Encana Oil & Gas (USA) Inc.
370 - 17 Street, Suite 1700
Denver, CO 80202

N30 595 (Location: 335670)
Pit (Facility: 285021)
Encana Oil & Gas (USA) Inc. (Operator: 100185)

REPORT OF WORK COMPLETED

- Pit – Form 27 (Doc: 2229808) (Rem: 7167)
- Pit – Form 19 (Doc: 2230513)

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Form 4 as a Report of Work Completed and Remediation Plan Update following discovery of groundwater impacts during pit closure efforts on the N30 595 well pad in the North Parachute area of operation in Garfield County.

Pit closure activities and impact characterization began in August, 2012 under an approved Form 27. Below-liner soil samples indicated failure of the pit liner and soil impacts which were identified in a Form 19. As indicated in the Form 27, after below-liner soil characterization samples were collected, the pit was backfilled and in-situ characterization and remediation system installation was scheduled.

During initial in-situ characterization efforts in February 2013, groundwater was encountered within the project area at approximately 38 feet below ground surface (BGS). Soil and water samples were collected to determine extent of impacts. Laboratory results identified TPH concentrations above COGCC Table 910-1 allowable concentrations in soil both above and below the static groundwater table. Field observations identified potential sheen with the collected water samples; however, lab results for BTEX were in compliance with allowable limits identified in Table 910-1.

In April and May, 2013 five (5) groundwater monitoring wells were installed, permitted, and developed. An unknown hydrocarbon-like substance was noted on the water table. Additional water samples were collected for analysis, and returned results in compliance with Table 910-1 limits for BTEX. All five (5) wells were added to Encana's quarterly water quality monitoring program for the North Parachute Ranch. See attached summary table for monitoring well lab results.

After receiving additional reports of a hydrocarbon-like substance on top of the water table, and despite two years of compliant groundwater samples, a decision was made to make a concerted effort to identify the unknown substance. On January 7, 2015, multiple bailer volumes from groundwater monitoring well ENPR21MW were allowed to settle in a bucket to support collection of a sample of the substance on top of the water. The sample was submitted for product characterization, and a separate water sample was submitted for analysis for a full-suite of potential organic constituents. Laboratory analytical results indicated that the identified product's chromatogram match the fingerprint of diesel fuel. The product characterization report is included as an attachment. Additionally, laboratory analytical results of the groundwater confirmed the presence of TPH-DRO in the groundwater at the site. The laboratory analytical report for this sample is included as an attachment.

Please note that the water samples collected at the down gradient monitoring well (ENPR19MW) and collection points (SBW, SBSW01) have been non-detect for BTEX in every sampling event. At this point all evidence points to localized groundwater impacts at the pit site with no offsite mobilization.

In support of soil remediation efforts, eight (8) passive soil vapor extraction (SVE) wells were installed in August of 2013 to address in-situ soil impacts. SVE wells were completed by affixing a rotating passive vent to the top of the well allowing for the removal and circulation of subsurface soil vapors. These passive vent wells will be utilized to allow for enhanced biodegradation of hydrocarbon impacted soils identified in the vadose or unsaturated zone of the soil column. Bio-attenuation parameters will be monitored on a monthly basis to track remedial progress of the vadose zone soils. Soil boring, monitoring well, and SVE well locations are depicted in the attached Site Diagram.

CHANGE OF REMEDIATION PLAN

Encana proposes to conduct a series of multiphase extraction events on three existing monitoring wells (ENPR17MW, ENPR18MW, and ENPR21MW) onsite in the area of the pit in order to evaluate recovery rates of groundwater, free phase product and soil vapor from the subsurface formation. Multiphase removal will be completed with the use of a high vacuum truck which will be connected to a manifold attached to the designated multiphase extraction and recovery wells. Removed hydrocarbons and groundwater will be fully contained and transported off site for disposal.

ATTACHMENTS

1. **Topographic Location Map**
2. **Site Diagram**
3. **Soil Results Summary Table** – Lab reports are available upon request and will be provided with the Notification of Completion for this project.
4. **Water Results Summary Table** – Lab reports are available upon request.
5. **ENPRMW21 – Product Characterization Report – January 16, 2015**
6. **ENPRMW21 – Laboratory Analytical Report – January 21, 2015**

encana

North Parachute Ranch

Garfield County, Colorado

0 3,200 6,400 Feet

1 inch = 3,000 feet

N30 Well Pad and Pit
Location ID: 335670
Facility ID: 285021
Remediation #: 7167

T005S-R096W

T005S-R095W

T006S-R096W

T006S-R095W

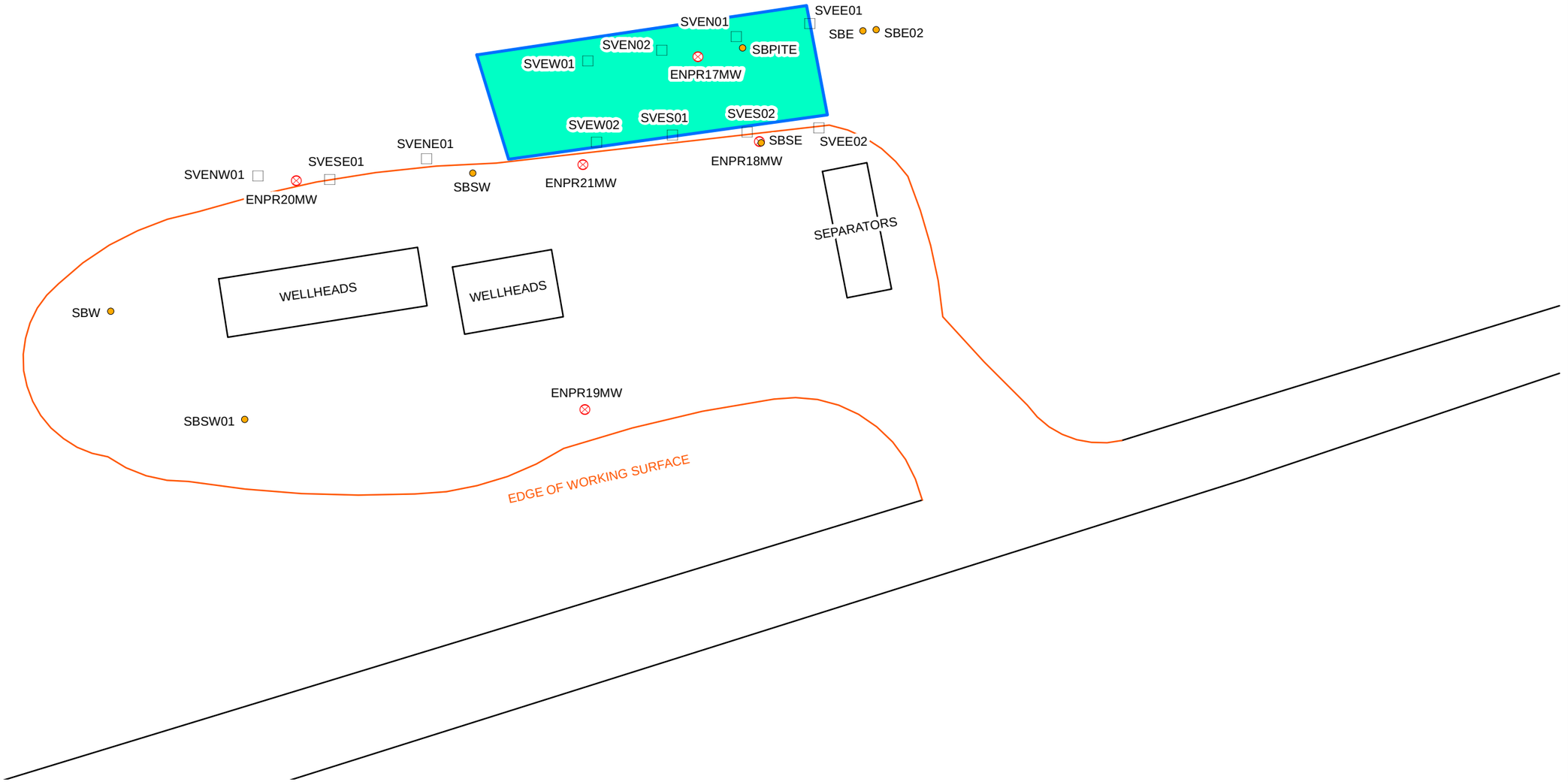
K10 O10A A15 L14 M14 D23 D23A H22 K22 J22B J22 F23 K23 O23 N23 B26 H26A H26 K26 K25A K25 J25A I25A I25 A36 A36A D31 MFWTF (UL) MFWTF (LL) MFCS N30 D19 D19A D19B E19 L19 J30 I30A I30 L29 C29 F29 H29A D28 C28A C28 A28 A28B D27A D27 C27 C27A G29 H29 J27 P27 C04 Unocal 4 N04 Unocal 9 D09A

Encana Site Boundary
Access Road
Township Boundary

Surface Ownership

Not Identified Below (clear)
EnCana (transparent)
USFS (transparent)
BLM (transparent)

Revised: 11/12/2012



LEGEND

- SOIL BORING
- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- PIT OUTLINE

0 60 120
Feet

N

SITE DIAGRAM
N30 PAD
GARFIELD COUNTY, COLORADO

ENCANA OIL & GAS (USA) INC.

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Laboratory Results Summary Table

02/03/2015

Analytes (BDL = Below Detection Limit; ND = Non Detect)

Location	Sample Date:	Sample Matrix	Matrix Notes	Organic Compounds in Soil (mg/kg [ppm])																				Inorganics in Soil			Metals in Soil (mg/kg [ppm])											
Allowable Concentration -->				500			0.17	85	100	175	1000	1000	0.22	0.22	2.2	0.022	22	0.022	1000	1000	0.22	23	1000		(<12)	(6-9)	0.39	15000	70	120000	23	3100	400	23	1600	390	390	23000
				TPH (total volatile and extractable petroleum hydrocarbons)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Benzo(A)pyrene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3,C,D)pyrene	Napthalene	Pyrene	EC (<4 mmhos/cm or 2x background)	SAR (calculation)	pH	Arsenic	Barium - EPA Total Barium	Cadmium	Chromium (III)	Chromium (VI)	Copper	Lead (inorganic)	Mercury	Nickel (soluble salts)	Selenium	Silver	Zinc
N30	08/08/12	Pit	[PRE]EPIT Sewall	**10010**	210	**9800**	0.035	BDL	0.38	10																											
N30	08/08/12	Pit	[PRE]EPIT Nebot	**9120**	120	**9000**	0.086	BDL	0.087	7.7																											
N30	08/08/12	Pit	[PRE]EPIT Center	**1004.8**	4.8	**1000**	BDL	BDL	0.0043	0.029	0.033	0.035	BDL	0.012	BDL	BDL	0.031	BDL	0.029	0.068	BDL	0.33	BDL	2.4	**21**	8.2	**6.8**	6300	0.36	17	BDL	18	16	0.029	14	BDL	BDL	52
N30	08/08/12	Pit	[PRE]EPIT SWBOT	**4526**	26	**4500**	0.0091	BDL	0.081	0.36																											
N30	08/08/12	Pit	[PRE]EPIT NWALL	**5040**	240	**4800**	**0.61**	2.5	1.4	14																											
N30	08/08/12	Pit	[PRE]WPIT SEWALL	**7520**	220	**7300**	BDL	BDL	0.87	3.5																											
N30	08/08/12	Pit	[PRE]WPIT BOT	**13450**	450	**13000**	BDL	BDL	1.5	33	1	0.64	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.7	BDL	3.5	BDL	0.01	**46**	8.4	**22**	3200	BDL	22	BDL	29	19	0.22	21	4.2	BDL	63
N30	08/08/12	Pit	[PRE]WPIT WBOT	**9085**	85	**9000**	0.04	BDL	0.23	0.78																											
N30	08/08/12	Pit	[PRE]WPIT Nwall	**7220**	20	**7200**	BDL	BDL	0.0086	0.042																											
N30	08/20/12	Pit	[POST] Ewall	**6360**	160	**6200**	BDL	BDL	0.29	4.8																											
N30	08/20/12	Pit	[POST] Swall	190	BDL	190	BDL	BDL	0.12	BDL																											
N30	08/20/12	Pit	[POST] Ebot	**1533**	33	**1500**	BDL	BDL	0.13	0.14																											
N30	08/20/12	Pit	[POST] Bottom	**5330**	130	**5200**	BDL	BDL	0.27	2.9	0.36	0.25	BDL	BDL	BDL	BDL	BDL	BDL	0.04	1.2	BDL	1.2	BDL	2.8	**42**	8.4	**18**	690	BDL	23	BDL	27	13	0.023	18	BDL	BDL	86
N30	08/20/12	Pit	[POST]Nwwall	91	BDL	91	BDL	BDL	BDL	BDL																											
N30	08/20/12	Pit	[POST]Wwall	140	BDL	140	BDL	BDL	BDL	BDL																											
N30	08/20/12	Pit	SPOILS	**3203.9**	3.9	**3200**	BDL	BDL	BDL	BDL	BDL	0.12	0.026	BDL	BDL	0.008	BDL	BDL	0.009	0.37	BDL	0.35	0.045	2.1	**14**	8.1	**14**	2700	0.36	23	BDL	26	13	0.024	19	BDL	BDL	90
N30	02/12/13	Pit	SBPITE [25-27']	**3000**		**3000**																															
N30	02/12/13	Pit	SBPITE [30-32']	**2200**		**2200**																															
N30	02/12/13	Pit	SBPITE [35-37']	**2500**		**2500**																															
N30	02/12/13	Pit	SBPITE [40-42']	**2700**		**2700**																															
N30	02/12/13	Pit	SBPITE [45-47']	**7700**		**7700**																															
N30	02/12/13	Pit	SBPITE [50-51']	**980**		**980**																															
N30	02/12/13	Pit	SBE [20-22']	58		58																															
N30	02/12/13	Pit	SBE [25-27']	25		25																															
N30	02/12/13	Pit	SBE [30-32']	22		22																															
N30	02/12/13	Pit	SBE [35-37']	46		46																															
N30	02/12/13	Pit	SBE [40-41.5']	21		21																															
N30	02/13/13	Pit	SBSE [10-12']	12		12																															
N30	02/13/13	Pit	SBSE [15-17']	9.2		9.2																															
N30	02/13/13	Pit	SBSE [20-22']	33		33																															
N30	02/13/13	Pit	SBSE [25-26.5']	13		13																															
N30	02/13/13	Pit	SBSE [30-32']	10		10																															
N30	02/13/13	Pit	SBSE [35-37']	**840**		**840**																															
N30	02/13/13	Pit	SBSW [25-27']	20		20																															
N30	02/13/13	Pit	SBSW [30-32']	10		10																															
N30	02/13/13	Pit	SBSW [35-37']	**2100**		**2100**																															
N30	02/14/13	Pit	SBW [20-22']	5.3		5.3																															
N30	02/14/13	Pit	SBW [25-27']	BDL		BDL																															
N30	02/14/13	Pit	SBW [30-32']	BDL		BDL																															
N30	02/14/13	Pit	SBW [35-37']	BDL		BDL																															
N30	02/14/13	Pit	SBW [40-42']	BDL																																	

