ANALYTICAL REPORT

August 26, 2016

EnCana Oil & Gas - Parachute, CO

Sample Delivery Group:	L854084
Samples Received:	08/17/2016
Project Number:	M23
Description:	M23
Site:	M23
Report To:	Brett Middleton 143 Diamond Avenue Parachute, CO 81635

Entire Report Reviewed By:

Shane Gambill
Technical Service Representative

20160816-M23 PIT SBNW1 6 FT L854084-01 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 08:15
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	2	08/19/16 07:11	08/19/16 19:28	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 20:45	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 14:08	LRL

20160816-M23 PIT SBNW1 12 FT L854084-02 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 08:25
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG899943	1	08/18/16 13:11	08/19/16 04:44	LTB
Calculated Results	WG900031	1	08/18/16 14:04	08/19/16 01:59	LTB
Mercury by Method 7471A	WG899876	1	08/17/16 19:21	08/18/16 11:54	NJB
Metals (ICP) by Method 6010B	WG900031	1	08/18/16 14:04	08/19/16 01:59	LTB
Metals (ICP) by Method 6010B	WG900031	5	08/18/16 14:04	08/19/16 06:26	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG900724	1	08/21/16 08:48	08/22/16 12:36	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	1	08/19/16 07:11	08/19/16 18:33	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 21:07	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 14:31	LRL
Wet Chemistry by Method 3060A/7196A	WG899715	1	08/18/16 10:58	08/18/16 17:55	KK
Wet Chemistry by Method 9045D	WG900098	1	08/20/16 09:36	08/20/16 09:36	KK
Wet Chemistry by Method 9050AMod	WG900332	1	08/19/16 10:09	08/19/16 10:09	AMC

20160816-M23 PIT SBNW2 6 FT L854084-03 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 08:50
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	1	08/19/16 07:11	08/19/16 18:44	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 21:29	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 14:53	LRL

20160816-M23 PIT SBNW2 12 FT L854084-04 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 09:00
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG899943	1	08/18/16 13:11	08/19/16 04:47	LTB
Calculated Results	WG900031	1	08/18/16 14:04	08/19/16 02:02	LTB
Mercury by Method 7471A	WG899876	1	08/17/16 19:21	08/18/16 11:56	NJB
Metals (ICP) by Method 6010B	WG900031	1	08/18/16 14:04	08/19/16 02:02	LTB
Metals (ICP) by Method 6010B	WG900031	5	08/18/16 14:04	08/19/16 06:28	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG900724	3	08/21/16 08:48	08/23/16 04:40	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	1	08/19/16 07:11	08/19/16 18:55	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 21:52	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 15:15	LRL
Wet Chemistry by Method 3060A/7196A	WG899715	1	08/18/16 10:58	08/18/16 17:56	KK
Wet Chemistry by Method 9045D	WG900098	1	08/20/16 09:36	08/20/16 09:36	KK
Wet Chemistry by Method 9050AMod	WG900332	1	08/19/16 10:09	08/19/16 10:09	AMC

20160816-M23 PIT SBSW2 6 FT L854084-05 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 09:30
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG899943	1	08/18/16 13:11	08/19/16 04:50	LTB
Calculated Results	WG900031	1	08/18/16 14:04	08/19/16 02:10	LTB
Mercury by Method 7471A	WG899876	1	08/17/16 19:21	08/18/16 12:04	NJB
Metals (ICP) by Method 6010B	WG900031	1	08/18/16 14:04	08/19/16 02:10	LTB
Metals (ICP) by Method 6010B	WG900031	10	08/18/16 14:04	08/19/16 06:31	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG900724	1	08/21/16 08:48	08/22/16 12:57	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	2	08/19/16 07:11	08/19/16 19:39	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 22:14	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 15:37	LRL
Wet Chemistry by Method 3060A/7196A	WG899715	1	08/18/16 10:58	08/18/16 17:56	KK
Wet Chemistry by Method 9045D	WG900098	1	08/20/16 09:36	08/20/16 09:36	KK
Wet Chemistry by Method 9050AMod	WG900332	1	08/19/16 10:09	08/19/16 10:09	AMC

