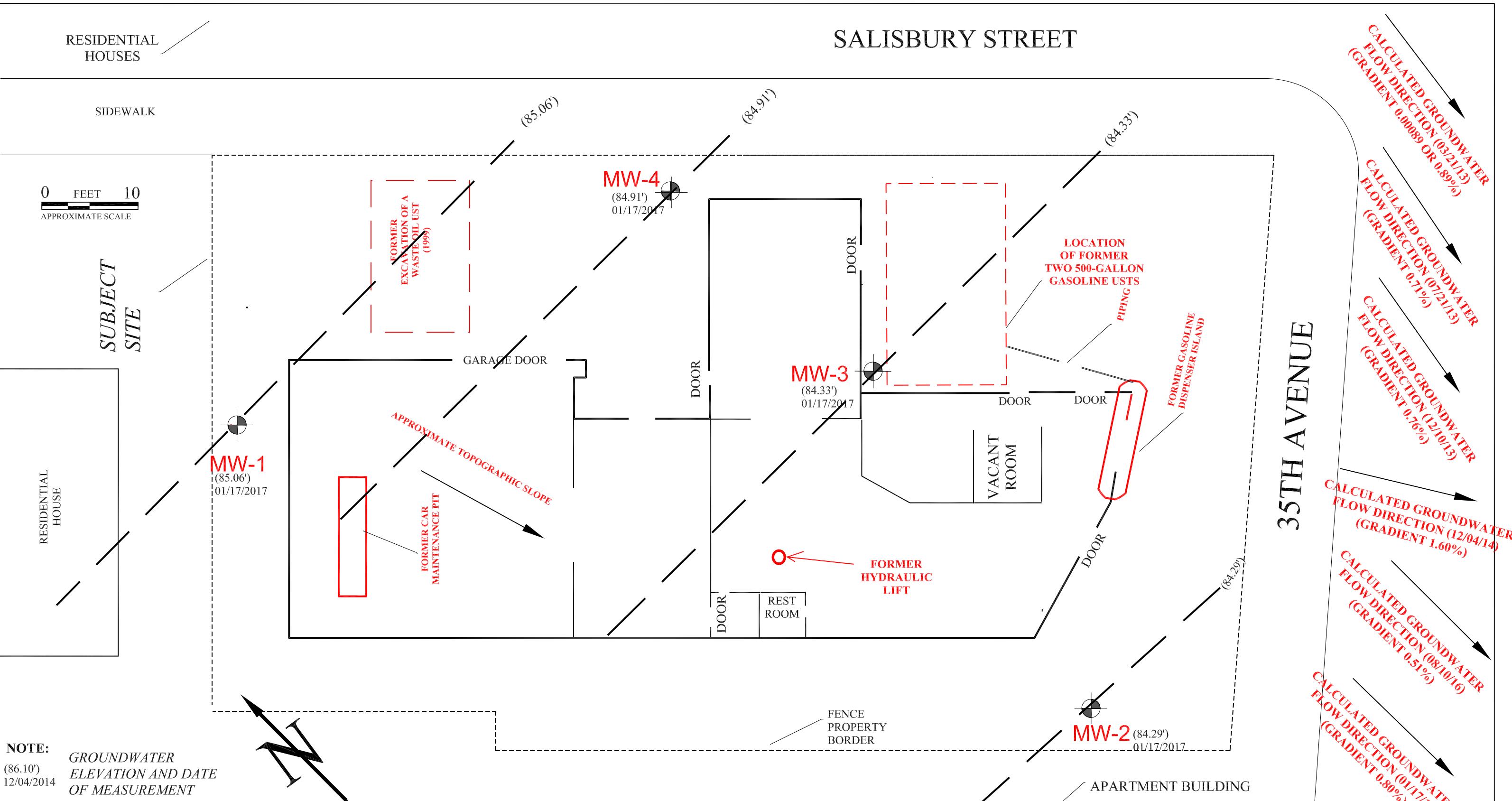
1485 BAYSHORE BOULEVARD, SUITE 374
SAN FRANCISCO, CA 94124

SITE LOCATION
2145 35TH AVENUE
OAKLAND, CA 94601

FIGURE 1

JANUARY
2017

SALISBURY STREET



**WELL LOCATIONS AND
GROUNDWATER FLOW DIRECTION AND GRADIENT**
2145 35TH AVENUE, OAKLAND, CALIFORNIA

FIGURE 2
JANUARY 2017

APPENDIX A
WELL PURGING AND SAMPLING LOGS

WELL SAMPLING LOG

Project No. : _____
Project Name: SALISBURY
Location: 2145 35th Avenue
Oakland, CA 94601

Well ID: MW-1
Sampled by: EFC S.M.
Date: 01/17/17

Well Diameter:	2"
Total Well Depth:	17.70'
Depth to Water:	9.15
Water Column:	
Calculated Purge:	
Actual Purge:	
Free Product:	
Product Sheen:	No

Purge Volume Calculations for Three Casing Volume Purge
Volume Per One Foot of Well: $\pi r^2 \times 1$ <u>0.163 gallon</u>
Volume of One Casing: <u>1.39 gallons</u>
Volume of Three Casings: <u>4.20 gallons</u>

Purge Method: By boiler
Did Well go dry? - volume stabilize

Sampling Method: by baffle
Sample Time: 9:55 A.M.

Post Purge Depth to Water (DTW)

Time	DTW
9:20 10:18 <u>5 min</u>	9.20'

Analyze for:

Comments: _____

WELL SAMPLING LOG

Project No. : _____
Project Name: SALISBURY
Location: 2145 35th Avenue
Oakland, CA 94601

Well ID: MW-2
Sampled by: EEC S.M.
Date: 01/17/17

Well Diameter:	4"
Total Well Depth:	15.41
Depth to Water:	10.141
Water Column:	
Calculated Purge:	
Actual Purge:	
Free Product:	
Product Sheen:	

Purge Volume Calculations for Three Casing Volume Purge
Volume Per One Foot of Well: $\pi r^2 \times 1$
Volume of One Casing: 3.44 gal/s
Volume of Three Casings: 10.30 gal/s

Purge Method: purge and sample
Did Well go dry? No

Sampling Method: by boil-

Post Purge Depth to Water (DTW)	
Time	DTW
1:39	11.20'

Analyze for:

Comments: _____

WELL SAMPLING LOG

Project No. : _____
Project Name: SALISBURY
Location: 2145 35th Avenue
Oakland, CA 94601

Well ID: MW-3
Sampled by: KFC S.M.
Date: 01/17/17

Well Diameter:	4"
Total Well Depth:	17.68'
Depth to Water:	10.28'
Water Column:	
Calculated Purge:	
Actual Purge:	
Free Product:	
Product Sheen:	

Purge Volume Calculations for Three Casing Volume Purge
Volume Per One Foot of Well: <u>0.653</u>
$\pi r^2 \times 1$
Volume of One Casing: <u>4.83</u> 9-06
Volume of Three Casings: <u>14.50</u> 9-06

Purge Method: purge & sample
Did Well go dry? no

Sampling Method: from baile
Sample Time: 12:40

Post Purge Depth to Water (DTW)

Analyze for:

Comments: _____

WELL SAMPLING LOG

Project No. : _____
Project Name: SALISBURY
Location: 2145 35th Avenue
Oakland, CA 94601

Well ID: MW-4
Sampled by: EBC SN-
Date: 01/17/17

Well Diameter:	2"
Total Well Depth:	17.72'
Depth to Water:	10.00
Water Column:	
Calculated Purge:	
Actual Purge:	
Free Product:	
Product Sheen:	

Purge Volume Calculations for Three Casing Volume Purge	
Volume Per One Foot of Well:	0.163 cu.in.
$\pi r^2 \times 1$	
Volume of One Casing:	1.25 gal
Volume of Three Casings:	3.76 gal

Purge Method: by boil/o -
Did Well go dry? no

Sampling Method: by boile
Sample Time: 11:10

Post Purge Depth to Water (DTW)	
Time	DTW
11:05 a.m.	10035'

Analyze for:

Comments: _____

**APPENDIX B
LABORATORY REPORT**



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

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

Laboratory Job Number 285148
ANALYTICAL REPORT

Eagle Env. Construction
1485 Bay Shore Boulevard
San Francisco, CA 94124

Project : SALISBURY PROJECT
Location : Salisbury Project
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	285148-001
MW-2	285148-002
MW-3	285148-003
MW-4	285148-004

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

Signature: 

Date: 01/26/2017

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226 Ext 13107

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: **285148**
Client: **Eagle Env. Construction**
Project: **SALISBURY PROJECT**
Location: **Salisbury Project**
Request Date: **01/17/17**
Samples Received: **01/17/17**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 01/17/17. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

Low response was observed for stoddard solvent C7-C12 in the CCV analyzed 01/20/17 15:32; affected data was qualified with "b". No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

MW-2 (lab # 285148-002) was diluted due to high non-target analytes. No other analytical problems were encountered.