Encana Oil and Gas (USA) Inc.
Environmental Compliance Group
Parachute Field Office
143 Diamond Avenue
Parachute, CO 81635

encana natural gas

Laboratory Results Summary Table

02/03/2015

				Organic Compounds in Soil (mg/kg [ppm])																				Inorganics in Soil			Metals in Soil (mg/kg [ppm])											
			Allowable Concentration -->	500			0.17	85	100	175	1000	1000	0.22	0.22	2.2	0.022	22	0.022	1000	1000	0.22	23	1000		(<12)	(6-9)	0.39	15000	70	120000	23	3100	400	23	1600	390	390	23000
Location	Sample Date:	Sample Matrix	Matrix Notes	TPH (total volatile and extractable petroleum hydrocarbons)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Benzo(A)pyrene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3,C,D)pyrene	Naphthalene	Pyrene	EC (<4 mmhos/cm or 2x background)	SAR (calculation)	pH	Arsenic	Barium - EPA Total Barium	Cadmium	Chromium (III)	Chromium (VI)	Copper	Lead (inorganic)	Mercury	Nickel (soluble salts)	Selenium	Silver	Zinc
N30	04/23/13	Pit	SBE02 [50-52']	BDL	BDL	BDL	BDL	BDL	BDL	BDL																											
N30	04/23/13	Pit	SBE02 [60-62']	BDL	BDL	BDL	BDL	BDL	BDL	0.028																											
N30	04/23/13	Pit	ENPR17MW [50-52']	**4860**	160	**4700**	0.091	BDL	0.38	3.4																											
N30	04/23/13	Pit	ENPR17MW [55-57']	142	22	120	BDL	BDL	0.03	0.35																											
N30	04/24/13	Pit	ENPR18MW [35-37']	52	BDL	52	BDL	BDL	BDL	BDL																											
N30	04/24/13	Pit	ENPR20MW [5-10']	**6120**	**820**	**5300**	**1.1**	7.3	2	35																											
N30	04/24/13	Pit	ENPR20MW [40-42']	76	36	40	BDL	BDL	0.086	0.089																											
N30	04/24/13	Pit	monitoring well south west																					3.6	**49**	**12**											
N30	04/25/13	Pit	ENPR19MW [10-12']	120	BDL	120	BDL	BDL	0.0034	0.031																											
N30	04/25/13	Pit	ENPR19MW[30-32']	BDL	BDL	BDL	BDL	BDL	BDL	BDL																											
N30	04/25/13	Pit	ENPR19MW [35-37']	BDL	BDL	BDL	BDL	BDL	BDL	BDL																											
N30	07/25/13	Pit	SVEE01 [75-77']	50	BDL	50	BDL	BDL	BDL	0.0086	BDL	0.022	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.12	BDL	2.6	BDL	2.2	3.4	8.1	**15**	240	0.3	23	BDL	24	13	BDL	16	2.5	BDL	54
N30	07/30/13	Pit	SVEE01 [15-17']	110	BDL	110	BDL	BDL	BDL	0.0079																											
N30	07/30/13	Pit	SVEE01 [60-62']	54.6	2.6	52	BDL	BDL	0.0056	BDL																											
N30	07/30/13	Pit	SNEN01 [40-46']	**660**	130	**530**	BDL	BDL	BDL	0.77																											
N30	07/30/13	Pit	SVEN01 [60-62']	13	BDL	13	BDL	BDL	BDL	BDL																											
N30	07/31/13	Pit	SVEN02 [30-32']	44	BDL	44	BDL	BDL	BDL	BDL																											
N30	07/31/13	Pit	SVEN02 [60-62']	35.63	0.63	35	0.0028	0.036	0.0037	0.11																											
N30	07/31/13	Pit	SVEW01 50-52']	271.2	1.2	270	BDL	BDL	0.0046	0.063																											
N30	07/31/13	Pit	SVEW01 [60-62']	11.3	1.3	10	0.0048	0.094	0.0056	0.22																											
N30	08/01/13	Pit	SVES02 [20-22']	**11320**	320	**11000**	BDL	BDL	0.7	7.2																											
N30	08/01/13	Pit	SVES02 [40-42']	11.2	2.1	9.1	BDL	BDL	0.0032	0.036																											
N30	08/01/13	Pit	SVEE02 [35-37']	**2555**	55	**2500**	0.0026	BDL	0.16	0.16																											
N30	08/01/13	Pit	SVEE02 [40-42']	13	2	11	0.005	0.061	0.0034	0.061																											
N30	08/01/13	Pit	SVEW02 [35-37']	120	BDL	120	BDL	BDL	BDL	BDL																											
N30	08/01/13	Pit	SVEW02 [40-42']	**5120**	420	**4600**	BDL	BDL	2.6	5.6																											
N30	08/01/13	Pit	SVES01 [30-32']	**8080**	180	**7900**	0.027	BDL	0.39	1.9																											
N30	08/01/13	Pit	SVES01 [40-42']	109	30	79	BDL	BDL	0.092	0.26																											
N30	08/05/13	Pit	SVENW01 [5-7']	**12620**	**620**	**12000**	BDL	2.6	1.9	34	1.6	1.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.7	BDL	7.8	0.69	**6**	**14**	7.8	**8.4**	3800	BDL	23	BDL	28	7.8	0.03	12	BDL	BDL	27
N30	08/05/13	Pit	SVENW01 [20-22']	BDL	BDL	BDL	BDL	BDL	BDL	BDL																											
N30	08/05/13	Pit	SVESW01 [10-12']	244	44	180	BDL	BDL	0.034	0.35																											
N30	08/05/13	Pit	SVESE01 [20-22']	51	BDL	51	BDL	BDL	BDL	0.0082																											
N30	08/06/13	Pit	SVENE01 [10-12']	**765**	65	**660**	BDL	BDL	BDL	0.18																											
N30	08/06/13	Pit	SVENE01 [40-42']	91	28	63	BDL	BDL	BDL	0.089																											
N30	08/06/13	Pit	ENPR21MW [35-37']	**689.5**	9.5	**680**	BDL	BDL	BDL	0.098																											
N30	08/06/13	Pit	ENPR21MW [45-47']	30.2	5.2	25	0.0034	BDL	BDL	0.017																											
N30	08/07/13	Pit	SBSW01 [35-37']	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.25	1.1	8.5	**18**	390	BDL	24	BDL	25	13	BDL	17	BDL	BDL	51

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143 Diamond Avenue
Parachute, CO 81635

Analytes (BDL = Below Detection Limit; ND = Non Detect)

			Organic Compounds (ug/L)				Inorganic Compounds		
		Allowable Concentration -->	5	1000	700	10000	mg/L	mg/L	mg/L
Location	Sample Date:	Sampling Point	Benzene	Toluene	Ethylbenzene	Xylenes - total	TDS (1.25 x Backgground)	Chlorides (1.25 x Backgground)	Sulfates (1.25 x Backgground)
N30	02/14/13	SBW	BDL	BDL	BDL	BDL			
N30	08/07/13	SBSW01	BDL	BDL	BDL	BDL			
N30	02/14/13	SBSW	0.72	BDL	BDL	11			
N30	09/24/13	ENPR21MW	BDL	BDL	BDL	BDL	700	66	130
N30	12/11/13	ENPR21MW	BDL	BDL	BDL	BDL			
N30	03/25/14	ENPR21MW	BDL	BDL	BDL	BDL			
N30	06/24/14	ENPR21MW	BDL	BDL	BDL	BDL			
N30	08/25/14	ENPR21MW	BDL	BDL	BDL	BDL			
N30	12/01/14	ENPR21MW	BDL	BDL	BDL	4.6			
N30	05/01/13	ENPR20MW	1.4	7.1	1.3	11	650	66	130
N30	09/04/13	ENPR20MW	BDL	BDL	BDL	BDL	590	48	130
N30	12/11/13	ENPR20MW	BDL	BDL	BDL	BDL			
N30	03/25/14	ENPR20MW	BDL	BDL	BDL	BDL			
N30	06/24/14	ENPR20MW	BDL	BDL	BDL	BDL			
N30	08/25/14	ENPR20MW	BDL	BDL	BDL	BDL			
N30	12/01/14	ENPR20MW	BDL	BDL	BDL	BDL			
N30	05/01/13	ENPR19MW	BDL	BDL	BDL	BDL	520	36	100
N30	09/03/13	ENPR19MW	BDL	BDL	BDL	BDL	510	36	100
N30	12/11/13	ENPR19MW	BDL	BDL	BDL	BDL			
N30	03/25/14	ENPR19MW	BDL	BDL	BDL	BDL			
N30	06/24/14	ENPR19MW	BDL	BDL	BDL	BDL			
N30	08/25/14	ENPR19MW	BDL	BDL	BDL	BDL			
N30	12/01/14	ENPR19MW	BDL	BDL	BDL	BDL			
N30	02/13/13	ENPR18MW	BDL	BDL	BDL	17			
N30	05/01/13	ENPR18MW	0.94	5.2	6.6	10	700	46	160
N30	09/24/13	ENPR18MW	BDL	BDL	BDL	BDL	640	41	150
N30	12/11/13	ENPR18MW	BDL	BDL	BDL	BDL			
N30	03/25/14	ENPR18MW	BDL	BDL	BDL	BDL			
N30	06/24/14	ENPR18MW	BDL	BDL	BDL	BDL			
N30	08/25/14	ENPR18MW	BDL	BDL	BDL	BDL			
N30	12/01/14	ENPR18MW	BDL	BDL	BDL	BDL			
N30	05/01/13	ENPR17MW	0.58	8.1	0.71	13	700	62	170
N30	09/24/13	ENPR17MW	BDL	BDL	BDL	BDL	680	54	180
N30	12/11/13	ENPR17MW	BDL	BDL	BDL	BDL			
N30	03/25/14	ENPR17MW	BDL	BDL	BDL	BDL			
N30	06/24/14	ENPR17MW	BDL	BDL	BDL	BDL			
N30	08/25/14	ENPR17MW	BDL	BDL	BDL	BDL			
N30	12/01/14	ENPR17MW	BDL	BDL	BDL	BDL			

Piceance Environmental
143 Diamond Avenue
Parachute, CO 81635

ChemSolutions
7388 S. Revere Parkway #806
Centennial, CO 80112
303.771.5570

January 16, 2015

Chris McKisson
LT Environmental, Inc.
820 Megan Avenue, Unit B
Rifle, CO 81650

RE: LTE841

Dear Chris,

Following are the results of the product characterization for the Project #033413001 sample collected on 1/7/15.

Sample 20150107-N30 (PC) was analyzed by gas chromatography using a flame ionization detector. The sample chromatogram was compared to various fuel standard chromatograms. Each fuel has a chromatographic fingerprint. The chromatogram for the sample matches the fingerprint for diesel fuel. The sample carbon range is C10-C30.

Copies of the sample, diesel standard and retention time standard chromatograms are enclosed. Also enclosed is an overlay of the sample and diesel chromatograms.