20160816-M23 PIT SBSW2 12 FT L854084-06 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 09:35
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG899943	1	08/18/16 13:11	08/19/16 04:53	LTB
Calculated Results	WG900031	1	08/18/16 14:04	08/19/16 02:13	LTB
Mercury by Method 7471A	WG899876	1	08/17/16 19:21	08/18/16 12:07	NJB
Metals (ICP) by Method 6010B	WG900031	1	08/18/16 14:04	08/19/16 02:13	LTB
Metals (ICP) by Method 6010B	WG900031	5	08/18/16 14:04	08/19/16 06:34	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG900724	5	08/21/16 08:48	08/23/16 05:22	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	20	08/19/16 07:11	08/19/16 20:35	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 22:36	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 16:00	LRL
Wet Chemistry by Method 3060A/7196A	WG899715	1	08/18/16 10:58	08/18/16 17:57	KK
Wet Chemistry by Method 9045D	WG899712	1	08/19/16 10:18	08/19/16 10:18	KK
Wet Chemistry by Method 9050AMod	WG900332	1	08/19/16 10:09	08/19/16 10:09	AMC

20160816-M23 PIT SBSW1 6 FT L854084-07 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 09:50
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG899943	1	08/18/16 13:11	08/19/16 04:55	LTB
Calculated Results	WG900031	1	08/18/16 14:04	08/19/16 02:16	LTB
Mercury by Method 7471A	WG899876	1	08/17/16 19:21	08/18/16 12:09	NJB
Metals (ICP) by Method 6010B	WG900031	1	08/18/16 14:04	08/19/16 02:16	LTB
Metals (ICP) by Method 6010B	WG900031	5	08/18/16 14:04	08/19/16 06:37	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG900724	5	08/21/16 08:48	08/23/16 05:44	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900567	5	08/19/16 23:14	08/20/16 12:10	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/23/16 22:58	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 18:12	LRL
Wet Chemistry by Method 3060A/7196A	WG899715	1	08/18/16 10:58	08/18/16 17:58	KK
Wet Chemistry by Method 9045D	WG899712	1	08/19/16 10:18	08/19/16 10:18	KK
Wet Chemistry by Method 9050AMod	WG900332	1	08/19/16 10:09	08/19/16 10:09	AMC

20160816-M23 PIT SBSW1 12 FT L854084-08 Solid

Collected by: Matt Kasten
Collected date/time: 08/16/16 10:05
Received date/time: 08/17/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Semi-Volatile Organic Compounds (GC) by Method 8015	WG900293	2	08/19/16 07:11	08/19/16 19:06	DMG
Volatile Organic Compounds (GC) by Method 8015	WG901299	1	08/23/16 13:11	08/24/16 02:48	JAH
Volatile Organic Compounds (GC) by Method 8021	WG901299	1	08/23/16 13:11	08/24/16 18:34	LRL

All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Shane Gambill
Technical Service Representative

Sample Handling and Receiving

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

ESC Sample ID	Project Sample ID	Method
L854084-02	20160816-M23 PIT SBNW1 12 FT	9045D
L854084-04	20160816-M23 PIT SBNW2 12 FT	9045D
L854084-05	20160816-M23 PIT SBSW2 6 FT	9045D
L854084-06	20160816-M23 PIT SBSW2 12 FT	9045D
L854084-07	20160816-M23 PIT SBSW1 6 FT	9045D

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00192		0.000500	1	08/24/2016 14:08	WG901299
Toluene	0.00544		0.00500	1	08/24/2016 14:08	WG901299
Ethylbenzene	0.00227		0.000500	1	08/24/2016 14:08	WG901299
Total Xylene	0.00624		0.00150	1	08/24/2016 14:08	WG901299
TPH (GC/FID) Low Fraction	0.301		0.100	1	08/23/2016 20:45	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*95.5*		*59.0-128*		*08/23/2016 20:45*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*89.1*		*59.0-128*		*08/24/2016 14:08*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*98.7*		*54.0-144*		*08/24/2016 14:08*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*90.7*		*54.0-144*		*08/23/2016 20:45*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	78.9	J3	8.00	2	08/19/2016 19:28	WG900293
(S) o-Terphenyl	*52.6*		*50.0-150*		*08/19/2016 19:28*	WG900293

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	15.6		1	08/19/2016 04:44	WG899943

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	20.5		2.00	1	08/19/2016 01:59	WG900031

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	08/18/2016 17:55	WG899715

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.38		1	08/20/2016 09:36	WG900098

Sample Narrative:

9045D L854084-02 WG900098: 8.38 at 19.2c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	1460		1	08/19/2016 10:09	WG900332

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	08/18/2016 11:54	WG899876

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.48		2.00	1	08/19/2016 01:59	WG900031
Barium	1390		2.50	5	08/19/2016 06:26	WG900031
Cadmium	ND		0.500	1	08/19/2016 01:59	WG900031
Chromium	20.5		1.00	1	08/19/2016 01:59	WG900031
Copper	12.2		2.00	1	08/19/2016 01:59	WG900031
Lead	10.4		0.500	1	08/19/2016 01:59	WG900031
Nickel	14.5		2.00	1	08/19/2016 01:59	WG900031
Selenium	ND		2.00	1	08/19/2016 01:59	WG900031
Silver	ND		1.00	1	08/19/2016 01:59	WG900031
Zinc	38.4		5.00	1	08/19/2016 01:59	WG900031