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

CHAIN OF CUSTODY

Page 1 of 1

Chain of Custody # : _____

Gemütlicher Einbaum: Tischwagen

C&T LOGIN # 285148

Project No:

Project Name: Salisbury Project

EDD Format: X Rpt Level: II III IV Company : Eagle Environmental Construction (EEC)

Turnaround Time: RUSH

Sami Malaeb

Report To: Sami Malaeb

Company : Eagle Environment Construction (EEC)

Telephone: (925) 858-9608

Email: s.malaeb@comcast.net

Lab No.	Sample ID.	Sampling		Matrix		# of Containers	Chemical Preservative				
		Date	Time	Water	Soil		HCl	H ₂ SO ₄	HNO ₃	NaOH	None
1	MW-1	01/17/2017	9:55 a.m.	X		3	X				
	MW-1	01/17/2017	//	X		3	X				
	MW-1	01/17/2017	//	X		2					X
	MW-2	01/17/2017	1:50 p.m.	X		3	X				
2	MW-2	01/17/2017	//	X		3	X				
	MW-2	01/17/2017	//	X		2					X
	MW-3	01/17/2017	12:40 p.m.	X		3	X				
3	MW-3	01/17/2017	//	X		3	X				
	MW-3	01/17/2017	//	X		2					X
4	MW-4	01/17/2017	11:10 a.m.	X		3	X				
	MW-4	01/17/2017	//	X		3	X				
	MW-4	01/17/2017	//	X		2					X

Analytical Request									
X	TPH-G and TPH-SS by 8016								
	Full 8260, including Naphthalene, BTEX, and Fuel Oxygenates								
	TPH-D; TPH-Motor Oil; TPH-Hydraulic Oil (with silica gel cleanup)								
X		X							
			X						
X				X					
		X			X				
X						X			
		X					X		
X								X	
		X							X
X									X
		X							
X									X
		X							

Notes:

Need results 1 week
turn around time
no later than
1/24/17 at 4:00 p.m.

SAMPLE RECEIPT

Intact Cold
 On Ice Ambient

RELINQUISHED BY:

RECEIVED BY

[Signature] 01/17/17 15:38
DATE/TIME

DATE/TIME

111719

15:05 DATE/TIME

DATE/TIME

DATE/TIME

DATE/TIME

DATE: 05/15

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 285148 Date Received 1/17/17 Number of coolers 1
 Client EEC Project Salisbury project

Date Opened 1/17 By (print) DIN (sign) Lingay
 Date Logged in 1 By (print) V (sign) ↓
 Date Labeled ↓ By (print) HF (sign) J/K

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
 Shipping info _____

2A. Were custody seals present? YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO

6. Indicate the packing in cooler: (if other, describe) _____

Bubble Wrap Foam blocks Bags None
 Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 2.8

Temperature blank(s) included? Thermometer# 4 IR Gun# _____

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

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are there any missing / extra samples? _____ YES NO

11. Are samples in the appropriate containers for indicated tests? _____ YES NO

12. Are sample labels present, in good condition and complete? _____ YES NO

13. Do the sample labels agree with custody papers? _____ YES NO

14. Was sufficient amount of sample sent for tests requested? _____ YES NO

15. Are the samples appropriately preserved? _____ YES NO N/A

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? (pH strip lot# _____) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

21. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS



Curtis & Tompkins, Ltd.

Detections Summary for 285148

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

Client : Eagle Env. Construction
Project : SALISBURY PROJECT
Location : Salisbury Project

No Detections

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	6,000		50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Stoddard Solvent C7-C12	3,400	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	530	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Benzene	60		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	29		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	140		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
m,p-Xylenes	46		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	4.4		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Isopropylbenzene	55		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Propylbenzene	140		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	11		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butylbenzene	3.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	10		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
sec-Butylbenzene	10		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
para-Isopropyl Toluene	2.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
n-Butylbenzene	11		1.7	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
Naphthalene	28		2.0	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	68	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	52	Y	50	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Benzene	1.3		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
tert-Butylbenzene	0.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

No Detections

X = Sample exhibits chromatographic pattern which does not resemble standard.

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	01/17/17
Units:	ug/L	Received:	01/17/17
Diln Fac:	1.000		

Field ID: MW-1 Lab ID: 285148-001
 Type: SAMPLE

Analyte	Result	RL	Batch# Analyzed
Gasoline C7-C12	ND	50	243583 01/20/17
Stoddard Solvent C7-C12	ND	50	243648 01/23/17

Surrogate	%REC	Limits	Batch# Analyzed
Bromofluorobenzene (FID)	118	80-132	243583 01/20/17

Field ID: MW-2 Lab ID: 285148-002
 Type: SAMPLE

Analyte	Result	RL	Batch# Analyzed
Gasoline C7-C12	6,000	50	243583 01/20/17
Stoddard Solvent C7-C12	3,400 Y	50	243706 01/24/17

Surrogate	%REC	Limits	Batch# Analyzed
Bromofluorobenzene (FID)	120	80-132	243583 01/20/17

Field ID: MW-3 Lab ID: 285148-003
 Type: SAMPLE

Analyte	Result	RL	Batch# Analyzed
Gasoline C7-C12	68 Y	50	243583 01/20/17
Stoddard Solvent C7-C12	ND	50	243648 01/23/17

Surrogate	%REC	Limits	Batch# Analyzed
Bromofluorobenzene (FID)	109	80-132	243583 01/20/17

Field ID: MW-4 Lab ID: 285148-004
 Type: SAMPLE

Analyte	Result	RL	Batch# Analyzed
Gasoline C7-C12	ND	50	243583 01/20/17
Stoddard Solvent C7-C12	ND	50	243648 01/23/17

Surrogate	%REC	Limits	Batch# Analyzed
Bromofluorobenzene (FID)	111	80-132	243583 01/20/17

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	01/17/17
Units:	ug/L	Received:	01/17/17
Diln Fac:	1.000		

Type: BLANK Batch#: 243583
 Lab ID: QC869300 Analyzed: 01/20/17

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	80-132

Type: BLANK Batch#: 243648
 Lab ID: QC869560 Analyzed: 01/23/17

Analyte	Result	RL
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	80-132

Type: BLANK Batch#: 243706
 Lab ID: QC869781 Analyzed: 01/24/17

Analyte	Result	RL
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	80-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected

RL= Reporting Limit

Page 2 of 2

12.3

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC869297	Batch#:	243583
Matrix:	Water	Analyzed:	01/20/17
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,145	114	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	80-132

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Field ID:	MW-1	Batch#:	243583
MSS Lab ID:	285148-001	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/20/17
Diln Fac:	1.000		

Type: MS Lab ID: QC869298

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	37.79	2,000	2,417	119	76-120
Surrogate					
Bromofluorobenzene (FID)	127	80-132			

Type: MSD Lab ID: QC869299

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	2,363	116	76-120	2 20
Surrogate					
Bromofluorobenzene (FID)	130	80-132			

RPD= Relative Percent Difference

Page 1 of 1

14.0

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC869555	Batch#:	243648
Matrix:	Water	Analyzed:	01/23/17
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,100	110	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	80-132

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	243648
MSS Lab ID:	285237-001	Sampled:	01/18/17
Matrix:	Water	Received:	01/19/17
Units:	ug/L	Analyzed:	01/23/17
Diln Fac:	1.000		

Type: MS Lab ID: QC869558

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	34.30	2,000	2,346	116	76-120
Surrogate					
Bromofluorobenzene (FID)	104	80-132			

Type: MSD Lab ID: QC869559

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	2,350	116	76-120	0 20
Surrogate					
Bromofluorobenzene (FID)	106	80-132			