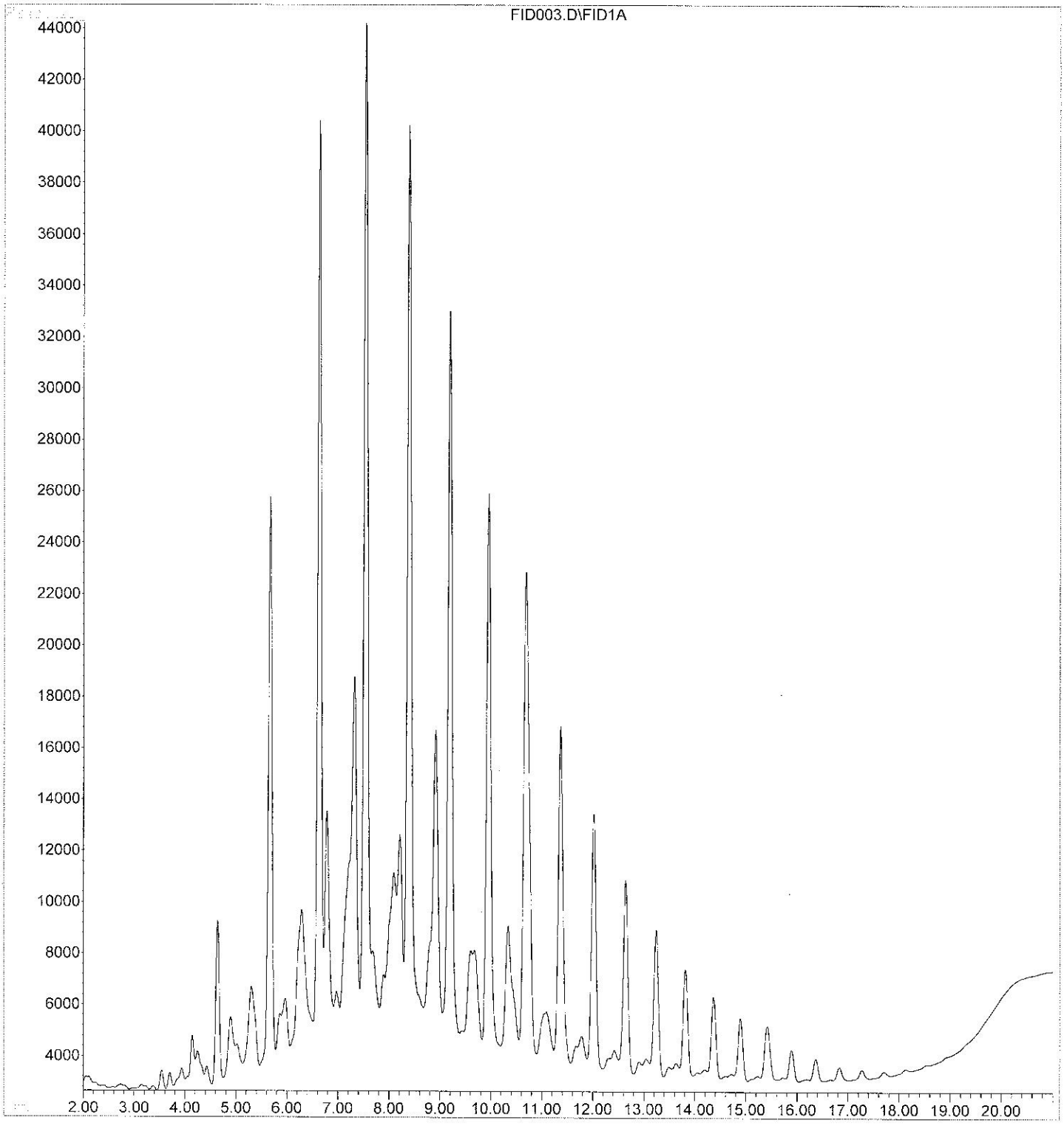
Thank you for the opportunity to work on this project. Please call if you have any questions. The invoice will be sent separately.

Sincerely,

John Graves
Laboratory Director
ChemSolutions LLC

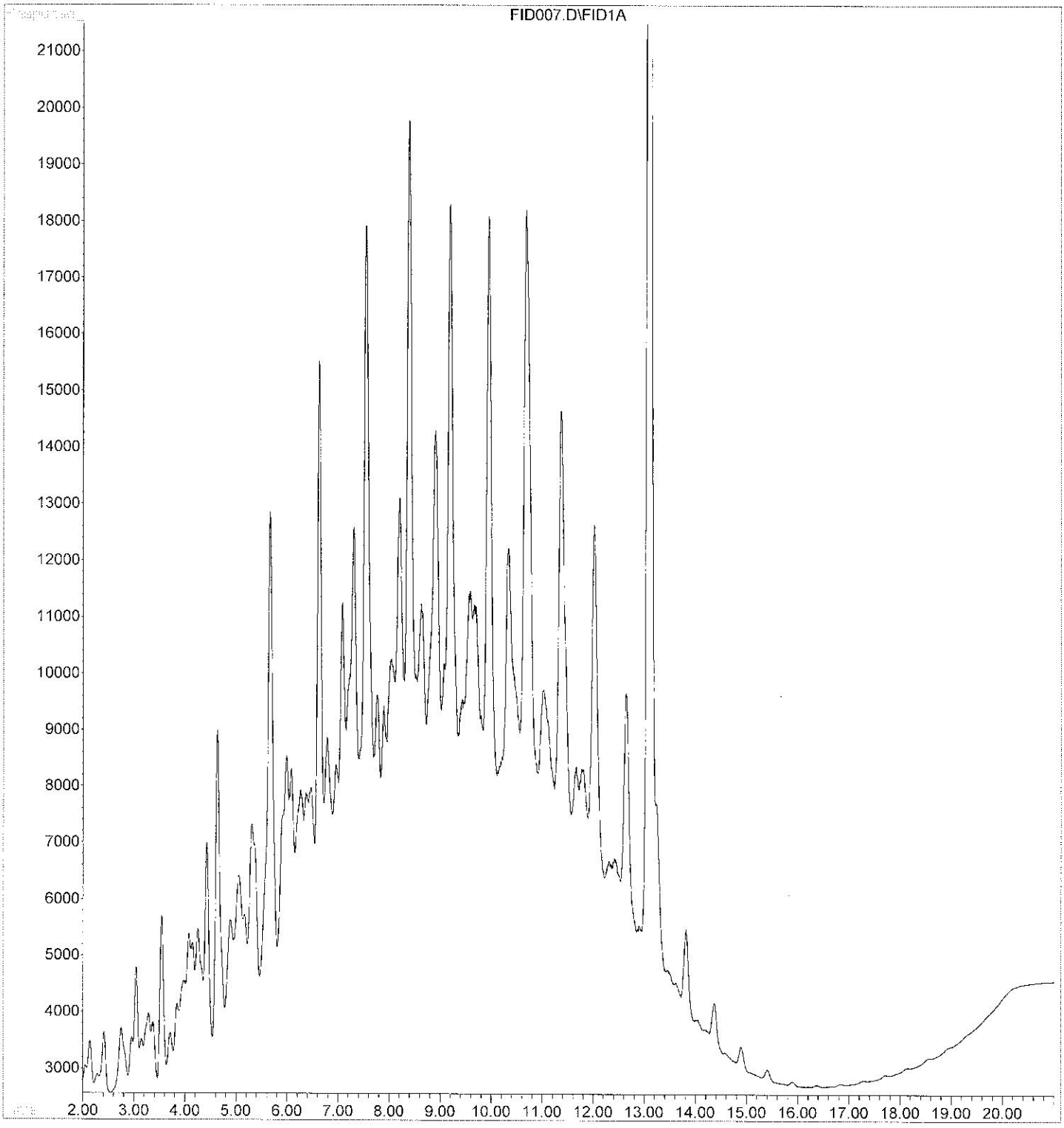
1000 ppm Product LTE841

File : C:\HPCHEM\4\DATA\011315\FID003.D
Operator : LB
Acquired : 13 Jan 2015 1:31 pm using AcqMethod DR010915.M
Instrument : GC Instru
Sample Name: 20150107-N30 Product Char. LTE841
Misc Info : 100uL of 10,000ppm/1mL (1000ppm)
Vial Number: 3



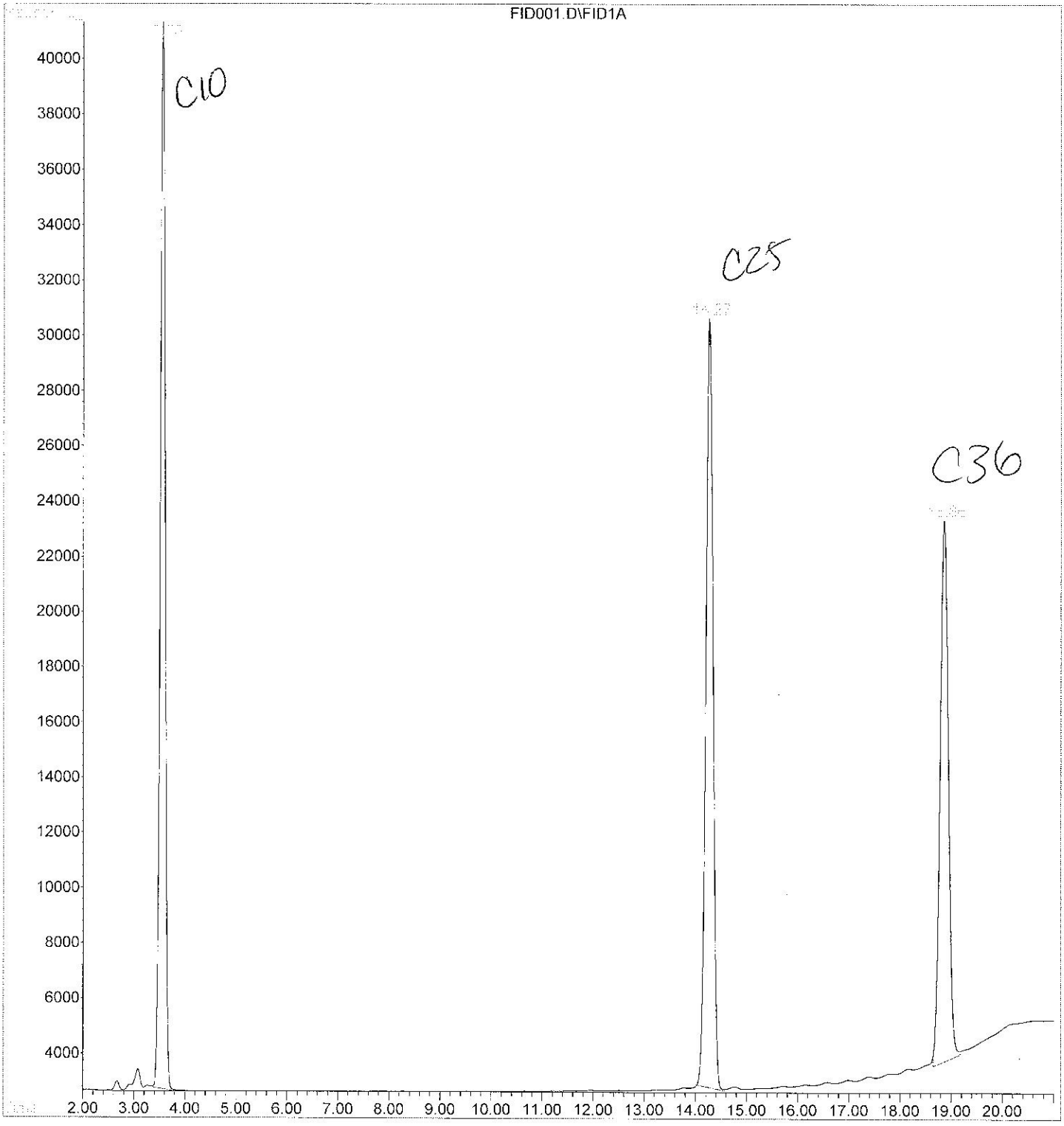
1000 ppm diesel standard

File : C:\HPCHEM\4\DATA\010915\FID007.D
Operator : LB
Acquired : 9 Jan 2015 12:48 pm using AcqMethod DR010915.M
Instrument : GC Instru
Sample Name: 1000ug/mL DRO ICAL
Misc Info : 10/17/14
Vial Number: 7