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00122		0.000500	1	08/24/2016 14:31	WG901299
Toluene	ND		0.00500	1	08/24/2016 14:31	WG901299
Ethylbenzene	ND		0.000500	1	08/24/2016 14:31	WG901299
Total Xylene	0.00164		0.00150	1	08/24/2016 14:31	WG901299
TPH (GC/FID) Low Fraction	0.651		0.100	1	08/23/2016 21:07	WG901299

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	*98.7*		*59.0-128*		*08/23/2016 21:07*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*92.9*		*59.0-128*		*08/24/2016 14:31*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*101*		*54.0-144*		*08/24/2016 14:31*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*91.6*		*54.0-144*		*08/23/2016 21:07*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	114	J3	4.00	1	08/19/2016 18:33	WG900293
(S) o-Terphenyl	*42.8*	J2	*50.0-150*		*08/19/2016 18:33*	WG900293

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	08/22/2016 12:36	WG900724
Acenaphthene	ND		0.00600	1	08/22/2016 12:36	WG900724
Acenaphthylene	ND		0.00600	1	08/22/2016 12:36	WG900724
Benzo(a)anthracene	ND		0.00600	1	08/22/2016 12:36	WG900724
Benzo(a)pyrene	ND		0.00600	1	08/22/2016 12:36	WG900724
Benzo(b)fluoranthene	ND		0.00600	1	08/22/2016 12:36	WG900724
Benzo(g,h,i)perylene	ND		0.00600	1	08/22/2016 12:36	WG900724
Benzo(k)fluoranthene	ND		0.00600	1	08/22/2016 12:36	WG900724
Chrysene	ND		0.00600	1	08/22/2016 12:36	WG900724
Dibenz(a,h)anthracene	ND		0.00600	1	08/22/2016 12:36	WG900724
Fluoranthene	ND		0.00600	1	08/22/2016 12:36	WG900724
Fluorene	ND		0.00600	1	08/22/2016 12:36	WG900724
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/22/2016 12:36	WG900724
Naphthalene	ND		0.0200	1	08/22/2016 12:36	WG900724
Phenanthrene	ND		0.00600	1	08/22/2016 12:36	WG900724
Pyrene	ND		0.00600	1	08/22/2016 12:36	WG900724
1-Methylnaphthalene	ND		0.0200	1	08/22/2016 12:36	WG900724
2-Methylnaphthalene	ND		0.0200	1	08/22/2016 12:36	WG900724
2-Chloronaphthalene	ND		0.0200	1	08/22/2016 12:36	WG900724
(S) p-Terphenyl-d14	*83.6*		*32.2-131*		*08/22/2016 12:36*	WG900724
(S) Nitrobenzene-d5	*83.0*		*22.1-146*		*08/22/2016 12:36*	WG900724
(S) 2-Fluorobiphenyl	*95.0*		*40.6-122*		*08/22/2016 12:36*	WG900724

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00229		0.000500	1	08/24/2016 14:53	WG901299
Toluene	ND		0.00500	1	08/24/2016 14:53	WG901299
Ethylbenzene	0.00285		0.000500	1	08/24/2016 14:53	WG901299
Total Xylene	0.0109		0.00150	1	08/24/2016 14:53	WG901299
TPH (GC/FID) Low Fraction	0.578		0.100	1	08/23/2016 21:29	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*92.5*		*59.0-128*		*08/23/2016 21:29*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*87.5*		*59.0-128*		*08/24/2016 14:53*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*98.7*		*54.0-144*		*08/24/2016 14:53*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*89.7*		*54.0-144*		*08/23/2016 21:29*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	77.2	J3	4.00	1	08/19/2016 18:44	WG900293
(S) o-Terphenyl	*35.7*	J2	*50.0-150*		*08/19/2016 18:44*	WG900293

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	9.07		1	08/19/2016 04:47	WG899943

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	16.4		2.00	1	08/19/2016 02:02	WG900031

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	08/18/2016 17:56	WG899715

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94		1	08/20/2016 09:36	WG900098

Sample Narrative:

9045D L854084-04 WG900098: 7.94 at 18.9c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	2210		1	08/19/2016 10:09	WG900332

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0215		0.0200	1	08/18/2016 11:56	WG899876