RPD= Relative Percent Difference

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17.0

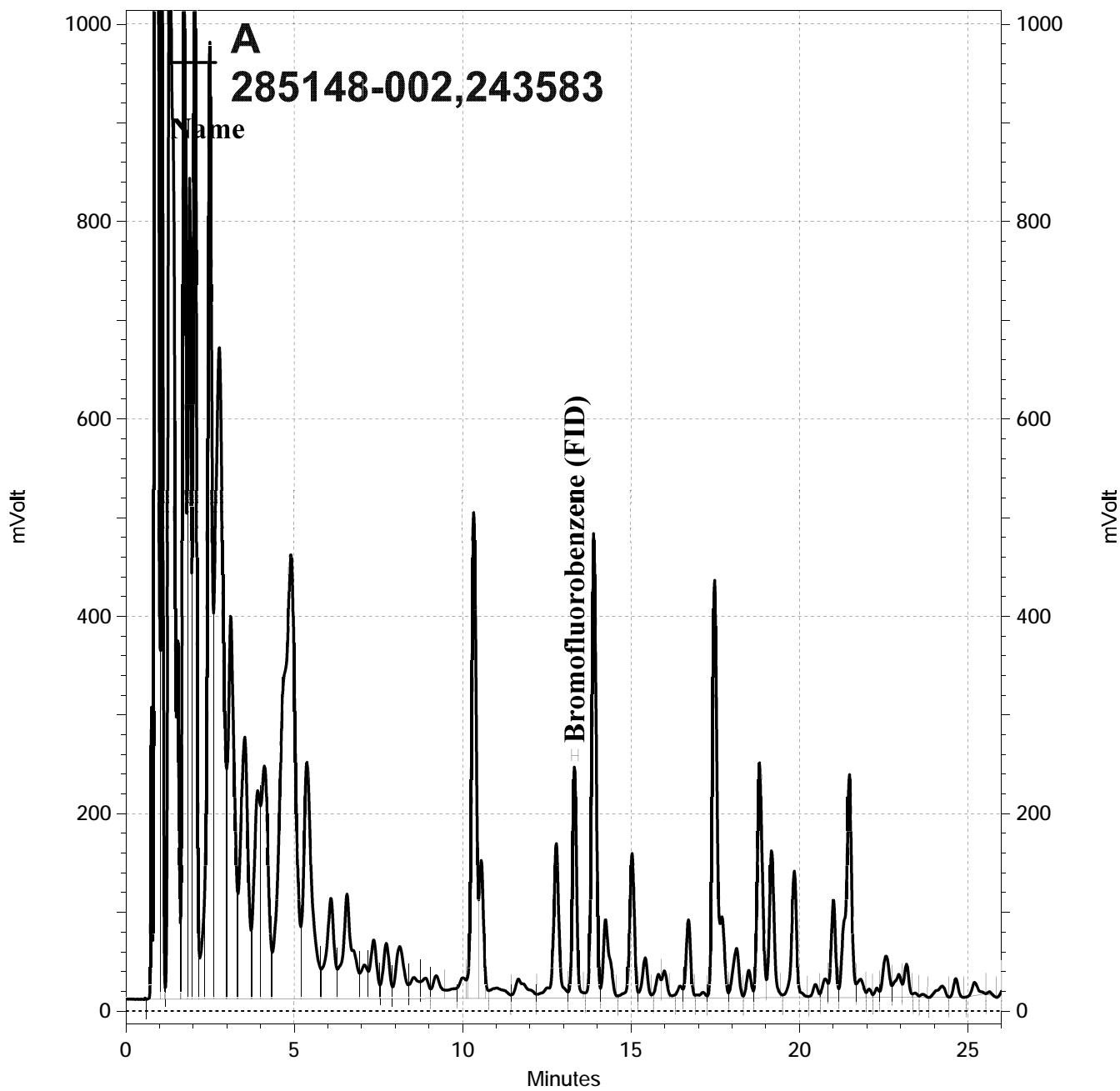
Batch QC Report

Total Volatile Hydrocarbons

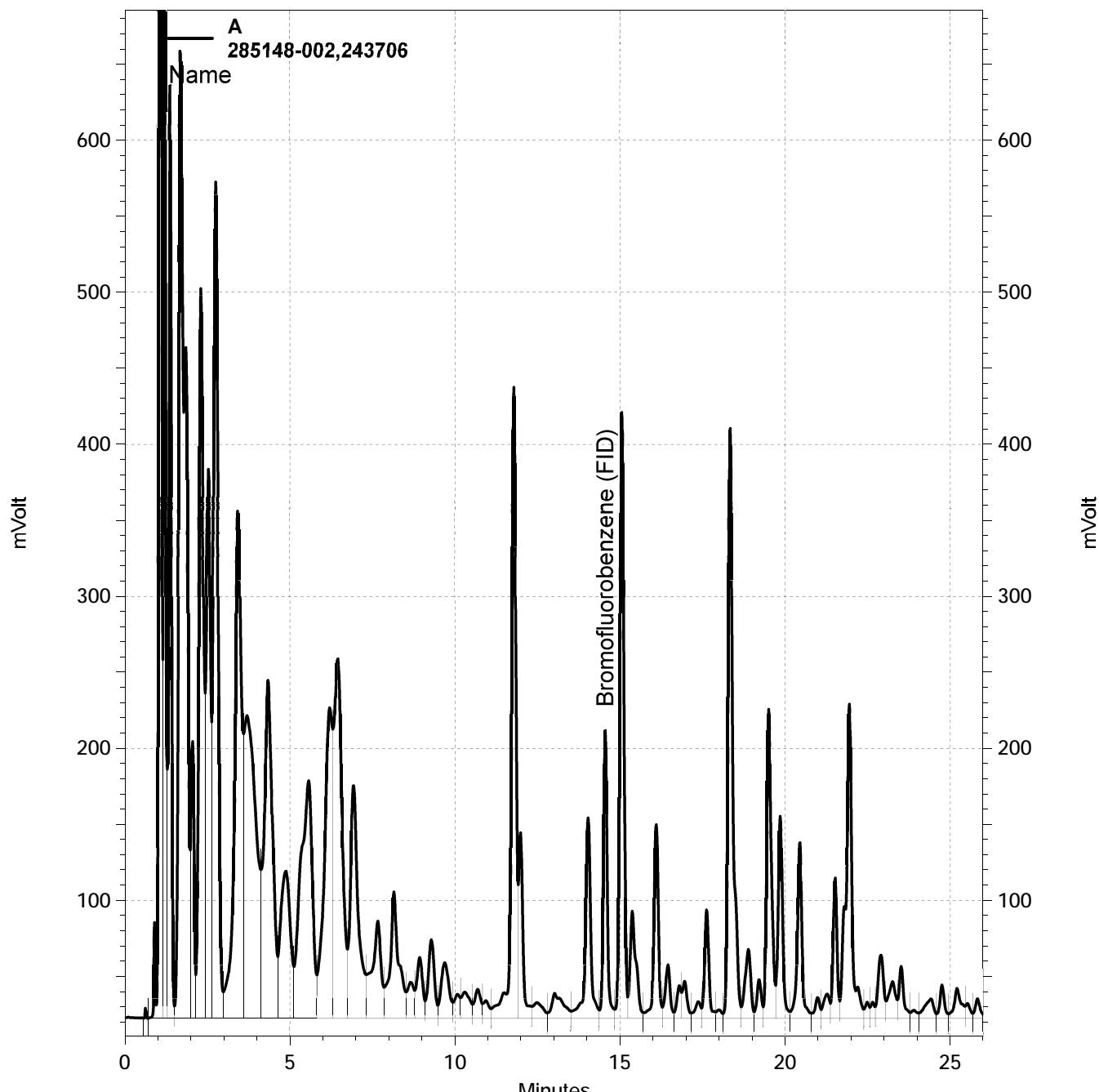
Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC869778	Batch#:	243706
Matrix:	Water	Analyzed:	01/24/17
Units:	ug/L		