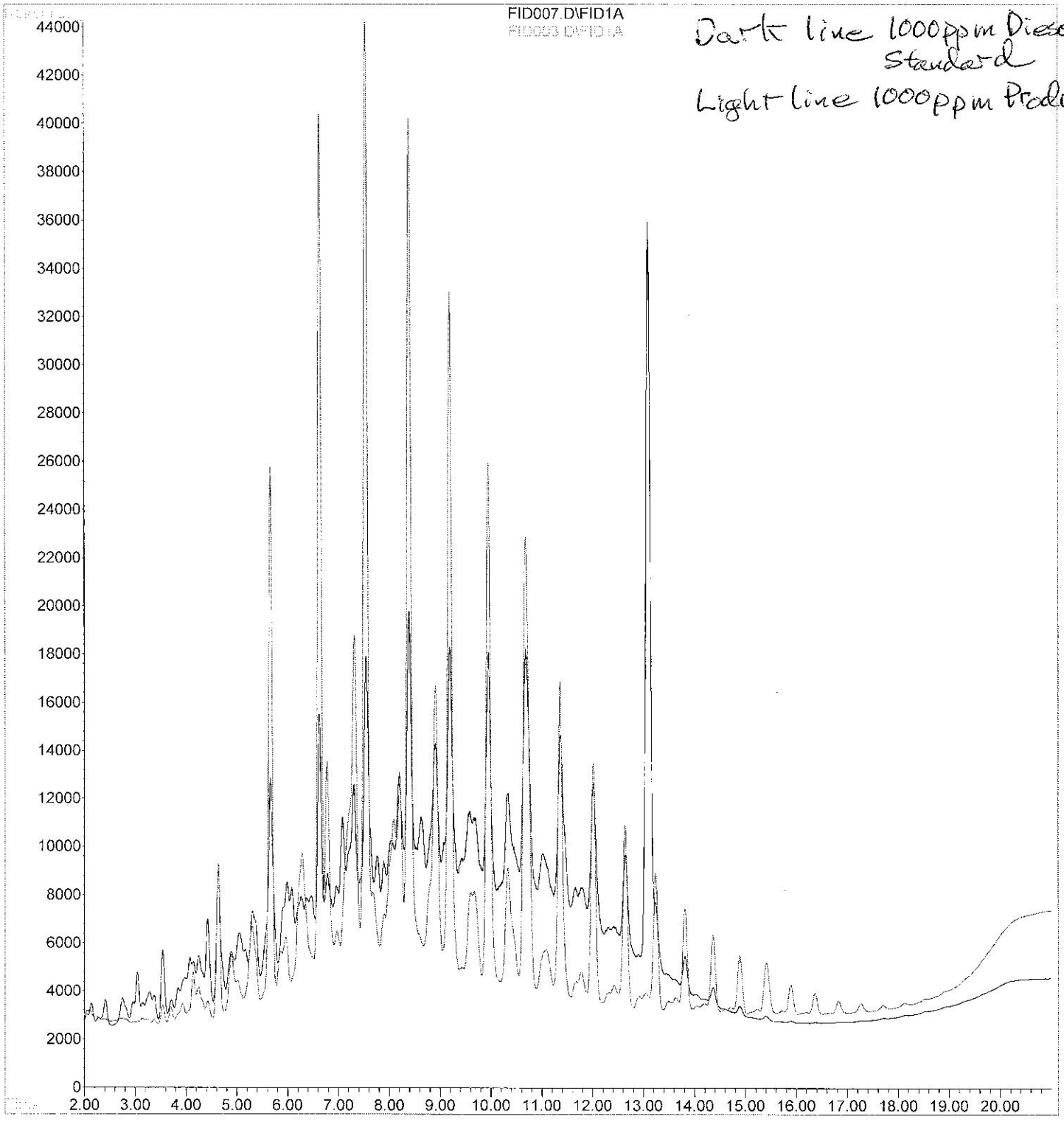
Retention time standard

File : C:\HPCHEM\4\DATA\122914\FID001.D
Operator : LB
Acquired : 29 Dec 2014 10:45 am using AcqMethod DR122914.M
Instrument : GC Instru
Sample Name: DRO Retention Time Marker
Misc Info : new column
Vial Number: 1



Overlay of Product sample with diesel standard.

File : C:\HPCHEM\4\DATA\010915\FID007.D
Operator : LB
Acquired : 9 Jan 2015 12:48 pm using AcqMethod DR010915.M
Instrument : GC Instru
Sample Name: 1000ug/mL DRO ICAL
Misc Info : 10/17/14
Vial Number: 7



21-Jan-2015

Chris Hines
LT Environmental, Inc
820 Megan Ave. Unit B
Rifle, CO 81650

Re: **N30 Remediation GW 1.7.15**

Work Order: **1501294**

Dear Chris,

Revision: **1**

ALS Environmental received 1 sample on 09-Jan-2015 12:30 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 32.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

Certificate No: MN 532786

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group USA, Corp

Date: 21-Jan-15

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Work Order: **1501294**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1501294-01	20150107 - ENRP21MW	Groundwater		1/7/2015 09:20	1/9/2015 12:30	☐

ALS Group USA, Corp

Date: 21-Jan-15

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Work Order: 1501294

Case Narrative

Batch 66748 sample 1501294-01 had one low acid surrogate, and one high base/neutral surrogate recovery for Semi-Volatiles, because the sample had to be diluted at the instrument due to matrix. The LCS recovery for 4-Nitrophenol was above the control limit. This compound was non-detect in all samples associated with this quality control batch. The MS/MSD data for Semi-Volatiles is not related to this project's samples. No data requires qualification.

DRO and GRO were added in the revised report sent 1/21/15.

ALS Group USA, Corp

Date: 21-Jan-15

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
WorkOrder: **1501294**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

ALS Group USA, Corp

Date: *21-Jan-15*

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Sample ID: 20150107 - ENRP21MW
Collection Date: 1/7/2015 09:20 AM

Work Order: 1501294
Lab ID: 1501294-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID		Method: **SW8015M**			Prep: SW3511 / 1/20/15		Analyst: **IT**
DRO (C10-C28)	**28**		**0.016**	**0.10**	**mg/L**	1	1/20/2015 18:35
Surr: 4-Terphenyl-d14	*121*			*31-176*	*%REC*	1	1/20/2015 18:35
GASOLINE RANGE ORGANICS BY GC-FID		Method: **SW8015**					Analyst: **IT**
GRO (C6-C10)	U		25	200	µg/L	1	1/20/2015 02:10
Surr: Toluene-d8	*117*			*70-130*	*%REC*	1	1/20/2015 02:10
SEMI-VOLATILE ORGANIC COMPOUNDS		Method: **SW846 8270D**			Prep: SW3510 / 1/13/15		Analyst: **RS**
1,2-Dinitrobenzene	U		110	110	µg/L	10	1/13/2015 22:40
1,4-Dinitrobenzene	U		110	110	µg/L	10	1/13/2015 22:40
2,4,5-Trichlorophenol	U		5.3	110	µg/L	10	1/13/2015 22:40
2,4,6-Trichlorophenol	U		5.7	110	µg/L	10	1/13/2015 22:40
2,4-Dichlorophenol	U		4.6	210	µg/L	10	1/13/2015 22:40
2,4-Dimethylphenol	U		37	110	µg/L	10	1/13/2015 22:40
2,4-Dinitrophenol	U		14	110	µg/L	10	1/13/2015 22:40
2-Chloronaphthalene	U		2.7	110	µg/L	10	1/13/2015 22:40
2-Chlorophenol	U		6.8	110	µg/L	10	1/13/2015 22:40
2-Methylnaphthalene	**61**	J	**2.7**	**110**	**µg/L**	10	1/13/2015 22:40
2-Methylphenol	U		4.2	110	µg/L	10	1/13/2015 22:40
3&4-Methylphenol	U		4.1	110	µg/L	10	1/13/2015 22:40
3,3´-Dichlorobenzidine	U		82	110	µg/L	10	1/13/2015 22:40
4-Nitrophenol	U		11	420	µg/L	10	1/13/2015 22:40
Acenaphthene	U		2.4	110	µg/L	10	1/13/2015 22:40
Acetophenone	U		1.9	21	µg/L	10	1/13/2015 22:40
Anthracene	U		15	110	µg/L	10	1/13/2015 22:40
Benzo(a)anthracene	U		12	110	µg/L	10	1/13/2015 22:40
Benzo(a)pyrene	U		2.2	110	µg/L	10	1/13/2015 22:40
Benzo(b)fluoranthene	U		16	110	µg/L	10	1/13/2015 22:40
Benzo(g,h,i)perylene	U		15	110	µg/L	10	1/13/2015 22:40
Benzo(k)fluoranthene	U		3.7	110	µg/L	10	1/13/2015 22:40
Benzoic acid	U		120	1,100	µg/L	10	1/13/2015 22:40
Bis(2-chloroisopropyl)ether	U		6.8	110	µg/L	10	1/13/2015 22:40
Bis(2-ethylhexyl)phthalate	U		3.1	110	µg/L	10	1/13/2015 22:40
Butyl benzyl phthalate	U		2.2	110	µg/L	10	1/13/2015 22:40
Carbazole	U		3.4	210	µg/L	10	1/13/2015 22:40
Chrysene	U		15	110	µg/L	10	1/13/2015 22:40
Dibenzo(a,h)anthracene	U		14	110	µg/L	10	1/13/2015 22:40
Dibenzofuran	U		5.8	110	µg/L	10	1/13/2015 22:40
Diethyl phthalate	U		5.2	420	µg/L	10	1/13/2015 22:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Sample ID: 20150107 - ENRP21MW
Collection Date: 1/7/2015 09:20 AM

Work Order: 1501294
Lab ID: 1501294-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Dimethyl phthalate	U		5.7	420	µg/L	10	1/13/2015 22:40
Di-n-butyl phthalate	U		2.9	110	µg/L	10	1/13/2015 22:40
Di-n-octyl phthalate	U		2.5	110	µg/L	10	1/13/2015 22:40
Fluoranthene	U		16	110	µg/L	10	1/13/2015 22:40
Fluorene	U		2.1	110	µg/L	10	1/13/2015 22:40
Hexachlorobenzene	U		4.6	110	µg/L	10	1/13/2015 22:40
Hexachlorobutadiene	U		5.0	110	µg/L	10	1/13/2015 22:40
Hexachlorocyclopentadiene	U		3.8	420	µg/L	10	1/13/2015 22:40
Hexachloroethane	U		10	110	µg/L	10	1/13/2015 22:40
Indeno(1,2,3-cd)pyrene	U		15	110	µg/L	10	1/13/2015 22:40
Naphthalene	U		2.6	110	µg/L	10	1/13/2015 22:40
Nitrobenzene	U		7.0	110	µg/L	10	1/13/2015 22:40
N-Nitrosodimethylamine	U		12	110	µg/L	10	1/13/2015 22:40
N-Nitrosodi-n-propylamine	U		6.8	110	µg/L	10	1/13/2015 22:40
N-Nitrosodiphenylamine	U		17	110	µg/L	10	1/13/2015 22:40
Pentachlorophenol	U		4.6	420	µg/L	10	1/13/2015 22:40
Phenol	U		6.8	110	µg/L	10	1/13/2015 22:40
Pyrene	U		14	110	µg/L	10	1/13/2015 22:40
Pyridine	U		7.4	420	µg/L	10	1/13/2015 22:40
Surr: 2,4,6-Tribromophenol	*31.2*	S		*38-115*	*%REC*	10	1/13/2015 22:40
Surr: 2-Fluorobiphenyl	*79.6*			*32-100*	*%REC*	10	1/13/2015 22:40
Surr: 2-Fluorophenol	*41.2*			*22-59*	*%REC*	10	1/13/2015 22:40
Surr: 4-Terphenyl-d14	*82.4*			*23-112*	*%REC*	10	1/13/2015 22:40
Surr: Nitrobenzene-d5	*134*	S		*31-93*	*%REC*	10	1/13/2015 22:40
Surr: Phenol-d6	*34.4*			*13-36*	*%REC*	10	1/13/2015 22:40
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260**					Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	1/14/2015 15:58
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	1/14/2015 15:58
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	1/14/2015 15:58
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	1/14/2015 15:58
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	1/14/2015 15:58
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	1/14/2015 15:58
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	1/14/2015 15:58
1,2,3-Trichloropropane	U		0.41	1.0	µg/L	1	1/14/2015 15:58
1,2,4-Trichlorobenzene	U		0.19	1.0	µg/L	1	1/14/2015 15:58
1,2,4-Trimethylbenzene	**5.5**		**0.23**	**1.0**	**µg/L**	1	1/14/2015 15:58
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	1/14/2015 15:58
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	1/14/2015 15:58
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/14/2015 15:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group USA, Corp

Date: *21-Jan-15*

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Sample ID: 20150107 - ENRP21MW
Collection Date: 1/7/2015 09:20 AM

Work Order: 1501294
Lab ID: 1501294-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	1/14/2015 15:58
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	1/14/2015 15:58
1,3,5-Trimethylbenzene	**8.3**		**0.13**	**1.0**	**µg/L**	1	1/14/2015 15:58
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/14/2015 15:58
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	1/14/2015 15:58
2-Butanone	U		0.87	5.0	µg/L	1	1/14/2015 15:58
4-Methyl-2-pentanone	U		0.15	1.0	µg/L	1	1/14/2015 15:58
Acetone	U		3.1	10	µg/L	1	1/14/2015 15:58
Benzene	U		0.25	1.0	µg/L	1	1/14/2015 15:58
Bromobenzene	U		0.18	1.0	µg/L	1	1/14/2015 15:58
Bromodichloromethane	U		0.16	1.0	µg/L	1	1/14/2015 15:58
Bromoform	U		0.099	1.0	µg/L	1	1/14/2015 15:58
Bromomethane	U		1.0	1.0	µg/L	1	1/14/2015 15:58
Carbon disulfide	U		0.26	1.0	µg/L	1	1/14/2015 15:58
Carbon tetrachloride	U		0.14	1.0	µg/L	1	1/14/2015 15:58
Chlorobenzene	U		0.19	1.0	µg/L	1	1/14/2015 15:58
Chloroethane	U		0.21	1.0	µg/L	1	1/14/2015 15:58
Chloroform	U		0.25	1.0	µg/L	1	1/14/2015 15:58
Chloromethane	U		0.25	1.0	µg/L	1	1/14/2015 15:58
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/14/2015 15:58
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	1/14/2015 15:58
Cyclohexanone	U		1.9	5.0	µg/L	1	1/14/2015 15:58
Dibromochloromethane	U		0.17	1.0	µg/L	1	1/14/2015 15:58
Dichlorodifluoromethane	U		0.41	1.0	µg/L	1	1/14/2015 15:58
Diethyl ether	U		0.23	1.0	µg/L	1	1/14/2015 15:58
Ethyl acetate	U		0.33	5.0	µg/L	1	1/14/2015 15:58
Ethyl methacrylate	U		0.26	1.0	µg/L	1	1/14/2015 15:58
Ethylbenzene	U		0.22	1.0	µg/L	1	1/14/2015 15:58
Isopropylbenzene	U		0.25	1.0	µg/L	1	1/14/2015 15:58
Methylene chloride	U		0.64	5.0	µg/L	1	1/14/2015 15:58
n-Butylbenzene	U		0.18	1.0	µg/L	1	1/14/2015 15:58
n-Propylbenzene	U		0.16	1.0	µg/L	1	1/14/2015 15:58
sec-Butylbenzene	U		0.14	1.0	µg/L	1	1/14/2015 15:58
Styrene	U		0.18	1.0	µg/L	1	1/14/2015 15:58
tert-Butylbenzene	U		0.18	1.0	µg/L	1	1/14/2015 15:58
Tetrachloroethene	U		0.25	1.0	µg/L	1	1/14/2015 15:58
Toluene	U		0.20	1.0	µg/L	1	1/14/2015 15:58
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	1/14/2015 15:58
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	1/14/2015 15:58
Trichloroethene	U		0.34	1.0	µg/L	1	1/14/2015 15:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group USA, Corp