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.27		2.00	1	08/19/2016 02:02	WG900031
Barium	3110		2.50	5	08/19/2016 06:28	WG900031
Cadmium	ND		0.500	1	08/19/2016 02:02	WG900031
Chromium	16.4		1.00	1	08/19/2016 02:02	WG900031
Copper	20.1		2.00	1	08/19/2016 02:02	WG900031
Lead	27.3		0.500	1	08/19/2016 02:02	WG900031
Nickel	15.0		2.00	1	08/19/2016 02:02	WG900031
Selenium	ND		2.00	1	08/19/2016 02:02	WG900031
Silver	ND		1.00	1	08/19/2016 02:02	WG900031
Zinc	48.4		5.00	1	08/19/2016 02:02	WG900031

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00363		0.000500	1	08/24/2016 15:15	WG901299
Toluene	ND		0.00500	1	08/24/2016 15:15	WG901299
Ethylbenzene	0.00180		0.000500	1	08/24/2016 15:15	WG901299
Total Xylene	0.00697		0.00150	1	08/24/2016 15:15	WG901299
TPH (GC/FID) Low Fraction	0.810		0.100	1	08/23/2016 21:52	WG901299

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	*93.3*		*59.0-128*		*08/23/2016 21:52*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*90.2*		*59.0-128*		*08/24/2016 15:15*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*98.6*		*54.0-144*		*08/24/2016 15:15*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*85.7*		*54.0-144*		*08/23/2016 21:52*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	62.3	J3	4.00	1	08/19/2016 18:55	WG900293
(S) o-Terphenyl	*57.3*		*50.0-150*		*08/19/2016 18:55*	WG900293

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0289		0.0180	3	08/23/2016 04:40	WG900724
Acenaphthene	0.0221		0.0180	3	08/23/2016 04:40	WG900724
Acenaphthylene	ND		0.0180	3	08/23/2016 04:40	WG900724
Benzo(a)anthracene	ND		0.0180	3	08/23/2016 04:40	WG900724
Benzo(a)pyrene	ND		0.0180	3	08/23/2016 04:40	WG900724
Benzo(b)fluoranthene	ND		0.0180	3	08/23/2016 04:40	WG900724
Benzo(g,h,i)perylene	ND		0.0180	3	08/23/2016 04:40	WG900724
Benzo(k)fluoranthene	ND		0.0180	3	08/23/2016 04:40	WG900724
Chrysene	ND		0.0180	3	08/23/2016 04:40	WG900724
Dibenz(a,h)anthracene	ND		0.0180	3	08/23/2016 04:40	WG900724
Fluoranthene	ND		0.0180	3	08/23/2016 04:40	WG900724
Fluorene	0.0625		0.0180	3	08/23/2016 04:40	WG900724
Indeno(1,2,3-cd)pyrene	ND		0.0180	3	08/23/2016 04:40	WG900724
Naphthalene	0.144		0.0600	3	08/23/2016 04:40	WG900724
Phenanthrene	0.0915		0.0180	3	08/23/2016 04:40	WG900724
Pyrene	0.0211		0.0180	3	08/23/2016 04:40	WG900724
1-Methylnaphthalene	0.182		0.0600	3	08/23/2016 04:40	WG900724
2-Methylnaphthalene	0.388		0.0600	3	08/23/2016 04:40	WG900724
2-Chloronaphthalene	ND		0.0600	3	08/23/2016 04:40	WG900724
(S) p-Terphenyl-d14	*93.3*		*32.2-131*		*08/23/2016 04:40*	WG900724
(S) Nitrobenzene-d5	*133*		*22.1-146*		*08/23/2016 04:40*	WG900724
(S) 2-Fluorobiphenyl	*95.3*		*40.6-122*		*08/23/2016 04:40*	WG900724

Sample Narrative:

8270C-SIM L854084-04 WG900724: Dilution due to matrix

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.4		1	08/19/2016 04:50	WG899943

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	21.2		2.00	1	08/19/2016 02:10	WG900031

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	08/18/2016 17:56	WG899715

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.96		1	08/20/2016 09:36	WG900098

Sample Narrative:

9045D L854084-05 WG900098: 7.96 at 19.0c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	1590		1	08/19/2016 10:09	WG900332

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	08/18/2016 12:04	WG899876

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	6.14		2.00	1	08/19/2016 02:10	WG900031
Barium	3540		5.00	10	08/19/2016 06:31	WG900031
Cadmium	ND		0.500	1	08/19/2016 02:10	WG900031
Chromium	21.2		1.00	1	08/19/2016 02:10	WG900031
Copper	12.9		2.00	1	08/19/2016 02:10	WG900031
Lead	11.5		0.500	1	08/19/2016 02:10	WG900031
Nickel	13.6		2.00	1	08/19/2016 02:10	WG900031
Selenium	ND		2.00	1	08/19/2016 02:10	WG900031
Silver	ND		1.00	1	08/19/2016 02:10	WG900031
Zinc	33.6		5.00	1	08/19/2016 02:10	WG900031