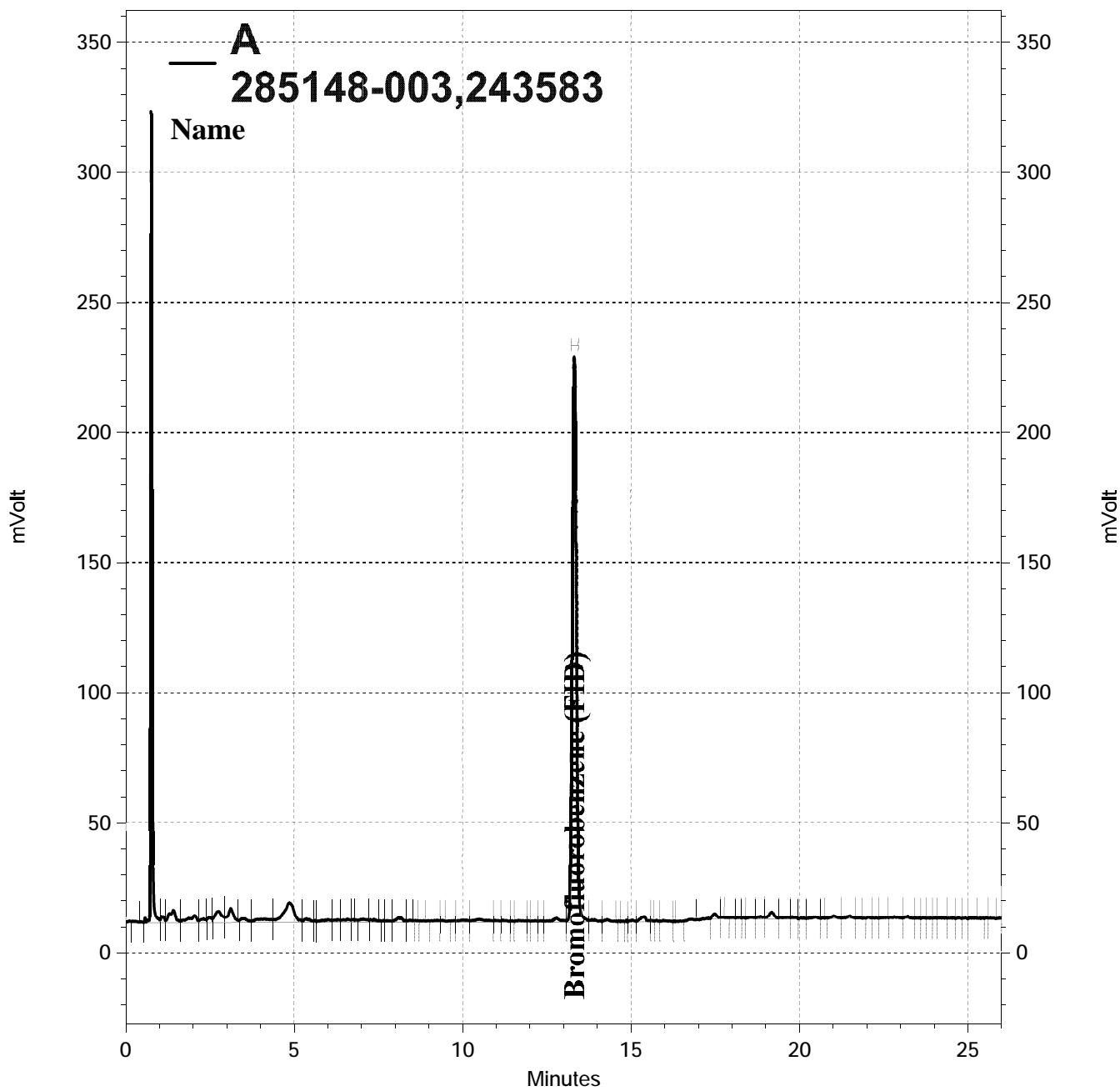
Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,113	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	80-132

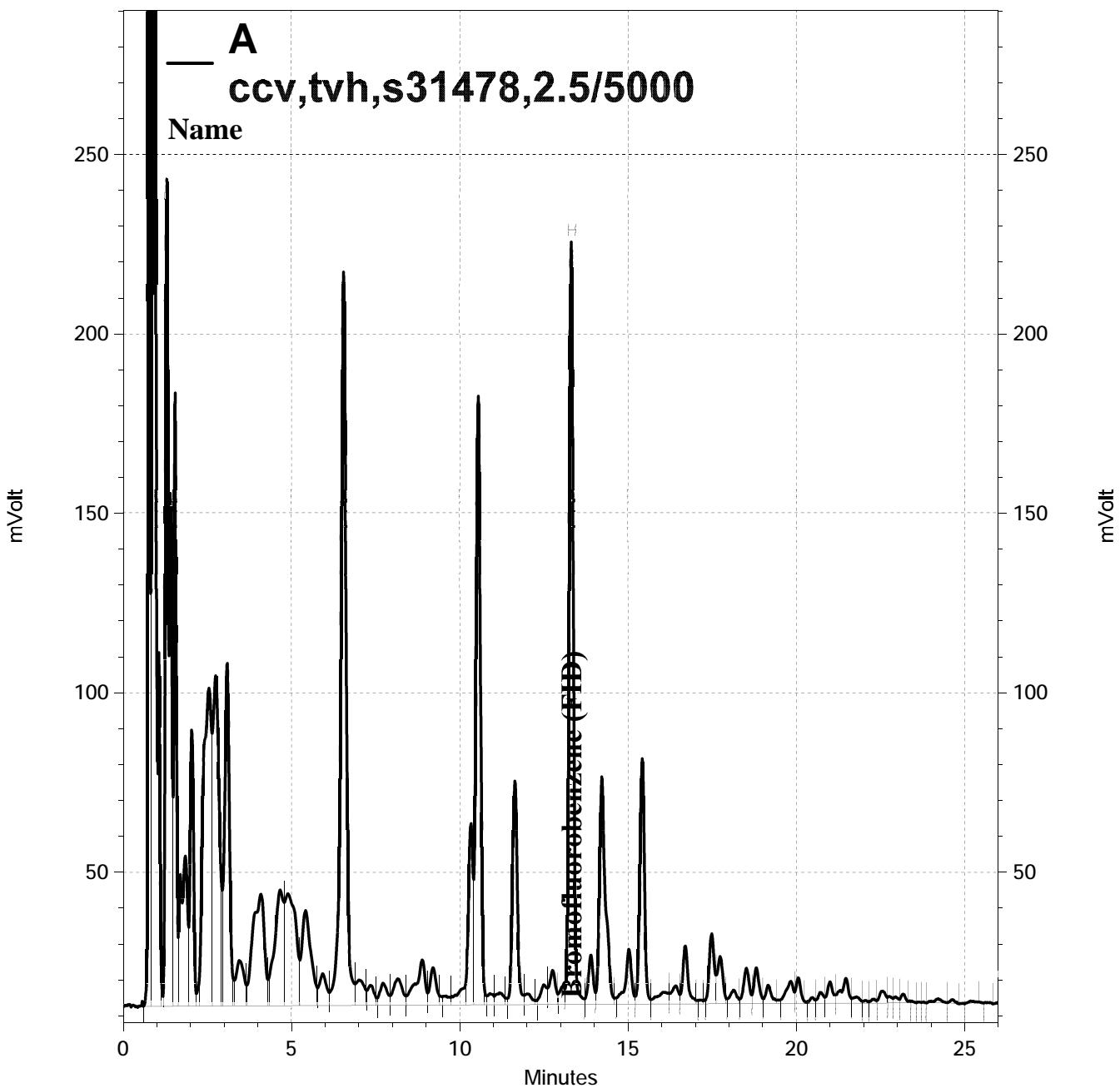


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Software Version 3.1.7
Run Date: 1/23/2017 8:09:29 AM
Analysis Date: 1/23/2017 8:38:34 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}