Date: *21-Jan-15*

Client: LT Environmental, Inc
Project: N30 Remediation GW 1.7.15
Sample ID: 20150107 - ENRP21MW
Collection Date: 1/7/2015 09:20 AM

Work Order: 1501294
Lab ID: 1501294-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	1/14/2015 15:58
Vinyl acetate	U		0.32	1.0	µg/L	1	1/14/2015 15:58
Vinyl chloride	U		0.19	1.0	µg/L	1	1/14/2015 15:58
Xylenes, Total	**0.64**	J	**0.62**	**3.0**	**µg/L**	1	1/14/2015 15:58
Surr: 1,2-Dichloroethane-d4	*98.0*			*75-120*	*%REC*	1	1/14/2015 15:58
Surr: 4-Bromofluorobenzene	*100*			*80-110*	*%REC*	1	1/14/2015 15:58
Surr: Dibromofluoromethane	*97.4*			*85-115*	*%REC*	1	1/14/2015 15:58
Surr: Toluene-d8	*97.2*			*85-110*	*%REC*	1	1/14/2015 15:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group USA, Corp

Date: 21-Jan-15

Client: LT Environmental, Inc

QC BATCH REPORT

Work Order: 1501294

Project: N30 Remediation GW 1.7.15

Batch ID: **66960** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKW1-66960-66960** Units: **mg/L** Analysis Date: **1/20/2015 03:49 PM**

Client ID: Run ID: **GC8_150120B** SeqNo: **3115578** Prep Date: **1/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	U	0.10								
Surr: 4-Terphenyl-d14	*0.1274*	0	*0.1143*	0	*111*	*31-176*	0			

LCS Sample ID: **DLCSW1-66960-66960** Units: **mg/L** Analysis Date: **1/20/2015 04:17 PM**

Client ID: Run ID: **GC8_150120B** SeqNo: **3115579** Prep Date: **1/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	8.01	0.10	11.43	0	70.1	35-95	0			
Surr: 4-Terphenyl-d14	*0.1282*	0	*0.1143*	0	*112*	*31-176*	0			

MS Sample ID: **1501678-01B MS** Units: **mg/L** Analysis Date: **1/20/2015 04:44 PM**

Client ID: Run ID: **GC8_150120B** SeqNo: **3115580** Prep Date: **1/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	26.84	0.35	40	0	67.1	29-96	0			
Surr: 4-Terphenyl-d14	*0.4292*	0	*0.4*	0	*107*	*31-176*	0			

MSD Sample ID: **1501678-01B MSD** Units: **mg/L** Analysis Date: **1/20/2015 05:12 PM**

Client ID: Run ID: **GC8_150120B** SeqNo: **3115581** Prep Date: **1/20/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	27.46	0.35	40	0	68.6	29-96	26.84	2.26	30	
Surr: 4-Terphenyl-d14	*0.435*	0	*0.4*	0	*109*	*31-176*	0.4292	*1.35*	*30*	

The following samples were analyzed in this batch: 1501294-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R156105** Instrument ID **GC9** Method: **SW8015**

MBLK Sample ID: **GBLKW1-150119-R156105** Units: **µg/L** Analysis Date: **1/19/2015 12:57 PM**
Client ID: Run ID: **GC9_150119A** SeqNo: **3112804** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	U	200								
Surr: Toluene-d8	*124.7*	0	*100*	0	*125*	*70-130*	0			

LCS Sample ID: **GLCSW1-150119-R156105** Units: **µg/L** Analysis Date: **1/19/2015 12:33 PM**
Client ID: Run ID: **GC9_150119A** SeqNo: **3112803** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10160	200	10000	0	102	70-130	0			
Surr: Toluene-d8	*95.51*	0	*100*	0	*95.5*	*70-130*	0			

MS Sample ID: **1501649-01A MS** Units: **µg/L** Analysis Date: **1/19/2015 02:12 PM**
Client ID: Run ID: **GC9_150119A** SeqNo: **3112807** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	11270	200	10000	0	113	70-130	0			
Surr: Toluene-d8	*102.1*	0	*100*	0	*102*	*70-130*	0			

MSD Sample ID: **1501649-01A MSD** Units: **µg/L** Analysis Date: **1/19/2015 02:36 PM**
Client ID: Run ID: **GC9_150119A** SeqNo: **3112808** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10870	200	10000	0	109	70-130	11270	3.55	30	
Surr: Toluene-d8	*94.51*	0	*100*	0	*94.5*	*70-130*	102.1	*7.74*	*30*	

The following samples were analyzed in this batch: 1501294-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK Sample ID: **SBLKW1-66748-66748** Units: **µg/L** Analysis Date: **1/13/2015 04:41 PM**
Client ID: Run ID: **SVMS4_150113A** SeqNo: **3107223** Prep Date: **1/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dinitrobenzene	U	5.0								
1,4-Dinitrobenzene	U	5.0								
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dichlorophenol	U	10								
2,4-Dimethylphenol	U	5.0								
2,4-Dinitrophenol	U	5.0								
2-Chloronaphthalene	U	5.0								
2-Chlorophenol	U	5.0								
2-Methylnaphthalene	0.3	5.0								J
2-Methylphenol	U	5.0								
3&4-Methylphenol	U	5.0								
3,3´-Dichlorobenzidine	U	5.0								
4-Nitrophenol	U	20								
Acenaphthene	U	5.0								
Acetophenone	U	1.0								
Anthracene	U	5.0								
Benzo(a)anthracene	U	5.0								
Benzo(a)pyrene	U	5.0								
Benzo(b)fluoranthene	U	5.0								
Benzo(g,h,i)perylene	U	5.0								
Benzo(k)fluoranthene	U	5.0								
Benzoic acid	U	50								
Bis(2-chloroisopropyl)ether	U	5.0								
Bis(2-ethylhexyl)phthalate	U	5.0								
Butyl benzyl phthalate	U	5.0								
Carbazole	U	10								
Chrysene	U	5.0								
Dibenzo(a,h)anthracene	U	5.0								
Dibenzofuran	U	5.0								
Diethyl phthalate	U	20								
Dimethyl phthalate	U	20								
Di-n-butyl phthalate	U	5.0								
Di-n-octyl phthalate	U	5.0								
Fluoranthene	U	5.0								
Fluorene	U	5.0								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachlorocyclopentadiene	U	20								
Hexachloroethane	U	5.0								
Indeno(1,2,3-cd)pyrene	U	5.0								
Naphthalene	U	5.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

Nitrobenzene	U	5.0					
N-Nitrosodimethylamine	U	5.0					
N-Nitrosodi-n-propylamine	U	5.0					
N-Nitrosodiphenylamine	U	5.0					
Pentachlorophenol	U	20					
Phenol	U	5.0					
Pyrene	U	5.0					
Pyridine	U	20					
Surr: 2,4,6-Tribromophenol	*33.47*	0	*50*	0	*66.9*	*38-115*	0
Surr: 2-Fluorobiphenyl	*36.78*	0	*50*	0	*73.6*	*32-100*	0
Surr: 2-Fluorophenol	*20.93*	0	*50*	0	*41.9*	*22-59*	0
Surr: 4-Terphenyl-d14	*45.73*	0	*50*	0	*91.5*	*23-112*	0
Surr: Nitrobenzene-d5	*29.33*	0	*50*	0	*58.7*	*31-93*	0
Surr: Phenol-d6	*12.25*	0	*50*	0	*24.5*	*13-36*	0

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

LCS Sample ID: **SLCSW1-66748-66748** Units: **µg/L** Analysis Date: **1/13/2015 05:06 PM**
Client ID: Run ID: **SVMS4_150113A** SeqNo: **3107224** Prep Date: **1/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dinitrobenzene	16.48	5.0	20	0	82.4	30-120	0			
1,4-Dinitrobenzene	16.41	5.0	20	0	82	30-120	0			
2,4,5-Trichlorophenol	17.5	5.0	20	0	87.5	50-110	0			
2,4,6-Trichlorophenol	17.12	5.0	20	0	85.6	50-115	0			
2,4-Dichlorophenol	13.65	10	20	0	68.2	50-105	0			
2,4-Dimethylphenol	12.13	5.0	20	0	60.6	30-110	0			
2,4-Dinitrophenol	12.3	5.0	20	0	61.5	15-140	0			
2-Chloronaphthalene	16.78	5.0	20	0	83.9	50-105	0			
2-Chlorophenol	14.36	5.0	20	0	71.8	35-105	0			
2-Methylnaphthalene	12.52	5.0	20	0	62.6	45-105	0			
2-Methylphenol	11.39	5.0	20	0	57	40-110	0			
3&4-Methylphenol	10.77	5.0	20	0	53.8	30-110	0			
4-Nitrophenol	17.51	20	20	0	87.6	1-58	0			JS
Acenaphthene	16.09	5.0	20	0	80.4	45-110	0			
Acetophenone	14.37	1.0	20	0	71.8	30-120	0			
Anthracene	17.07	5.0	20	0	85.4	55-110	0			
Benzo(a)anthracene	16.43	5.0	20	0	82.2	55-110	0			
Benzo(a)pyrene	16.88	5.0	20	0	84.4	55-110	0			
Benzo(b)fluoranthene	17	5.0	20	0	85	45-120	0			
Benzo(g,h,i)perylene	18.15	5.0	20	0	90.8	40-125	0			
Benzo(k)fluoranthene	17.28	5.0	20	0	86.4	45-125	0			
Bis(2-chloroisopropyl)ether	13.29	5.0	20	0	66.4	25-130	0			
Bis(2-ethylhexyl)phthalate	20.32	5.0	20	0	102	40-125	0			
Butyl benzyl phthalate	18.15	5.0	20	0	90.8	45-115	0			
Carbazole	16.4	10	20	0	82	50-150	0			
Chrysene	17.63	5.0	20	0	88.2	55-110	0			
Dibenzo(a,h)anthracene	17.3	5.0	20	0	86.5	40-125	0			
Dibenzofuran	16.67	5.0	20	0	83.4	55-105	0			
Diethyl phthalate	17.56	20	20	0	87.8	40-120	0			J
Dimethyl phthalate	18.51	20	20	0	92.6	25-125	0			J
Di-n-butyl phthalate	17.68	5.0	20	0	88.4	55-115	0			
Di-n-octyl phthalate	24.21	5.0	20	0	121	35-135	0			
Fluoranthene	18.27	5.0	20	0	91.4	55-115	0			
Fluorene	17.59	5.0	20	0	88	50-110	0			
Hexachlorobenzene	15.75	5.0	20	0	78.8	50-110	0			
Hexachlorobutadiene	11.08	5.0	20	0	55.4	25-105	0			
Hexachlorocyclopentadiene	7.28	20	20	0	36.4	25-105	0			J
Hexachloroethane	10.84	5.0	20	0	54.2	30-95	0			
Indeno(1,2,3-cd)pyrene	17.79	5.0	20	0	89	45-125	0			
Naphthalene	12.03	5.0	20	0	60.2	40-100	0			
Nitrobenzene	13.6	5.0	20	0	68	45-110	0			
N-Nitrosodimethylamine	9.8	5.0	20	0	49	25-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

N-Nitrosodi-n-propylamine	15.02	5.0	20	0	75.1	35-130	0	
N-Nitrosodiphenylamine	15.35	5.0	20	0	76.8	50-110	0	
Pentachlorophenol	12.35	20	20	0	61.8	40-115	0	J
Phenol	5.52	5.0	20	0	27.6	12-43	0	
Pyrene	16.73	5.0	20	0	83.6	50-130	0	
Pyridine	7.31	20	20	0	36.6	10-71	0	J
Surr: 2,4,6-Tribromophenol	*35.5*	0	*50*	0	*71*	*38-115*	0	
Surr: 2-Fluorobiphenyl	*37.91*	0	*50*	0	*75.8*	*32-100*	0	
Surr: 2-Fluorophenol	*19.62*	0	*50*	0	*39.2*	*22-59*	0	
Surr: 4-Terphenyl-d14	*40.96*	0	*50*	0	*81.9*	*23-112*	0	
Surr: Nitrobenzene-d5	*31.49*	0	*50*	0	*63*	*31-93*	0	
Surr: Phenol-d6	*11.79*	0	*50*	0	*23.6*	*13-36*	0	