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00246		0.000500	1	08/24/2016 15:37	WG901299
Toluene	ND		0.00500	1	08/24/2016 15:37	WG901299
Ethylbenzene	0.00280		0.000500	1	08/24/2016 15:37	WG901299
Total Xylene	0.00935		0.00150	1	08/24/2016 15:37	WG901299
TPH (GC/FID) Low Fraction	0.952		0.100	1	08/23/2016 22:14	WG901299

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	*94.4*		*59.0-128*		*08/23/2016 22:14*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*89.2*		*59.0-128*		*08/24/2016 15:37*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*100*		*54.0-144*		*08/24/2016 15:37*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*90.6*		*54.0-144*		*08/23/2016 22:14*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	136	J3	8.00	2	08/19/2016 19:39	WG900293
(S) o-Terphenyl	*29.3*	J2	*50.0-150*		*08/19/2016 19:39*	WG900293

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	08/22/2016 12:57	WG900724
Acenaphthene	ND		0.00600	1	08/22/2016 12:57	WG900724
Acenaphthylene	ND		0.00600	1	08/22/2016 12:57	WG900724
Benzo(a)anthracene	ND		0.00600	1	08/22/2016 12:57	WG900724
Benzo(a)pyrene	ND		0.00600	1	08/22/2016 12:57	WG900724
Benzo(b)fluoranthene	ND		0.00600	1	08/22/2016 12:57	WG900724
Benzo(g,h,i)perylene	ND		0.00600	1	08/22/2016 12:57	WG900724
Benzo(k)fluoranthene	ND		0.00600	1	08/22/2016 12:57	WG900724
Chrysene	ND		0.00600	1	08/22/2016 12:57	WG900724
Dibenz(a,h)anthracene	ND		0.00600	1	08/22/2016 12:57	WG900724
Fluoranthene	ND		0.00600	1	08/22/2016 12:57	WG900724
Fluorene	ND		0.00600	1	08/22/2016 12:57	WG900724
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/22/2016 12:57	WG900724
Naphthalene	ND		0.0200	1	08/22/2016 12:57	WG900724
Phenanthrene	ND		0.00600	1	08/22/2016 12:57	WG900724
Pyrene	ND		0.00600	1	08/22/2016 12:57	WG900724
1-Methylnaphthalene	ND		0.0200	1	08/22/2016 12:57	WG900724
2-Methylnaphthalene	0.0321		0.0200	1	08/22/2016 12:57	WG900724
2-Chloronaphthalene	ND		0.0200	1	08/22/2016 12:57	WG900724
(S) p-Terphenyl-d14	*75.1*		*32.2-131*		*08/22/2016 12:57*	WG900724
(S) Nitrobenzene-d5	*72.0*		*22.1-146*		*08/22/2016 12:57*	WG900724
(S) 2-Fluorobiphenyl	*82.2*		*40.6-122*		*08/22/2016 12:57*	WG900724

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.3		1	08/19/2016 04:53	WG899943

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	24.7		2.00	1	08/19/2016 02:13	WG900031

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	08/18/2016 17:57	WG899715

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.47		1	08/19/2016 10:18	WG899712

Sample Narrative:

9045D L854084-06 WG899712: 8.47 at 19.5c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	2670		1	08/19/2016 10:09	WG900332

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	08/18/2016 12:07	WG899876

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.99		2.00	1	08/19/2016 02:13	WG900031
Barium	2930		2.50	5	08/19/2016 06:34	WG900031
Cadmium	ND		0.500	1	08/19/2016 02:13	WG900031
Chromium	24.7		1.00	1	08/19/2016 02:13	WG900031
Copper	19.9		2.00	1	08/19/2016 02:13	WG900031
Lead	19.6		0.500	1	08/19/2016 02:13	WG900031
Nickel	18.0		2.00	1	08/19/2016 02:13	WG900031
Selenium	ND		2.00	1	08/19/2016 02:13	WG900031
Silver	ND		1.00	1	08/19/2016 02:13	WG900031
Zinc	51.3		5.00	1	08/19/2016 02:13	WG900031

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00327		0.000500	1	08/24/2016 16:00	WG901299
Toluene	ND		0.00500	1	08/24/2016 16:00	WG901299
Ethylbenzene	0.00144		0.000500	1	08/24/2016 16:00	WG901299
Total Xylene	0.00423		0.00150	1	08/24/2016 16:00	WG901299
TPH (GC/FID) Low Fraction	0.379		0.100	1	08/23/2016 22:36	WG901299