No items selected for this section

< A >

No items selected for this section

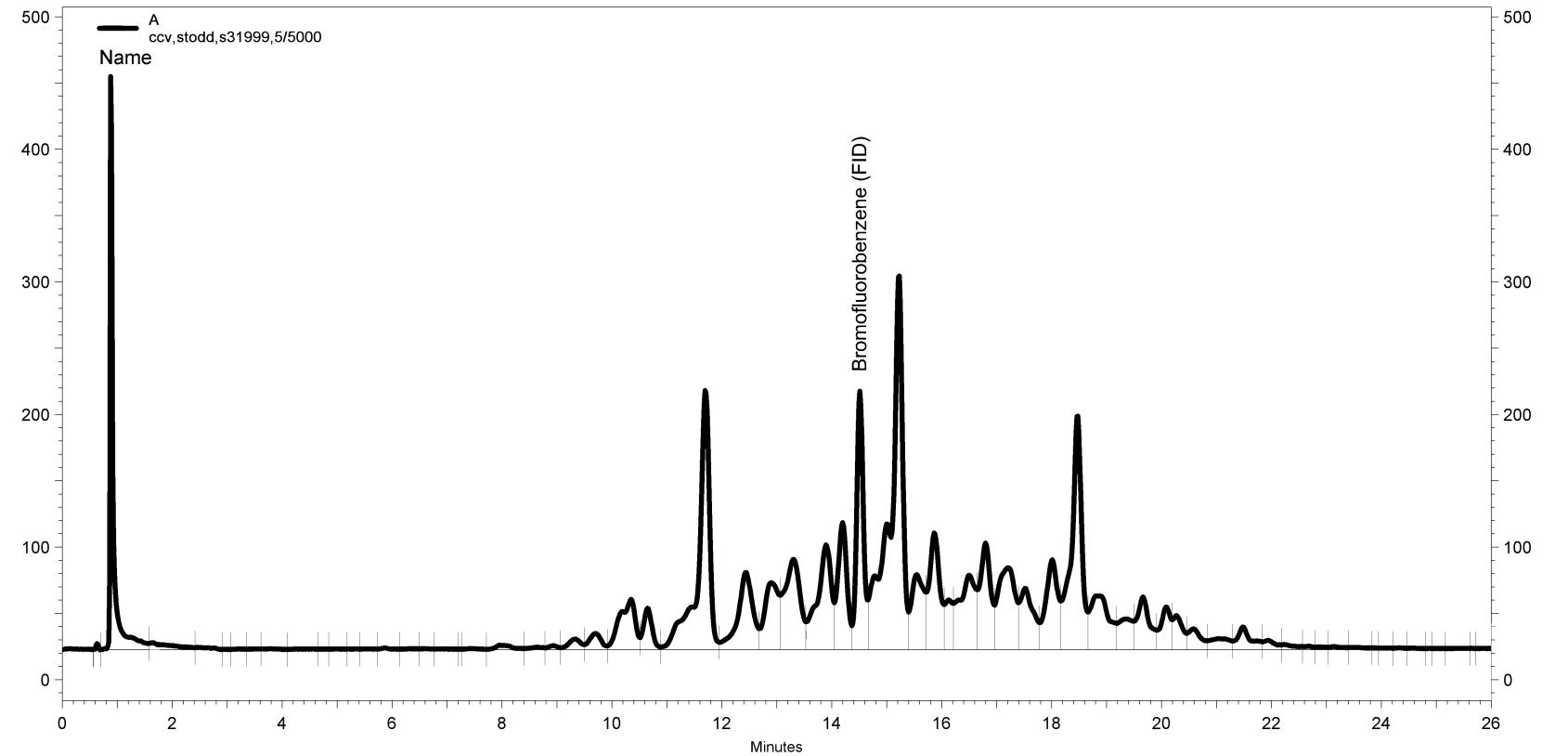
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Yes	Lowest Point Baseli	0	26.017	0

Manual Integration Fixes

Data File:	C:\Documents and Settings\All Users\Application Data\Chromatography\System\Recovery\
Instrument:	10\03\023-002_B789.tmp
Enabled	Event Type
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Channel A



Total Extractable Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 3520C
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	01/17/17
Units:	ug/L	Received:	01/17/17
Diln Fac:	1.000	Prepared:	01/20/17
Batch#:	243613	Analyzed:	01/24/17

Field ID: MW-1 Lab ID: 285148-001
 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Hydraulic Fluid, C12-40	ND	300

Surrogate	%REC	Limits
o-Terphenyl	70	67-136

Field ID: MW-2 Lab ID: 285148-002
 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	530 Y	50
Motor Oil C24-C36	ND	300
Hydraulic Fluid, C12-40	ND	300

Surrogate	%REC	Limits
o-Terphenyl	69	67-136

Field ID: MW-3 Lab ID: 285148-003
 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	52 Y	50
Motor Oil C24-C36	ND	300
Hydraulic Fluid, C12-40	ND	300

Surrogate	%REC	Limits
o-Terphenyl	78	67-136

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Total Extractable Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 3520C
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	01/17/17
Units:	ug/L	Received:	01/17/17
Diln Fac:	1.000	Prepared:	01/20/17
Batch#:	243613	Analyzed:	01/24/17

Field ID: MW-4 Lab ID: 285148-004
 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Hydraulic Fluid, C12-40	ND	300

Surrogate	%REC	Limits
o-Terphenyl	70	67-136

Type: BLANK Cleanup Method: EPA 3630C
 Lab ID: QC869431

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Hydraulic Fluid, C12-40	ND	300

Surrogate	%REC	Limits
o-Terphenyl	75	67-136

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Total Extractable Hydrocarbons

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 3520C
Project#:	SALISBURY PROJECT	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	243613
Units:	ug/L	Prepared:	01/20/17
Diln Fac:	1.000	Analyzed:	01/23/17

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC869432

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,552	62	60-121

Surrogate	%REC	Limits
o-Terphenyl	69	67-136

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC869433

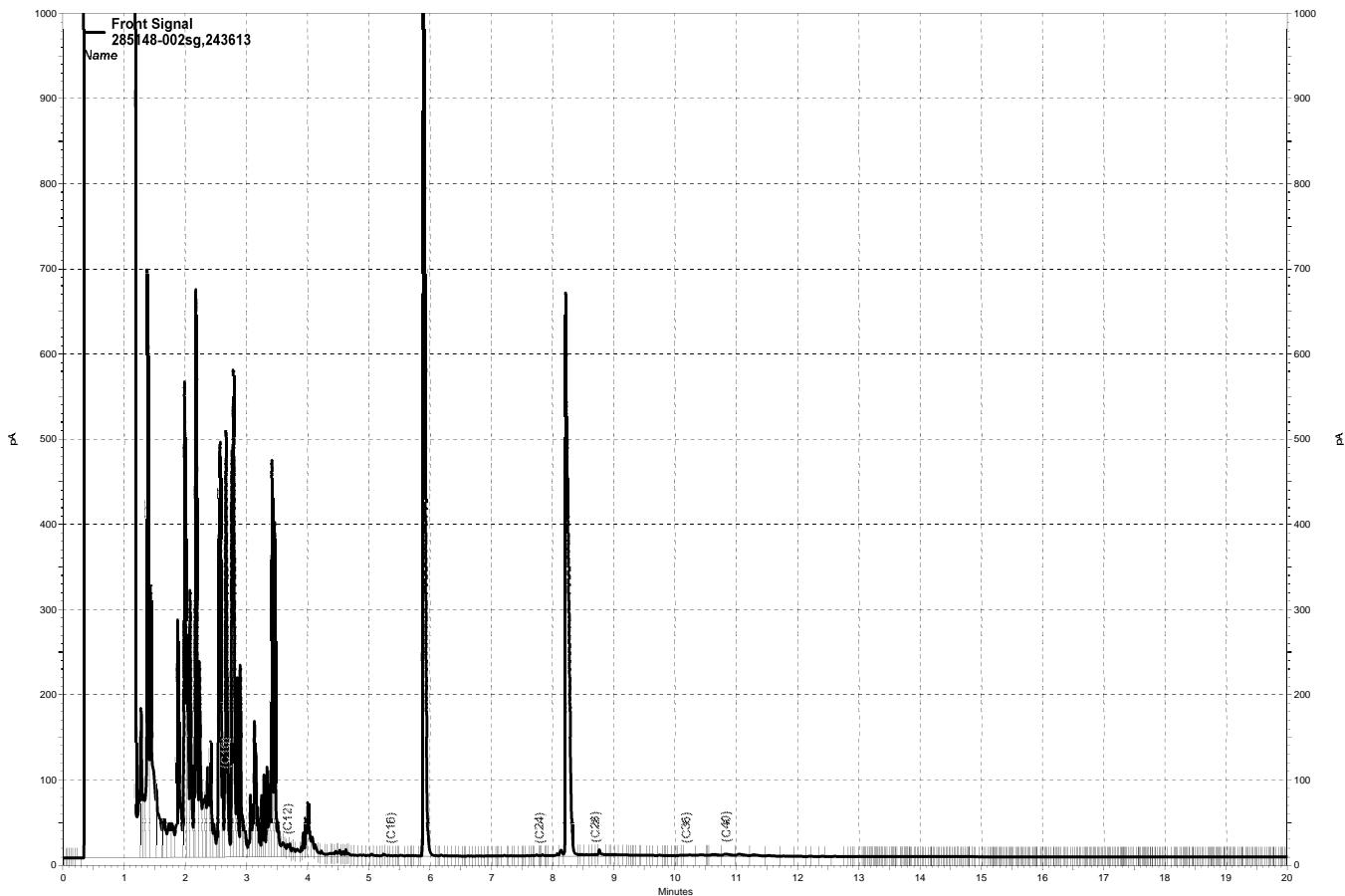
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,583	63	60-121	2	32