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

MS Sample ID: **1501331-01F MS** Units: **µg/L** Analysis Date: **1/13/2015 05:32 PM**
Client ID: Run ID: **SVMS4_150113A** SeqNo: **3107225** Prep Date: **1/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dinitrobenzene	168.1	50	200	0	84	30-120	0			
1,4-Dinitrobenzene	356.8	50	200	0	178	30-120	0			S
2,4,5-Trichlorophenol	179.2	50	200	0	89.6	50-110	0			
2,4,6-Trichlorophenol	179.7	50	200	0	89.8	50-115	0			
2,4-Dichlorophenol	147	100	200	0	73.5	50-105	0			
2,4-Dimethylphenol	122.1	50	200	2.32	59.9	30-110	0			
2,4-Dinitrophenol	188.6	50	200	0	94.3	15-140	0			
2-Chloronaphthalene	175.6	50	200	0	87.8	50-105	0			
2-Chlorophenol	158.2	50	200	3.84	77.2	35-105	0			
2-Methylnaphthalene	136.4	50	200	0	68.2	45-105	0			
2-Methylphenol	121.3	50	200	0	60.6	40-110	0			
3&4-Methylphenol	117.5	50	200	3.96	56.8	30-110	0			
4-Nitrophenol	185	200	200	0	92.5	1-58	0			JS
Acenaphthene	173.9	50	200	0	87	45-110	0			
Acetophenone	154.2	10	200	0	77.1	30-120	0			
Anthracene	175.4	50	200	0	87.7	55-110	0			
Benzo(a)anthracene	171.4	50	200	0	85.7	55-110	0			
Benzo(a)pyrene	175.2	50	200	0	87.6	55-110	0			
Benzo(b)fluoranthene	176.1	50	200	0	88	45-120	0			
Benzo(g,h,i)perylene	185.7	50	200	0	92.8	40-125	0			
Benzo(k)fluoranthene	172.1	50	200	0	86	45-125	0			
Bis(2-chloroisopropyl)ether	143.1	50	200	0	71.6	25-130	0			
Bis(2-ethylhexyl)phthalate	206.9	50	200	0	103	40-125	0			
Butyl benzyl phthalate	187.4	50	200	0	93.7	45-115	0			
Carbazole	171.7	100	200	0	85.8	50-150	0			
Chrysene	179	50	200	0	89.5	55-110	0			
Dibenzo(a,h)anthracene	177.2	50	200	0	88.6	40-125	0			
Dibenzofuran	174	50	200	0	87	55-105	0			
Diethyl phthalate	177.3	200	200	0	88.6	40-120	0			J
Dimethyl phthalate	191	200	200	0	95.5	25-125	0			J
Di-n-butyl phthalate	183.3	50	200	0	91.6	55-115	0			
Di-n-octyl phthalate	246.4	50	200	0	123	35-135	0			
Fluoranthene	190.9	50	200	0	95.4	55-115	0			
Fluorene	184.4	50	200	0	92.2	50-110	0			
Hexachlorobenzene	164.7	50	200	0	82.4	50-110	0			
Hexachlorobutadiene	121.2	50	200	0	60.6	25-105	0			
Hexachlorocyclopentadiene	80.3	200	200	0	40.2	25-105	0			J
Hexachloroethane	117.8	50	200	0	58.9	30-95	0			
Indeno(1,2,3-cd)pyrene	183.1	50	200	0	91.6	45-125	0			
Naphthalene	130	50	200	0	65	40-100	0			
Nitrobenzene	143.5	50	200	0	71.8	45-110	0			
N-Nitrosodimethylamine	99.3	50	200	0	49.6	25-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

N-Nitrosodi-n-propylamine	157.1	50	200	0	78.6	35-130	0	
N-Nitrosodiphenylamine	163.2	50	200	0	81.6	50-110	0	
Pentachlorophenol	168.1	200	200	0	84	40-115	0	J
Phenol	56.7	50	200	0.93	27.9	12-43	0	
Pyrene	174.9	50	200	0	87.4	50-130	0	
Pyridine	102.3	200	200	0.47	50.9	10-71	0	J
Surr: 2,4,6-Tribromophenol	*369.4*	0	*500*	0	*73.9*	*38-115*	0	
Surr: 2-Fluorobiphenyl	*395.4*	0	*500*	0	*79.1*	*32-100*	0	
Surr: 2-Fluorophenol	*203.4*	0	*500*	0	*40.7*	*22-59*	0	
Surr: 4-Terphenyl-d14	*424.5*	0	*500*	0	*84.9*	*23-112*	0	
Surr: Nitrobenzene-d5	*320.6*	0	*500*	0	*64.1*	*31-93*	0	
Surr: Phenol-d6	*120.7*	0	*500*	0	*24.1*	*13-36*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

MSD Sample ID: **1501331-01F MSD** Units: **µg/L** Analysis Date: **1/13/2015 05:58 PM**
Client ID: Run ID: **SVMS4_150113A** SeqNo: **3107226** Prep Date: **1/13/2015** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dinitrobenzene	168.9	50	200	0	84.4	30-120	168.1	0.475	30	
1,4-Dinitrobenzene	348.1	50	200	0	174	30-120	356.8	2.47	30	S
2,4,5-Trichlorophenol	176	50	200	0	88	50-110	179.2	1.8	30	
2,4,6-Trichlorophenol	167.6	50	200	0	83.8	50-115	179.7	6.97	30	
2,4-Dichlorophenol	129.8	100	200	0	64.9	50-105	147	12.4	30	
2,4-Dimethylphenol	108.4	50	200	2.32	53	30-110	122.1	11.9	30	
2,4-Dinitrophenol	187.9	50	200	0	94	15-140	188.6	0.372	30	
2-Chloronaphthalene	161.3	50	200	0	80.6	50-105	175.6	8.49	30	
2-Chlorophenol	133.6	50	200	3.84	64.9	35-105	158.2	16.9	30	
2-Methylnaphthalene	121.8	50	200	0	60.9	45-105	136.4	11.3	30	
2-Methylphenol	105.5	50	200	0	52.8	40-110	121.3	13.9	30	
3&4-Methylphenol	105.7	50	200	3.96	50.9	30-110	117.5	10.6	30	
4-Nitrophenol	180.6	200	200	0	90.3	1-58	185	0	30	JS
Acenaphthene	167.4	50	200	0	83.7	45-110	173.9	3.81	30	
Acetophenone	131.4	10	200	0	65.7	30-120	154.2	16	30	
Anthracene	172.2	50	200	0	86.1	55-110	175.4	1.84	30	
Benzo(a)anthracene	161.2	50	200	0	80.6	55-110	171.4	6.13	30	
Benzo(a)pyrene	162.5	50	200	0	81.2	55-110	175.2	7.52	30	
Benzo(b)fluoranthene	167.4	50	200	0	83.7	45-120	176.1	5.07	30	
Benzo(g,h,i)perylene	174.9	50	200	0	87.4	40-125	185.7	5.99	30	
Benzo(k)fluoranthene	165	50	200	0	82.5	45-125	172.1	4.21	30	
Bis(2-chloroisopropyl)ether	123.7	50	200	0	61.8	25-130	143.1	14.5	30	
Bis(2-ethylhexyl)phthalate	195.1	50	200	0	97.6	40-125	206.9	5.87	30	
Butyl benzyl phthalate	181.5	50	200	0	90.8	45-115	187.4	3.2	30	
Carbazole	163.8	100	200	0	81.9	50-150	171.7	4.71	30	
Chrysene	171.6	50	200	0	85.8	55-110	179	4.22	30	
Dibenzo(a,h)anthracene	165.1	50	200	0	82.6	40-125	177.2	7.07	30	
Dibenzofuran	166.1	50	200	0	83	55-105	174	4.65	30	
Diethyl phthalate	179.3	200	200	0	89.6	40-120	177.3	0	30	J
Dimethyl phthalate	188.2	200	200	0	94.1	25-125	191	0	30	J
Di-n-butyl phthalate	177.7	50	200	0	88.8	55-115	183.3	3.1	30	
Di-n-octyl phthalate	231.2	50	200	0	116	35-135	246.4	6.37	30	
Fluoranthene	185.5	50	200	0	92.8	55-115	190.9	2.87	30	
Fluorene	178.7	50	200	0	89.4	50-110	184.4	3.14	30	
Hexachlorobenzene	164.7	50	200	0	82.4	50-110	164.7	0	30	
Hexachlorobutadiene	110.6	50	200	0	55.3	25-105	121.2	9.15	30	
Hexachlorocyclopentadiene	65.6	200	200	0	32.8	25-105	80.3	0	30	J
Hexachloroethane	98.8	50	200	0	49.4	30-95	117.8	17.5	30	
Indeno(1,2,3-cd)pyrene	166.3	50	200	0	83.2	45-125	183.1	9.62	30	
Naphthalene	125	50	200	0	62.5	40-100	130	3.92	30	
Nitrobenzene	130	50	200	0	65	45-110	143.5	9.87	30	
N-Nitrosodimethylamine	89.6	50	200	0	44.8	25-110	99.3	10.3	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

QC BATCH REPORT

Batch ID: **66748** Instrument ID **SVMS4** Method: **SW846 8270D**

N-Nitrosodi-n-propylamine	134.8	50	200	0	67.4	35-130	157.1	15.3	30	
N-Nitrosodiphenylamine	158	50	200	0	79	50-110	163.2	3.24	30	
Pentachlorophenol	168.5	200	200	0	84.2	40-115	168.1	0	30	J
Phenol	49.9	50	200	0.93	24.5	12-43	56.7	0	30	J
Pyrene	165.9	50	200	0	83	50-130	174.9	5.28	30	
Pyridine	79.2	200	200	0.47	39.4	10-71	102.3	0	30	J
Surr: 2,4,6-Tribromophenol	*360.9*	0	*500*	0	*72.2*	*38-115*	369.4	*2.33*	*40*	
Surr: 2-Fluorobiphenyl	*362.4*	0	*500*	0	*72.5*	*32-100*	395.4	*8.71*	*40*	
Surr: 2-Fluorophenol	*182.5*	0	*500*	0	*36.5*	*22-59*	203.4	*10.8*	*40*	
Surr: 4-Terphenyl-d14	*403.5*	0	*500*	0	*80.7*	*23-112*	424.5	*5.07*	*40*	
Surr: Nitrobenzene-d5	*290.2*	0	*500*	0	*58*	*31-93*	320.6	*9.95*	*40*	
Surr: Phenol-d6	*110.8*	0	*500*	0	*22.2*	*13-36*	120.7	*8.55*	*40*	

The following samples were analyzed in this batch: 1501294-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

MBLK	Sample ID: **VBLKW1-150114-R155817A**				Units: **µg/L**			Analysis Date: **1/14/2015 01:06 PM**		
Client ID:		Run ID: **VMS6_150114A**			SeqNo: **3108350**		Prep Date:		DF: **1**	

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	U	1.0								
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,3-Trichloropropane	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2,4-Trimethylbenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3,5-Trimethylbenzene	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromobenzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexanone	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Diethyl ether	U	1.0								
Ethyl acetate	U	5.0								
Ethyl methacrylate	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

Methylene chloride	U	5.0					
n-Butylbenzene	U	1.0					
n-Propylbenzene	U	1.0					
sec-Butylbenzene	U	1.0					
Styrene	U	1.0					
tert-Butylbenzene	U	1.0					
Tetrachloroethene	U	1.0					
Toluene	U	1.0					
trans-1,2-Dichloroethene	U	1.0					
trans-1,3-Dichloropropene	U	1.0					
Trichloroethene	U	1.0					
Trichlorofluoromethane	U	1.0					
Vinyl acetate	U	1.0					
Vinyl chloride	U	1.0					
Xylenes, Total	U	3.0					
Surr: 1,2-Dichloroethane-d4	*19.4*	0	*20*	0	*97*	*75-120*	0
Surr: 4-Bromofluorobenzene	*19.52*	0	*20*	0	*97.6*	*80-110*	0
Surr: Dibromofluoromethane	*19.22*	0	*20*	0	*96.1*	*85-115*	0
Surr: Toluene-d8	*19.29*	0	*20*	0	*96.4*	*85-110*	0