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	*96.8*		*59.0-128*		*08/23/2016 22:36*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*90.7*		*59.0-128*		*08/24/2016 16:00*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*99.3*		*54.0-144*		*08/24/2016 16:00*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*89.6*		*54.0-144*		*08/23/2016 22:36*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	314	J3	80.0	20	08/19/2016 20:35	WG900293
(S) o-Terphenyl	*74.1*	J7	*50.0-150*		*08/19/2016 20:35*	WG900293

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0340		0.0300	5	08/23/2016 05:22	WG900724
Acenaphthene	ND		0.0300	5	08/23/2016 05:22	WG900724
Acenaphthylene	ND		0.0300	5	08/23/2016 05:22	WG900724
Benzo(a)anthracene	ND		0.0300	5	08/23/2016 05:22	WG900724
Benzo(a)pyrene	ND		0.0300	5	08/23/2016 05:22	WG900724
Benzo(b)fluoranthene	ND		0.0300	5	08/23/2016 05:22	WG900724
Benzo(g,h,i)perylene	ND		0.0300	5	08/23/2016 05:22	WG900724
Benzo(k)fluoranthene	ND		0.0300	5	08/23/2016 05:22	WG900724
Chrysene	ND		0.0300	5	08/23/2016 05:22	WG900724
Dibenz(a,h)anthracene	ND		0.0300	5	08/23/2016 05:22	WG900724
Fluoranthene	ND		0.0300	5	08/23/2016 05:22	WG900724
Fluorene	0.0357		0.0300	5	08/23/2016 05:22	WG900724
Indeno(1,2,3-cd)pyrene	ND		0.0300	5	08/23/2016 05:22	WG900724
Naphthalene	ND		0.100	5	08/23/2016 05:22	WG900724
Phenanthrene	0.0568		0.0300	5	08/23/2016 05:22	WG900724
Pyrene	ND		0.0300	5	08/23/2016 05:22	WG900724
1-Methylnaphthalene	0.102		0.100	5	08/23/2016 05:22	WG900724
2-Methylnaphthalene	0.218		0.100	5	08/23/2016 05:22	WG900724
2-Chloronaphthalene	ND		0.100	5	08/23/2016 05:22	WG900724
(S) p-Terphenyl-d14	*98.8*		*32.2-131*		*08/23/2016 05:22*	WG900724
(S) Nitrobenzene-d5	*137*		*22.1-146*		*08/23/2016 05:22*	WG900724
(S) 2-Fluorobiphenyl	*97.3*		*40.6-122*		*08/23/2016 05:22*	WG900724

Sample Narrative:

8270C-SIM L854084-06 WG900724: Dilution due to matrix

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.3		1	08/19/2016 04:55	WG899943

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	24.1		2.00	1	08/19/2016 02:16	WG900031

Wet Chemistry by Method 3060A/7196A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Hexavalent	ND		2.00	1	08/18/2016 17:58	WG899715

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.46		1	08/19/2016 10:18	WG899712

Sample Narrative:

9045D L854084-07 WG899712: 8.46 at 19.1c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	1330		1	08/19/2016 10:09	WG900332

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	08/18/2016 12:09	WG899876

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.19		2.00	1	08/19/2016 02:16	WG900031
Barium	2810		2.50	5	08/19/2016 06:37	WG900031
Cadmium	ND		0.500	1	08/19/2016 02:16	WG900031
Chromium	24.1		1.00	1	08/19/2016 02:16	WG900031
Copper	12.2		2.00	1	08/19/2016 02:16	WG900031
Lead	8.97		0.500	1	08/19/2016 02:16	WG900031
Nickel	14.3		2.00	1	08/19/2016 02:16	WG900031
Selenium	ND		2.00	1	08/19/2016 02:16	WG900031
Silver	ND		1.00	1	08/19/2016 02:16	WG900031
Zinc	31.5		5.00	1	08/19/2016 02:16	WG900031

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00181		0.000500	1	08/24/2016 18:12	WG901299
Toluene	ND		0.00500	1	08/24/2016 18:12	WG901299
Ethylbenzene	0.00229		0.000500	1	08/24/2016 18:12	WG901299
Total Xylene	0.00851		0.00150	1	08/24/2016 18:12	WG901299
TPH (GC/FID) Low Fraction	0.534		0.100	1	08/23/2016 22:58	WG901299

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) a,a,a-Trifluorotoluene(FID)	*91.1*		*59.0-128*		*08/23/2016 22:58*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*90.7*		*59.0-128*		*08/24/2016 18:12*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*101*		*54.0-144*		*08/24/2016 18:12*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*90.6*		*54.0-144*		*08/23/2016 22:58*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	58.5		20.0	5	08/20/2016 12:10	WG900567
(S) o-Terphenyl	*58.2*		*50.0-150*		*08/20/2016 12:10*	WG900567