Surrogate	%REC	Limits
o-Terphenyl	69	67-136

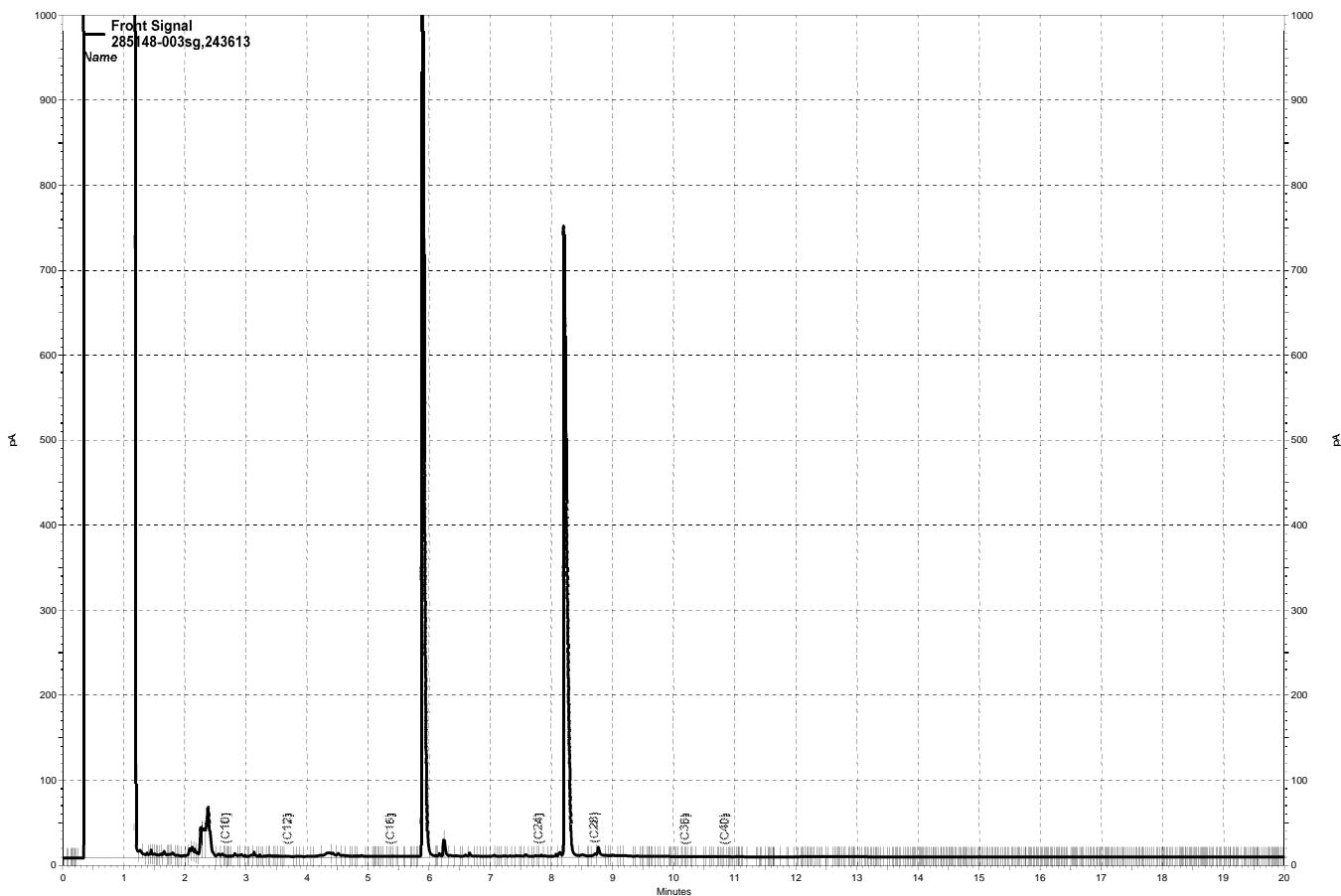
RPD= Relative Percent Difference

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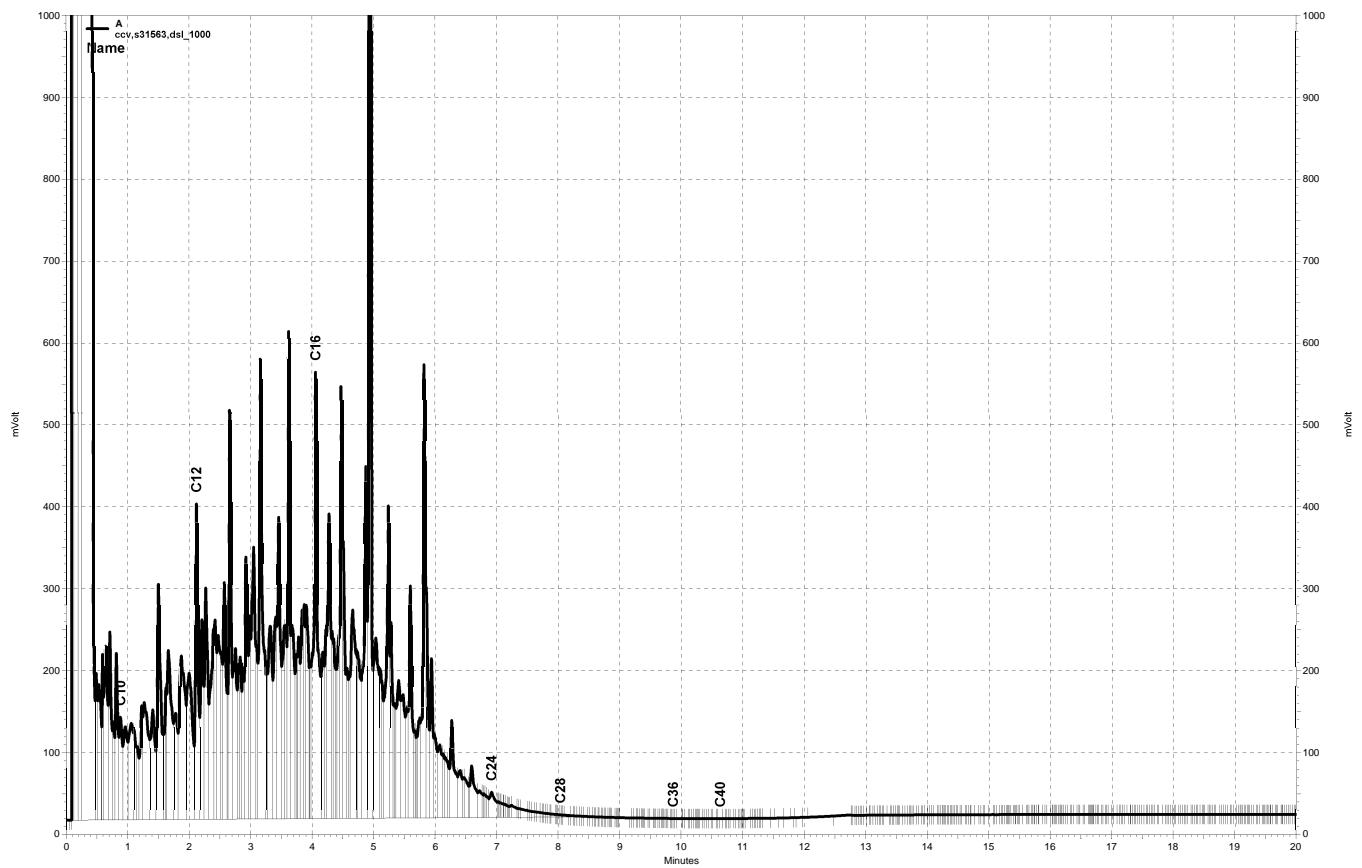
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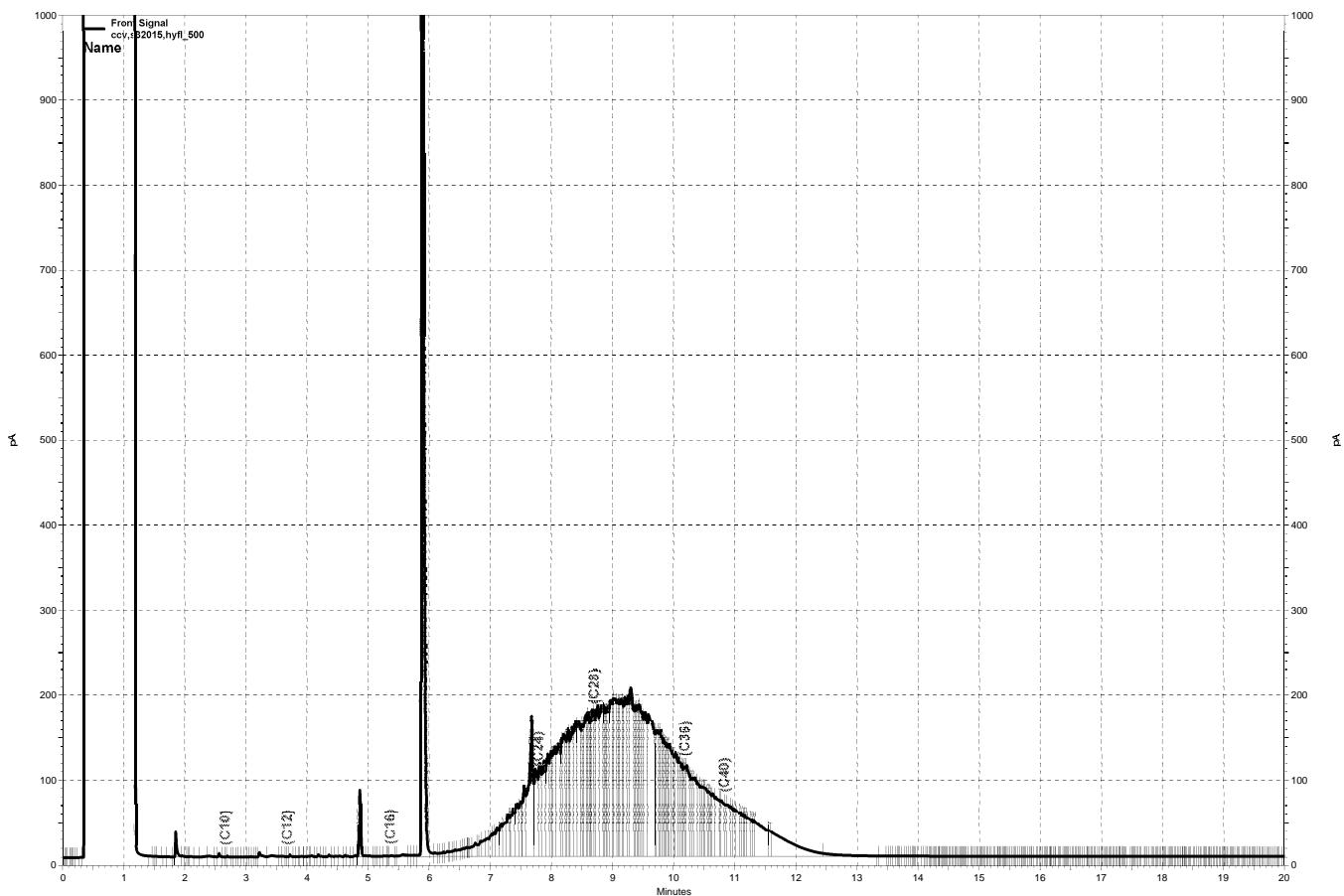
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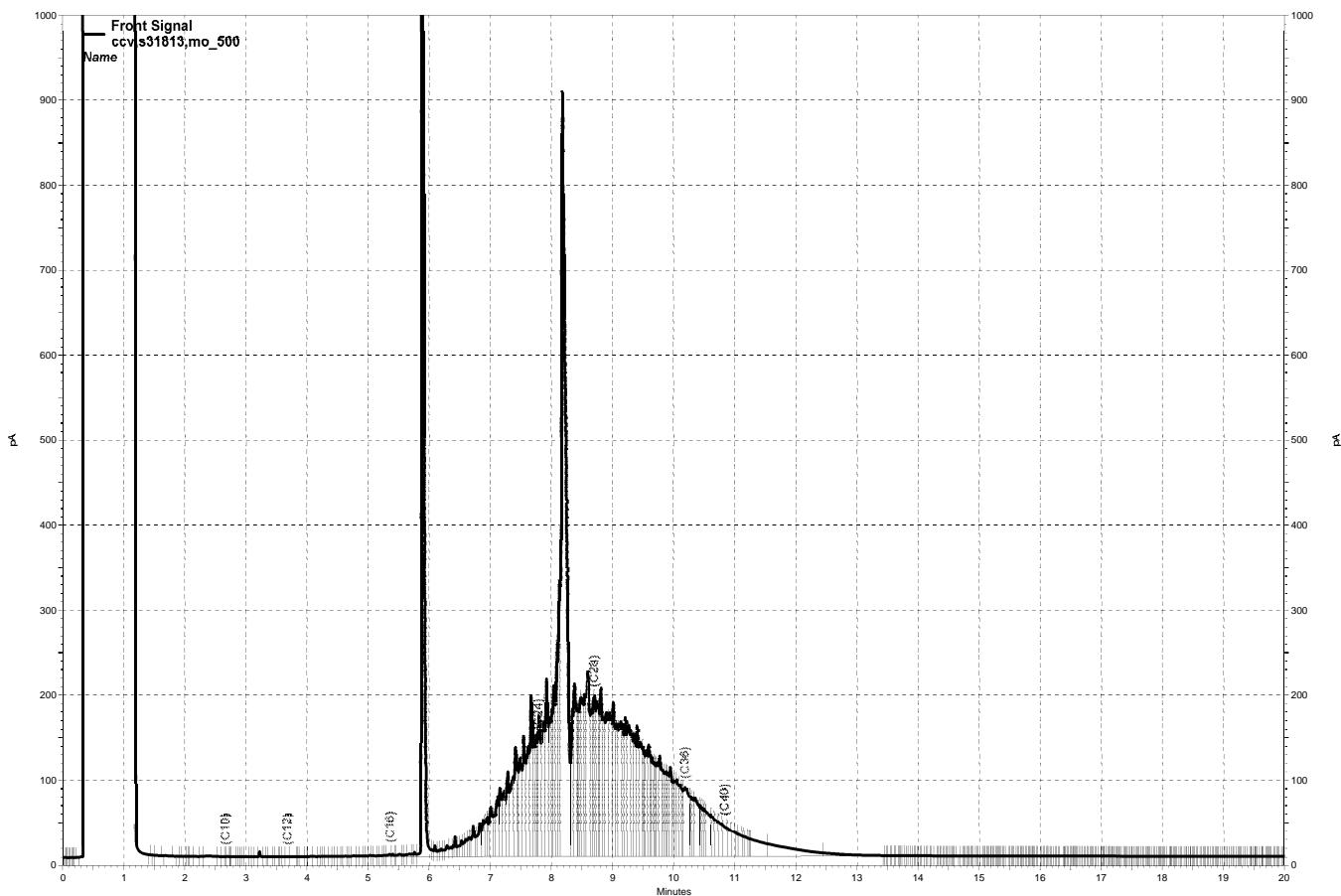
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Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	243481
Lab ID:	285148-001	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromoform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	243481
Lab ID:	285148-001	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-128
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-2	Units:	ug/L
Lab ID:	285148-002	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	1.0	1.000	243481	01/18/17
tert-Butyl Alcohol (TBA)	ND	33	3.333	243524	01/19/17
Chloromethane	ND	1.0	1.000	243481	01/18/17
Isopropyl Ether (DIPE)	ND	0.5	1.000	243481	01/18/17
Vinyl Chloride	ND	0.5	1.000	243481	01/18/17
Bromomethane	ND	1.0	1.000	243481	01/18/17
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	243481	01/18/17
Chloroethane	ND	1.0	1.000	243481	01/18/17
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000	243481	01/18/17
Trichlorofluoromethane	ND	1.0	1.000	243481	01/18/17