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

LCS	Sample ID: **VLCSW1-150114-R155817A**				Units: **µg/L**			Analysis Date: **1/14/2015 11:47 AM**		
Client ID:		Run ID: **VMS6_150114A**			SeqNo: **3108349**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20	1.0	20	0	100	80-130	0			
1,1,1-Trichloroethane	22.56	1.0	20	0	113	75-130	0			
1,1,2,2-Tetrachloroethane	19.81	1.0	20	0	99	75-130	0			
1,1,2-Trichloroethane	20.12	1.0	20	0	101	75-125	0			
1,1-Dichloroethane	19.63	1.0	20	0	98.2	75-133	0			
1,1-Dichloroethene	20.12	1.0	20	0	101	70-145	0			
1,2,3-Trichloropropane	19.92	1.0	20	0	99.6	75-125	0			
1,2,4-Trichlorobenzene	19.89	1.0	20	0	99.4	70-135	0			
1,2,4-Trimethylbenzene	20.06	1.0	20	0	100	75-130	0			
1,2-Dibromo-3-chloropropane	18.94	1.0	20	0	94.7	60-130	0			
1,2-Dibromoethane	22.39	1.0	20	0	112	80-150	0			
1,2-Dichlorobenzene	19.31	1.0	20	0	96.6	70-130	0			
1,2-Dichloroethane	20.89	1.0	20	0	104	78-125	0			
1,2-Dichloropropane	20.03	1.0	20	0	100	75-125	0			
1,3,5-Trimethylbenzene	20.25	1.0	20	0	101	75-130	0			
1,3-Dichlorobenzene	19.76	1.0	20	0	98.8	75-130	0			
1,4-Dichlorobenzene	19.69	1.0	20	0	98.4	75-130	0			
2-Butanone	18.05	5.0	20	0	90.2	55-150	0			
4-Methyl-2-pentanone	24.01	1.0	20	0	120	77-178	0			
Acetone	17.9	10	20	0	89.5	60-160	0			
Benzene	21.88	1.0	20	0	109	85-125	0			
Bromobenzene	19.18	1.0	20	0	95.9	80-125	0			
Bromodichloromethane	19.41	1.0	20	0	97	75-125	0			
Bromoform	18.63	1.0	20	0	93.2	60-125	0			
Bromomethane	20.77	1.0	20	0	104	30-185	0			
Carbon disulfide	21.01	1.0	20	0	105	60-165	0			
Carbon tetrachloride	21.99	1.0	20	0	110	65-140	0			
Chlorobenzene	19.85	1.0	20	0	99.2	80-120	0			
Chloroethane	17.94	1.0	20	0	89.7	50-140	0			
Chloroform	20.39	1.0	20	0	102	80-130	0			
Chloromethane	18.71	1.0	20	0	93.6	50-130	0			
cis-1,2-Dichloroethene	19.74	1.0	20	0	98.7	75-134	0			
cis-1,3-Dichloropropene	20.55	1.0	20	0	103	70-130	0			
Dibromochloromethane	17.35	1.0	20	0	86.8	60-115	0			
Dichlorodifluoromethane	16.11	1.0	20	0	80.6	20-120	0			
Ethylbenzene	19.91	1.0	20	0	99.6	85-125	0			
Isopropylbenzene	19.93	1.0	20	0	99.6	80-127	0			
Methylene chloride	18.72	5.0	20	0	93.6	75-140	0			
n-Butylbenzene	20.26	1.0	20	0	101	75-145	0			
n-Propylbenzene	19.61	1.0	20	0	98	78-120	0			
sec-Butylbenzene	20.44	1.0	20	0	102	80-134	0			
Styrene	20.64	1.0	20	0	103	85-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

tert-Butylbenzene	19.75	1.0	20	0	98.8	70-130	0
Tetrachloroethene	22.35	1.0	20	0	112	77-138	0
Toluene	21.14	1.0	20	0	106	85-125	0
trans-1,2-Dichloroethene	21.42	1.0	20	0	107	80-140	0
trans-1,3-Dichloropropene	20.1	1.0	20	0	100	81-123	0
Trichloroethene	21.18	1.0	20	0	106	84-130	0
Trichlorofluoromethane	20.31	1.0	20	0	102	60-140	0
Vinyl chloride	20.85	1.0	20	0	104	50-136	0
Xylenes, Total	60.57	3.0	60	0	101	80-126	0
Surr: 1,2-Dichloroethane-d4	*18.91*	0	*20*	0	*94.6*	*75-120*	0
Surr: 4-Bromofluorobenzene	*19.74*	0	*20*	0	*98.7*	*80-110*	0
Surr: Dibromofluoromethane	*20.1*	0	*20*	0	*100*	*85-115*	0
Surr: Toluene-d8	*20.08*	0	*20*	0	*100*	*85-110*	0

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: **1501459-01A MS** Units: **µg/L** Analysis Date: **1/14/2015 08:46 PM**
Client ID: Run ID: **VMS6_150114A** SeqNo: **3108361** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.05	1.0	20	0	100	80-130	0			
1,1,1-Trichloroethane	22.9	1.0	20	0	114	75-130	0			
1,1,2,2-Tetrachloroethane	18.68	1.0	20	0	93.4	75-130	0			
1,1,2-Trichloroethane	19.46	1.0	20	0	97.3	75-125	0			
1,1-Dichloroethane	20.27	1.0	20	0	101	75-133	0			
1,1-Dichloroethene	20.71	1.0	20	0	104	70-145	0			
1,2,3-Trichloropropane	19.34	1.0	20	0	96.7	75-125	0			
1,2,4-Trichlorobenzene	19.15	1.0	20	0	95.8	70-135	0			
1,2,4-Trimethylbenzene	21.05	1.0	20	0	105	75-130	0			
1,2-Dibromo-3-chloropropane	17.48	1.0	20	0	87.4	60-130	0			
1,2-Dibromoethane	21.33	1.0	20	0	107	80-150	0			
1,2-Dichlorobenzene	19.57	1.0	20	0	97.8	70-130	0			
1,2-Dichloroethane	21.56	1.0	20	0	108	78-125	0			
1,2-Dichloropropane	19.76	1.0	20	0	98.8	75-125	0			
1,3,5-Trimethylbenzene	21.46	1.0	20	0	107	75-130	0			
1,3-Dichlorobenzene	20.26	1.0	20	0	101	75-130	0			
1,4-Dichlorobenzene	20.02	1.0	20	0	100	75-130	0			
2-Butanone	17.98	5.0	20	0	89.9	55-150	0			
4-Methyl-2-pentanone	22.82	1.0	20	0	114	77-178	0			
Acetone	17.65	10	20	0	88.2	60-160	0			
Benzene	21.88	1.0	20	0	109	85-125	0			
Bromobenzene	19.14	1.0	20	0	95.7	80-125	0			
Bromodichloromethane	19.16	1.0	20	0	95.8	75-125	0			
Bromoform	16.27	1.0	20	0	81.4	60-125	0			
Bromomethane	12.6	1.0	20	0	63	30-185	0			
Carbon disulfide	19.59	1.0	20	0	98	60-165	0			
Carbon tetrachloride	21.3	1.0	20	0	106	65-140	0			
Chlorobenzene	20.14	1.0	20	0	101	80-120	0			
Chloroethane	18.31	1.0	20	0	91.6	50-140	0			
Chloroform	20.82	1.0	20	0	104	80-130	0			
Chloromethane	15.74	1.0	20	0	78.7	50-130	0			
cis-1,2-Dichloroethene	20.31	1.0	20	0	102	75-134	0			
cis-1,3-Dichloropropene	20.64	1.0	20	0	103	70-130	0			
Dibromochloromethane	16.18	1.0	20	0	80.9	60-115	0			
Dichlorodifluoromethane	16.21	1.0	20	0	81	20-120	0			
Ethylbenzene	20.39	1.0	20	0	102	85-125	0			
Isopropylbenzene	21.1	1.0	20	0	106	80-127	0			
Methylene chloride	19.09	5.0	20	0	95.4	75-140	0			
n-Butylbenzene	21.04	1.0	20	0	105	75-145	0			
n-Propylbenzene	20.89	1.0	20	0	104	78-120	0			
sec-Butylbenzene	21.76	1.0	20	0	109	80-134	0			
Styrene	20.86	1.0	20	0	104	85-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

tert-Butylbenzene	20.95	1.0	20	0	105	70-130	0
Tetrachloroethene	21.51	1.0	20	0	108	77-138	0
Toluene	21.17	1.0	20	0	106	85-125	0
trans-1,2-Dichloroethene	21.31	1.0	20	0	107	80-140	0
trans-1,3-Dichloropropene	19.17	1.0	20	0	95.8	81-123	0
Trichloroethene	21.66	1.0	20	0	108	84-130	0
Trichlorofluoromethane	20.65	1.0	20	0	103	60-140	0
Vinyl chloride	20.87	1.0	20	0	104	50-136	0
Xylenes, Total	62.4	3.0	60	0	104	80-126	0
Surr: 1,2-Dichloroethane-d4	*19.59*	0	*20*	0	*98*	*75-120*	0
Surr: 4-Bromofluorobenzene	*20.18*	0	*20*	0	*101*	*80-110*	0
Surr: Dibromofluoromethane	*19.82*	0	*20*	0	*99.1*	*85-115*	0
Surr: Toluene-d8	*19.01*	0	*20*	0	*95*	*85-110*	0

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: **1501459-02A MS** Units: **µg/L** Analysis Date: **1/14/2015 09:38 PM**
Client ID: Run ID: **VMS6_150114A** SeqNo: **3108363** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.81	1.0	20	0	104	80-130	0			
1,1,1-Trichloroethane	23.45	1.0	20	0	117	75-130	0			
1,1,2,2-Tetrachloroethane	19.64	1.0	20	0	98.2	75-130	0			
1,1,2-Trichloroethane	20.45	1.0	20	0	102	75-125	0			
1,1-Dichloroethane	20.79	1.0	20	0	104	75-133	0			
1,1-Dichloroethene	21.49	1.0	20	0	107	70-145	0			
1,2,3-Trichloropropane	19.41	1.0	20	0	97	75-125	0			
1,2,4-Trichlorobenzene	20.92	1.0	20	0	105	70-135	0			
1,2,4-Trimethylbenzene	22.05	1.0	20	0	110	75-130	0			
1,2-Dibromo-3-chloropropane	18.5	1.0	20	0	92.5	60-130	0			
1,2-Dibromoethane	22.56	1.0	20	0	113	80-150	0			
1,2-Dichlorobenzene	20.82	1.0	20	0	104	70-130	0			
1,2-Dichloroethane	21.34	1.0	20	0	107	78-125	0			
1,2-Dichloropropane	20.86	1.0	20	0	104	75-125	0			
1,3,5-Trimethylbenzene	22.32	1.0	20	0	112	75-130	0			
1,3-Dichlorobenzene	21.34	1.0	20	0	107	75-130	0			
1,4-Dichlorobenzene	20.85	1.0	20	0	104	75-130	0			
2-Butanone	17.98	5.0	20	0	89.9	55-150	0			
4-Methyl-2-pentanone	24.03	1.0	20	0	120	77-178	0			
Acetone	18.31	10	20	0	91.6	60-160	0			
Benzene	22.42	1.0	20	0	112	85-125	0			
Bromobenzene	19.93	1.0	20	0	99.6	80-125	0			
Bromodichloromethane	19.82	1.0	20	0	99.1	75-125	0			
Bromoform	17.6	1.0	20	0	88	60-125	0			
Bromomethane	16.35	1.0	20	0	81.8	30-185	0			
Carbon disulfide	21.13	1.0	20	0	106	60-165	0			
Carbon tetrachloride	22.01	1.0	20	0	110	65-140	0			
Chlorobenzene	21.01	1.0	20	0	105	80-120	0			
Chloroethane	19.06	1.0	20	0	95.3	50-140	0			
Chloroform	21.99	1.0	20	0	110	80-130	0			
Chloromethane	18.22	1.0	20	0	91.1	50-130	0			
cis-1,2-Dichloroethene	20.47	1.0	20	0	102	75-134	0			
cis-1,3-Dichloropropene	21.08	1.0	20	0	105	70-130	0			
Dibromochloromethane	16.92	1.0	20	0	84.6	60-115	0			
Dichlorodifluoromethane	16.5	1.0	20	0	82.5	20-120	0			
Ethylbenzene	21.29	1.0	20	0	106	85-125	0			
Isopropylbenzene	21.87	1.0	20	0	109	80-127	0			
Methylene chloride	19.73	5.0	20	0	98.6	75-140	0			
n-Butylbenzene	22.68	1.0	20	0	113	75-145	0			
n-Propylbenzene	21.9	1.0	20	0	110	78-120	0			
sec-Butylbenzene	22.93	1.0	20	0	115	80-134	0			
Styrene	21.63	1.0	20	0	108	85-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

tert-Butylbenzene	21.87	1.0	20	0	109	70-130	0
Tetrachloroethene	22.57	1.0	20	0	113	77-138	0
Toluene	21.51	1.0	20	0	108	85-125	0
trans-1,2-Dichloroethene	22.13	1.0	20	0	111	80-140	0
trans-1,3-Dichloropropene	19.63	1.0	20	0	98.2	81-123	0
Trichloroethene	22.29	1.0	20	0	111	84-130	0
Trichlorofluoromethane	21.23	1.0	20	0	106	60-140	0
Vinyl chloride	22.33	1.0	20	0	112	50-136	0
Xylenes, Total	64.16	3.0	60	0	107	80-126	0
Surr: 1,2-Dichloroethane-d4	*19.48*	0	*20*	0	*97.4*	*75-120*	0
Surr: 4-Bromofluorobenzene	*20.44*	0	*20*	0	*102*	*80-110*	0
Surr: Dibromofluoromethane	*20.03*	0	*20*	0	*100*	*85-115*	0
Surr: Toluene-d8	*19.38*	0	*20*	0	*96.9*	*85-110*	0