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0300	5	08/23/2016 05:44	WG900724
Acenaphthene	ND		0.0300	5	08/23/2016 05:44	WG900724
Acenaphthylene	ND		0.0300	5	08/23/2016 05:44	WG900724
Benzo(a)anthracene	ND		0.0300	5	08/23/2016 05:44	WG900724
Benzo(a)pyrene	ND		0.0300	5	08/23/2016 05:44	WG900724
Benzo(b)fluoranthene	ND		0.0300	5	08/23/2016 05:44	WG900724
Benzo(g,h,i)perylene	ND		0.0300	5	08/23/2016 05:44	WG900724
Benzo(k)fluoranthene	ND		0.0300	5	08/23/2016 05:44	WG900724
Chrysene	ND		0.0300	5	08/23/2016 05:44	WG900724
Dibenz(a,h)anthracene	ND		0.0300	5	08/23/2016 05:44	WG900724
Fluoranthene	ND		0.0300	5	08/23/2016 05:44	WG900724
Fluorene	ND		0.0300	5	08/23/2016 05:44	WG900724
Indeno(1,2,3-cd)pyrene	ND		0.0300	5	08/23/2016 05:44	WG900724
Naphthalene	ND		0.100	5	08/23/2016 05:44	WG900724
Phenanthrene	ND		0.0300	5	08/23/2016 05:44	WG900724
Pyrene	ND		0.0300	5	08/23/2016 05:44	WG900724
1-Methylnaphthalene	ND		0.100	5	08/23/2016 05:44	WG900724
2-Methylnaphthalene	ND		0.100	5	08/23/2016 05:44	WG900724
2-Chloronaphthalene	ND		0.100	5	08/23/2016 05:44	WG900724
(S) p-Terphenyl-d14	*103*		*32.2-131*		*08/23/2016 05:44*	WG900724
(S) Nitrobenzene-d5	*121*		*22.1-146*		*08/23/2016 05:44*	WG900724
(S) 2-Fluorobiphenyl	*95.2*		*40.6-122*		*08/23/2016 05:44*	WG900724

Sample Narrative:

8270C-SIM L854084-07 WG900724: Dilution due to matrix

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00205		0.000500	1	08/24/2016 18:34	WG901299
Toluene	ND		0.00500	1	08/24/2016 18:34	WG901299
Ethylbenzene	0.000837		0.000500	1	08/24/2016 18:34	WG901299
Total Xylene	0.00240		0.00150	1	08/24/2016 18:34	WG901299
TPH (GC/FID) Low Fraction	0.530		0.100	1	08/24/2016 02:48	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*93.3*		*59.0-128*		*08/24/2016 02:48*	WG901299
(S) a,a,a-Trifluorotoluene(FID)	*91.8*		*59.0-128*		*08/24/2016 18:34*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*101*		*54.0-144*		*08/24/2016 18:34*	WG901299
(S) a,a,a-Trifluorotoluene(PID)	*86.9*		*54.0-144*		*08/24/2016 02:48*	WG901299

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) High Fraction	100	J3	8.00	2	08/19/2016 19:06	WG900293
(S) o-Terphenyl	*62.1*		*50.0-150*		*08/19/2016 19:06*	WG900293

Abbreviations and Definitions

SDG	Sample Delivery Group.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.

Qualifier	Description
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660
Alaska	UST-080
Arizona	AZ0612
Arkansas	88-0469
California	01157CA
Colorado	TN00003
Conneticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia [1]	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky [1]	90010
Kentucky [2]	16
Louisiana	AI30792
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086
Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey–NELAP	TN002
New Mexico	TN00003
New York	11742
North Carolina	Env375
North Carolina [1]	DW21704
North Carolina [2]	41
North Dakota	R-140
Ohio–VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	221
South Carolina	84004
South Dakota	n/a
Tennessee [1 4]	2006
Texas	T 104704245-07-TX
Texas [5]	LAB0152
Utah	6157585858
Vermont	VT2006
Virginia	109
Washington	C1915
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