Acetone	ND	10	1.000	243481	01/18/17
Freon 113	ND	2.0	1.000	243481	01/18/17
1,1-Dichloroethene	ND	0.5	1.000	243481	01/18/17
Methylene Chloride	ND	10	1.000	243481	01/18/17
Carbon Disulfide	ND	0.5	1.000	243481	01/18/17
MTBE	ND	0.5	1.000	243481	01/18/17
trans-1,2-Dichloroethene	ND	0.5	1.000	243481	01/18/17
Vinyl Acetate	ND	10	1.000	243481	01/18/17
1,1-Dichloroethane	ND	0.5	1.000	243481	01/18/17
2-Butanone	ND	10	1.000	243481	01/18/17
cis-1,2-Dichloroethene	ND	0.5	1.000	243481	01/18/17
2,2-Dichloropropane	ND	0.5	1.000	243481	01/18/17
Chloroform	ND	0.5	1.000	243481	01/18/17
Bromochloromethane	ND	0.5	1.000	243481	01/18/17
1,1,1-Trichloroethane	ND	0.5	1.000	243481	01/18/17
1,1-Dichloropropene	ND	0.5	1.000	243481	01/18/17
Carbon Tetrachloride	ND	0.5	1.000	243481	01/18/17
1,2-Dichloroethane	ND	0.5	1.000	243481	01/18/17
Benzene	60	0.5	1.000	243481	01/18/17
Trichloroethene	ND	0.5	1.000	243481	01/18/17
1,2-Dichloropropane	ND	0.5	1.000	243481	01/18/17
Bromodichloromethane	ND	0.5	1.000	243481	01/18/17
Dibromomethane	ND	0.5	1.000	243481	01/18/17
4-Methyl-2-Pentanone	ND	10	1.000	243481	01/18/17
cis-1,3-Dichloropropene	ND	0.5	1.000	243481	01/18/17
Toluene	29	0.5	1.000	243481	01/18/17
trans-1,3-Dichloropropene	ND	0.5	1.000	243481	01/18/17
1,1,2-Trichloroethane	ND	0.5	1.000	243481	01/18/17
2-Hexanone	ND	10	1.000	243481	01/18/17