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

MSD	Sample ID: **1501459-01A MSD**				Units: **µg/L**			Analysis Date: **1/14/2015 09:12 PM**		
Client ID:		Run ID: **VMS6_150114A**			SeqNo: **3108362**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	19.41	1.0	20	0	97	80-130	20.05	3.24	30	
1,1,1-Trichloroethane	20.58	1.0	20	0	103	75-130	22.9	10.7	30	
1,1,2,2-Tetrachloroethane	18.34	1.0	20	0	91.7	75-130	18.68	1.84	30	
1,1,2-Trichloroethane	18.89	1.0	20	0	94.4	75-125	19.46	2.97	30	
1,1-Dichloroethane	18.96	1.0	20	0	94.8	75-133	20.27	6.68	30	
1,1-Dichloroethene	18.98	1.0	20	0	94.9	70-145	20.71	8.72	30	
1,2,3-Trichloropropane	18.13	1.0	20	0	90.6	75-125	19.34	6.46	30	
1,2,4-Trichlorobenzene	19.48	1.0	20	0	97.4	70-135	19.15	1.71	30	
1,2,4-Trimethylbenzene	20.24	1.0	20	0	101	75-130	21.05	3.92	30	
1,2-Dibromo-3-chloropropane	16.58	1.0	20	0	82.9	60-130	17.48	5.28	30	
1,2-Dibromoethane	20.69	1.0	20	0	103	80-150	21.33	3.05	30	
1,2-Dichlorobenzene	18.89	1.0	20	0	94.4	70-130	19.57	3.54	30	
1,2-Dichloroethane	20.07	1.0	20	0	100	78-125	21.56	7.16	30	
1,2-Dichloropropane	19.35	1.0	20	0	96.8	75-125	19.76	2.1	30	
1,3,5-Trimethylbenzene	20.65	1.0	20	0	103	75-130	21.46	3.85	30	
1,3-Dichlorobenzene	19.65	1.0	20	0	98.2	75-130	20.26	3.06	30	
1,4-Dichlorobenzene	19.34	1.0	20	0	96.7	75-130	20.02	3.46	30	
2-Butanone	16.3	5.0	20	0	81.5	55-150	17.98	9.8	30	
4-Methyl-2-pentanone	22.09	1.0	20	0	110	77-178	22.82	3.25	30	
Acetone	16.93	10	20	0	84.6	60-160	17.65	4.16	30	
Benzene	20.23	1.0	20	0	101	85-125	21.88	7.84	30	
Bromobenzene	18.3	1.0	20	0	91.5	80-125	19.14	4.49	30	
Bromodichloromethane	18.27	1.0	20	0	91.4	75-125	19.16	4.76	30	
Bromoform	15.78	1.0	20	0	78.9	60-125	16.27	3.06	30	
Bromomethane	13.63	1.0	20	0	68.2	30-185	12.6	7.85	30	
Carbon disulfide	17.94	1.0	20	0	89.7	60-165	19.59	8.79	30	
Carbon tetrachloride	19.48	1.0	20	0	97.4	65-140	21.3	8.93	30	
Chlorobenzene	19.15	1.0	20	0	95.8	80-120	20.14	5.04	30	
Chloroethane	17.11	1.0	20	0	85.6	50-140	18.31	6.78	30	
Chloroform	19.22	1.0	20	0	96.1	80-130	20.82	7.99	30	
Chloromethane	14.82	1.0	20	0	74.1	50-130	15.74	6.02	30	
cis-1,2-Dichloroethene	18.71	1.0	20	0	93.6	75-134	20.31	8.2	30	
cis-1,3-Dichloropropene	19.31	1.0	20	0	96.6	70-130	20.64	6.66	30	
Dibromochloromethane	15.43	1.0	20	0	77.2	60-115	16.18	4.75	30	
Dichlorodifluoromethane	14.57	1.0	20	0	72.8	20-120	16.21	10.7	30	
Ethylbenzene	19.4	1.0	20	0	97	85-125	20.39	4.98	30	
Isopropylbenzene	20.12	1.0	20	0	101	80-127	21.1	4.75	30	
Methylene chloride	18.05	5.0	20	0	90.2	75-140	19.09	5.6	30	
n-Butylbenzene	20.77	1.0	20	0	104	75-145	21.04	1.29	30	
n-Propylbenzene	20.06	1.0	20	0	100	78-120	20.89	4.05	30	
sec-Butylbenzene	21.23	1.0	20	0	106	80-134	21.76	2.47	30	
Styrene	19.78	1.0	20	0	98.9	85-125	20.86	5.31	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

tert-Butylbenzene	20.51	1.0	20	0	103	70-130	20.95	2.12	30
Tetrachloroethene	20.67	1.0	20	0	103	77-138	21.51	3.98	30
Toluene	19.6	1.0	20	0	98	85-125	21.17	7.7	30
trans-1,2-Dichloroethene	19.44	1.0	20	0	97.2	80-140	21.31	9.18	30
trans-1,3-Dichloropropene	18.21	1.0	20	0	91	81-123	19.17	5.14	30
Trichloroethene	19.97	1.0	20	0	99.8	84-130	21.66	8.12	30
Trichlorofluoromethane	18.32	1.0	20	0	91.6	60-140	20.65	12	30
Vinyl chloride	18.43	1.0	20	0	92.2	50-136	20.87	12.4	30
Xylenes, Total	58.68	3.0	60	0	97.8	80-126	62.4	6.14	30
Surr: 1,2-Dichloroethane-d4	*19.16*	0	*20*	0	*95.8*	*75-120*	19.59	*2.22*	*30*
Surr: 4-Bromofluorobenzene	*20.4*	0	*20*	0	*102*	*80-110*	20.18	*1.08*	*30*
Surr: Dibromofluoromethane	*20.25*	0	*20*	0	*101*	*85-115*	19.82	*2.15*	*30*
Surr: Toluene-d8	*19.19*	0	*20*	0	*96*	*85-110*	19.01	*0.942*	*30*

Client: LT Environmental, Inc
Work Order: 1501294
Project: N30 Remediation GW 1.7.15

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

MSD	Sample ID: **1501459-02A MSD**				Units: **µg/L**			Analysis Date: **1/14/2015 10:04 PM**		
Client ID:		Run ID: **VMS6_150114A**			SeqNo: **3108364**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.48	1.0	20	0	102	80-130	20.81	1.6	30	
1,1,1-Trichloroethane	22.72	1.0	20	0	114	75-130	23.45	3.16	30	
1,1,2,2-Tetrachloroethane	19.16	1.0	20	0	95.8	75-130	19.64	2.47	30	
1,1,2-Trichloroethane	19.75	1.0	20	0	98.8	75-125	20.45	3.48	30	
1,1-Dichloroethane	19.81	1.0	20	0	99	75-133	20.79	4.83	30	
1,1-Dichloroethene	19.79	1.0	20	0	99	70-145	21.49	8.24	30	
1,2,3-Trichloropropane	19.26	1.0	20	0	96.3	75-125	19.41	0.776	30	
1,2,4-Trichlorobenzene	21.01	1.0	20	0	105	70-135	20.92	0.429	30	
1,2,4-Trimethylbenzene	21.56	1.0	20	0	108	75-130	22.05	2.25	30	
1,2-Dibromo-3-chloropropane	18.22	1.0	20	0	91.1	60-130	18.5	1.53	30	
1,2-Dibromoethane	21.7	1.0	20	0	108	80-150	22.56	3.89	30	
1,2-Dichlorobenzene	20.35	1.0	20	0	102	70-130	20.82	2.28	30	
1,2-Dichloroethane	21.31	1.0	20	0	107	78-125	21.34	0.141	30	
1,2-Dichloropropane	20.77	1.0	20	0	104	75-125	20.86	0.432	30	
1,3,5-Trimethylbenzene	22.4	1.0	20	0	112	75-130	22.32	0.358	30	
1,3-Dichlorobenzene	20.91	1.0	20	0	105	75-130	21.34	2.04	30	
1,4-Dichlorobenzene	20.64	1.0	20	0	103	75-130	20.85	1.01	30	
2-Butanone	17.67	5.0	20	0	88.4	55-150	17.98	1.74	30	
4-Methyl-2-pentanone	23.94	1.0	20	0	120	77-178	24.03	0.375	30	
Acetone	19.33	10	20	0	96.6	60-160	18.31	5.42	30	
Benzene	21.75	1.0	20	0	109	85-125	22.42	3.03	30	
Bromobenzene	19.18	1.0	20	0	95.9	80-125	19.93	3.84	30	
Bromodichloromethane	19.18	1.0	20	0	95.9	75-125	19.82	3.28	30	
Bromoform	16.84	1.0	20	0	84.2	60-125	17.6	4.41	30	
Bromomethane	15.65	1.0	20	0	78.2	30-185	16.35	4.38	30	
Carbon disulfide	19.53	1.0	20	0	97.6	60-165	21.13	7.87	30	
Carbon tetrachloride	20.99	1.0	20	0	105	65-140	22.01	4.74	30	
Chlorobenzene	20.25	1.0	20	0	101	80-120	21.01	3.68	30	
Chloroethane	17.62	1.0	20	0	88.1	50-140	19.06	7.85	30	
Chloroform	20.23	1.0	20	0	101	80-130	21.99	8.34	30	
Chloromethane	15.79	1.0	20	0	79	50-130	18.22	14.3	30	
cis-1,2-Dichloroethene	19.11	1.0	20	0	95.6	75-134	20.47	6.87	30	
cis-1,3-Dichloropropene	20.33	1.0	20	0	102	70-130	21.08	3.62	30	
Dibromochloromethane	16.27	1.0	20	0	81.4	60-115	16.92	3.92	30	
Dichlorodifluoromethane	15.26	1.0	20	0	76.3	20-120	16.5	7.81	30	
Ethylbenzene	20.37	1.0	20	0	102	85-125	21.29	4.42	30	
Isopropylbenzene	21.65	1.0	20	0	108	80-127	21.87	1.01	30	
Methylene chloride	18.72	5.0	20	0	93.6	75-140	19.73	5.25	30	
n-Butylbenzene	22.73	1.0	20	0	114	75-145	22.68	0.22	30	
n-Propylbenzene	21.82	1.0	20	0	109	78-120	21.9	0.366	30	
sec-Butylbenzene	23.23	1.0	20	0	116	80-134	22.93	1.3	30	
Styrene	20.44	1.0	20	0	102	85-125	21.63	5.66	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

QC BATCH REPORT

Batch ID: **R155817A** Instrument ID **VMS6** Method: **SW8260**

tert-Butylbenzene	22.02	1.0	20	0	110	70-130	21.87	0.684	30
Tetrachloroethene	21.94	1.0	20	0	110	77-138	22.57	2.83	30
Toluene	20.7	1.0	20	0	104	85-125	21.51	3.84	30
trans-1,2-Dichloroethene	20.08	1.0	20	0	100	80-140	22.13	9.71	30
trans-1,3-Dichloropropene	19.07	1.0	20	0	95.4	81-123	19.63	2.89	30
Trichloroethene	21.47	1.0	20	0	107	84-130	22.29	3.75	30
Trichlorofluoromethane	19.58	1.0	20	0	97.9	60-140	21.23	8.09	30
Vinyl chloride	19.79	1.0	20	0	99	50-136	22.33	12.1	30
Xylenes, Total	61.91	3.0	60	0	103	80-126	64.16	3.57	30
Surr: 1,2-Dichloroethane-d4	*19.06*	0	*20*	0	*95.3*	*75-120*	19.48	*2.18*	*30*
Surr: 4-Bromofluorobenzene	*20.17*	0	*20*	0	*101*	*80-110*	20.44	*1.33*	*30*
Surr: Dibromofluoromethane	*20.33*	0	*20*	0	*102*	*85-115*	20.03	*1.49*	*30*
Surr: Toluene-d8	*19.34*	0	*20*	0	*96.7*	*85-110*	19.38	*0.207*	*30*

The following samples were analyzed in this batch: 1501294-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

1501294

ALS Laboratory Group

CHAIN OF CUSTODY

Failure to complete all section of this form may delay analysis.

COC number (for client tracking)

Page 1 of 1

CLIENT CONTACT AND REPORTING INFORMATION	INVOICE ADDRESS (if other than reporting address)
Company Name: Encana Oil & Gas (USA)	Company Name: Same
Project Manager: Chris Hines	Contact Name: Same
Address: 143 Diamond Avenue	Address: Same
Parachute, Co 81635 970-285-2653	
Phone: 970-285-2653	**PROJECT INFORMATION**
Email 1: ENCANACO-LTENV	Project ID: N30 Remediation
Email 2: —	Site: N30
SERVICE REQUEST (Express services subject to availability)	PO No: 033413001
☑ Regular (default)	ALS Quote No: NA
☐ Express (Pls specify date required _____) (express fee will apply)	

ANALYSIS REQUIRED (suite codes must be listed to attract suite prices)

Full List VOC'S | Full List SVOC's | DRO/GRO 1/9/15

ALS ID #	SAMPLE IDENTIFICATION (this description will appear on report)	MATRIX (a)	SAMPLING AND CONTAINER INFO Date	Time	Tot Bottle	REMARKS	CROSS THE REQUESTED ANALYSIS
1	20150107 - ENRP21MW	GW	1/7/2015	0920	5		X X X

CLIENT SIGNATURES

Client's Signature:

Client's Date and Time of Completion: 1/7/15 1405

For lab use only

Cooler Security Seal: ☐ sealed ☐ broken ☐ not available

Sample Temp: ☐ chilled 2.2 deg 'C ☐ ambient

No of Cooler Received: carton / cooler box

Courier Name: N.M. ALS

Received by (lab): Date and Time: 1/9/15 1230

Committed by: Date and Time:

Note: (a) DW (Drinking water), SW (Surface water), GW (Ground water), WW (Waste water), S (Soil), SL (Sludge), SE (Sediment), OS (Other solid material)

ALS Technichem (HK) Pty Ltd Address: 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong Tel: +852 2610 1044 Fax: +852 2610 2021 Email: HongKong@alsglobal.com

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **LTENV** Date/Time Received: **09-Jan-15 12:30**

Work Order: **1501294** Received by: **DS**

Checklist completed by Ann Preston (eSignature) 12-Jan-15 (Date) Reviewed by: Ann Preston (eSignature) 12-Jan-15 (Date)

Matrices: Groundwater

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
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 ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):	2.2°C		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Revision: 1