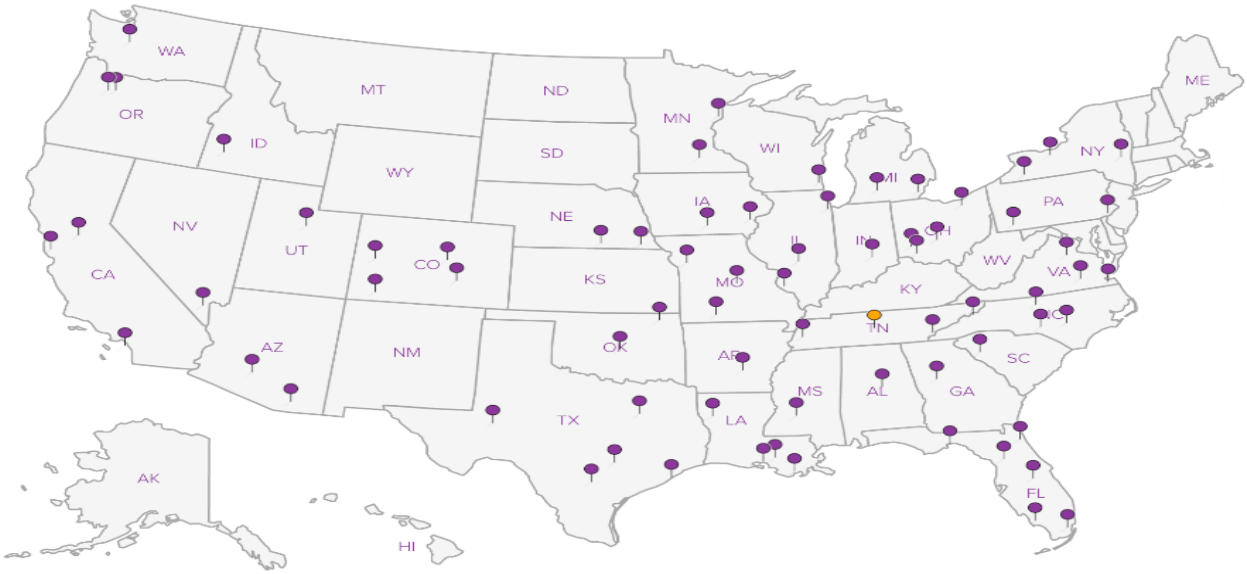
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01
A2LA – ISO 17025 [5]	1461.02
Canada	1461.01
EPA–Crypto	TN00003
AIHA	100789
DOD	1461.01
USDA	S-67674

[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



* 623 - 2260

Chain of Custody Page 1 of 1

ESC LAB SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 854084

G242

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Company Name/Address:
Encana Oil & Gas (USA)
143 Diamond Avenue
Parachute, CO 81635
ENCANACO

Billing Information:
Brett Middleton
143 Diamond Avenue
Parachute, CO 81635
970-285-2653

Report to:
Brett Middleton

Email To:
brett.middleton@encana.com

Project Description: M23 Pit

City/State Collected: Parachute, CO

Phone: 970-285-2739

Fax:

Client Project # M23

Lab Project #

Collected by (print): Matt Kosh

Site/Facility ID # M23

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed

Email? ___No ✓Yes
FAX? ✓No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEXGRO/DRO - 8021/8015	SV8270PAHSIM - 8270SIM	SPCON - 9050AMod	SAR - Calc.	RCRA8 Metals + Cu, Ni, and Zn - 6010/7470	CR6SS - 3060A/7196	CR3 - Calc.	Rem./Contaminant	Sample # (lab only)
20160816-M23PA SBNW1 6'	Grab	SS	6'-8'	8/16/16	815	3	X								01
20160816-M23 Pit SBNW1 12'			12'-14'		825	3	X	X	X	X	X	X	X		02
20160816-M23 Pit SBNW2 6'			6-8'		850	3	X								03
20160816-M23 Pit SBNW2 12'			12-14		900	3	X	X	X	X	X	X	X		04
20160816-M23 Pit SBSW2 6'			6-8'		930	3	X	X	X	X	X	X	X		05
20160816-M23 Pit SBSW2 12			12-14'		935	2	X	X	X	X	X	X	X		06
20160816-M23 Pit SBSW01 6'			6-8'		950	3	X	X	X	X	X	X	X		07
20160816-M23 Pit SBSW1 12'	↓	↓	12-14'	↓	1005	3	X								08

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Flow _____ Other _____

Remarks:

Hold #

Condition: (lab use only) OK Gw

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/16/16	1800	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/16/16	1800	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: 3.2 °C Bottles Received: 23-4oz

Date: 8/17/16 Time: 900

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Checklist

Client: ENCANCO SDG# 954684

Cooler Received/Opened On: 8-17-16 By Jeremy Watkins

Temperature Upon Receipt: 3.7 °c

(Signature)

Cooler Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			✓
Were custody papers properly filled out (ink, signed, etc.)?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were correct preservatives used?			✓
Were all applicable sample containers checked for preservation? (Any samples not in accepted pH range noted on COC .)			✓
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated? (If yes see attached NCF)		✓	