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-2	Units:	ug/L
Lab ID:	285148-002	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
1,3-Dichloropropane	ND	0.5	1.000	243481	01/18/17
Tetrachloroethene	ND	0.5	1.000	243481	01/18/17
Dibromochloromethane	ND	0.5	1.000	243481	01/18/17
1,2-Dibromoethane	ND	0.5	1.000	243481	01/18/17
Chlorobenzene	ND	0.5	1.000	243481	01/18/17
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	243481	01/18/17
Ethylbenzene	140	1.7	3.333	243524	01/19/17
m,p-Xylenes	46	0.5	1.000	243481	01/18/17
o-Xylene	4.4	0.5	1.000	243481	01/18/17
Styrene	ND	0.5	1.000	243481	01/18/17
Bromoform	ND	1.0	1.000	243481	01/18/17
Isopropylbenzene	55	0.5	1.000	243481	01/18/17
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	243481	01/18/17
1,2,3-Trichloropropane	ND	0.5	1.000	243481	01/18/17
Propylbenzene	140	1.7	3.333	243524	01/19/17
Bromobenzene	ND	0.5	1.000	243481	01/18/17
1,3,5-Trimethylbenzene	11	0.5	1.000	243481	01/18/17
2-Chlorotoluene	ND	0.5	1.000	243481	01/18/17
4-Chlorotoluene	ND	0.5	1.000	243481	01/18/17
tert-Butylbenzene	3.2	0.5	1.000	243481	01/18/17
1,2,4-Trimethylbenzene	10	0.5	1.000	243481	01/18/17
sec-Butylbenzene	10	0.5	1.000	243481	01/18/17
para-Isopropyl Toluene	2.5	0.5	1.000	243481	01/18/17
1,3-Dichlorobenzene	ND	0.5	1.000	243481	01/18/17
1,4-Dichlorobenzene	ND	0.5	1.000	243481	01/18/17
n-Butylbenzene	11	1.7	3.333	243524	01/19/17
1,2-Dichlorobenzene	ND	0.5	1.000	243481	01/18/17
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	243481	01/18/17
1,2,4-Trichlorobenzene	ND	0.5	1.000	243481	01/18/17
Hexachlorobutadiene	ND	2.0	1.000	243481	01/18/17
Naphthalene	28	2.0	1.000	243481	01/18/17
1,2,3-Trichlorobenzene	ND	0.5	1.000	243481	01/18/17

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	93	80-128	1.000	243481	01/18/17
1,2-Dichloroethane-d4	110	75-139	1.000	243481	01/18/17
Toluene-d8	98	80-120	1.000	243481	01/18/17
Bromofluorobenzene	92	80-120	1.000	243481	01/18/17

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	243481
Lab ID:	285148-003	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	1.3	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropene	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	243481
Lab ID:	285148-003	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	0.5	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	243481
Lab ID:	285148-004	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected

RL= Reporting Limit

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Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	243481
Lab ID:	285148-004	Sampled:	01/17/17
Matrix:	Water	Received:	01/17/17
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit
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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	243481
Units:	ug/L	Analyzed:	01/18/17
Diln Fac:	1.000		

Type: BS Lab ID: QC868892

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	75.95	122	32-155
Isopropyl Ether (DIPE)	12.50	10.14	81	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.71	102	62-120
Methyl tert-Amyl Ether (TAME)	12.50	14.35	115	69-120
1,1-Dichloroethene	12.50	14.19	114	66-135
Benzene	12.50	14.87	119	80-123
Trichloroethene	12.50	13.79	110	80-123
Toluene	12.50	14.35	115	80-121
Chlorobenzene	12.50	13.59	109	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC868893

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	76.10	122	32-155	0	33
Isopropyl Ether (DIPE)	12.50	10.24	82	57-128	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.81	102	62-120	1	20
Methyl tert-Amyl Ether (TAME)	12.50	14.46	116	69-120	1	20
1,1-Dichloroethene	12.50	14.00	112	66-135	1	24
Benzene	12.50	14.42	115	80-123	3	20
Trichloroethene	12.50	13.10	105	80-123	5	20
Toluene	12.50	13.97	112	80-121	3	20
Chlorobenzene	12.50	13.34	107	80-123	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-128
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC868894	Batch#:	243481
Matrix:	Water	Analyzed:	01/18/17
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromoform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC868894	Batch#:	243481
Matrix:	Water	Analyzed:	01/18/17
Units:	ug/L		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit
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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	243524
Units:	ug/L	Analyzed:	01/19/17
Diln Fac:	1.000		

Type: BS Lab ID: QC869054

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	73.01	117	32-155
Isopropyl Ether (DIPE)	12.50	13.18	105	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	12.89	103	62-120
Methyl tert-Amyl Ether (TAME)	12.50	12.54	100	69-120
1,1-Dichloroethene	12.50	12.57	101	66-135
Benzene	12.50	12.64	101	80-123
Trichloroethene	12.50	11.82	95	80-123
Toluene	12.50	12.15	97	80-121
Chlorobenzene	12.50	11.98	96	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC869055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	79.46	127	32-155	8	33
Isopropyl Ether (DIPE)	12.50	12.94	104	57-128	2	20
Ethyl tert-Butyl Ether (ETBE)	12.50	13.70	110	62-120	6	20
Methyl tert-Amyl Ether (TAME)	12.50	12.88	103	69-120	3	20
1,1-Dichloroethene	12.50	13.19	106	66-135	5	24
Benzene	12.50	12.67	101	80-123	0	20
Trichloroethene	12.50	12.15	97	80-123	3	20
Toluene	12.50	11.86	95	80-121	2	20
Chlorobenzene	12.50	12.49	100	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-128
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	94	80-120

RPD= Relative Percent Difference

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC869058	Batch#:	243524
Matrix:	Water	Analyzed:	01/19/17
Units:	ug/L		

Analyte	Result	RL
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromoform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC869058	Batch#:	243524
Matrix:	Water	Analyzed:	01/19/17
Units:	ug/L		

Analyte	Result	RL
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit
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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	285148	Location:	Salisbury Project
Client:	Eagle Env. Construction	Prep:	EPA 5030B
Project#:	SALISBURY PROJECT	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	243524
MSS Lab ID:	285107-009	Sampled:	01/16/17
Matrix:	Water	Received:	01/16/17
Units:	ug/L	Analyzed:	01/19/17
Diln Fac:	5.000		

Type: MS Lab ID: QC869171

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<11.12	312.5	288.8	92	49-155
Isopropyl Ether (DIPE)	<0.6421	62.50	62.74	100	65-122
Ethyl tert-Butyl Ether (ETBE)	<0.6590	62.50	63.04	101	69-120
Methyl tert-Amyl Ether (TAME)	<0.7247	62.50	59.47	95	74-120
1,1-Dichloroethene	<0.6295	62.50	58.36	93	73-129
Benzene	<0.7458	62.50	58.70	94	80-120
Trichloroethene	5.200	62.50	64.86	95	73-123
Toluene	18.10	62.50	79.19	98	80-120
Chlorobenzene	<0.5938	62.50	61.89	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-120

Type: MSD Lab ID: QC869172

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	312.5	345.1	110	49-155	18	33
Isopropyl Ether (DIPE)	62.50	62.51	100	65-122	0	22
Ethyl tert-Butyl Ether (ETBE)	62.50	64.75	104	69-120	3	20
Methyl tert-Amyl Ether (TAME)	62.50	66.55	106	74-120	11	20
1,1-Dichloroethene	62.50	56.11	90	73-129	4	25
Benzene	62.50	60.48	97	80-120	3	20
Trichloroethene	62.50	64.93	96	73-123	0	20
Toluene	62.50	81.13	101	80-120	2	21
Chlorobenzene	62.50	62.01	99	80-120	0	24

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

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