Nicholson GeoSolutions LLC
3433 East Lake Drive
Centennial, CO 80121

November 8, 2016

Mr. Derek Johnson
Linn Energy, LLC
235 Callahan Avenue
Parachute, Colorado 81635

Subject: OM I-02 Small Landfarm Sampling Results

Dear Derek:

Nicholson GeoSolutions LLC was retained by Linn Energy, LLC (Linn) to conduct soil sampling of the small landfarm on the OM I-02 well pad in the Garden Gulch area, Garfield County, Colorado.

The sample was composited from 8 subsamples collected at depths of about 18 inches across the surface of the landfarm on October 8th, 2016. This sample was analyzed for Total Volatile Petroleum Hydrocarbons (TVPH – gasoline range), Total Extractable Petroleum Hydrocarbons (TEPH – diesel and motor oil range), PAHs, BTEX, SAR, pH, conductivity, and metals to evaluate compliance with the COGCC Table 910-1 standards and whether additional treatment is necessary. The laboratory report is attached.

All parameters were below the standards except for arsenic at 2.17 mg/kg and specific conductance at 4.3 mmhos/cm. Treatment of this material is now complete. Due to the elevated conductivity, it should be buried at least three feet deep.

Nicholson GeoSolutions LLC

David K. Nicholson, P.G.
Principal Geologist

APPENDIX A
Laboratory Report

ANALYTICAL REPORT

October 19, 2016

Linn Energy - Denver, CO

Sample Delivery Group:	L865265
Samples Received:	10/11/2016
Project Number:	
Description:	Pit Reclamation

Report To: Dave Nicholson
1999 Broadway, Suite 3700
Denver, CO 80202

Entire Report Reviewed By:

Mark W. Beasley
Technical Service Representative

OM K-15 L865265-01 Solid

Collected by: DK Nicholson
Collected date/time: 10/08/16 13:00
Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:19	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:26	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 09:48	RDS
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	2	10/13/16 16:21	10/14/16 10:51	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 13:41	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 02:17	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:27	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

OM K-15 SM L865265-02 Solid

Collected by: DK Nicholson
Collected date/time: 10/08/16 12:50
Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:21	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:28	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:18	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	1	10/13/16 16:21	10/14/16 09:18	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 12:33	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 02:41	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:27	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

OM I-02 SM L865265-03 Solid

Collected by: DK Nicholson
Collected date/time: 10/08/16 10:40
Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:24	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:31	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:26	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:06	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	2	10/13/16 16:21	10/14/16 10:05	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 13:58	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 03:05	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:28	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

OM L-15 L865265-04 Solid

Collected by: DK Nicholson
Collected date/time: 10/08/16 13:30
Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:32	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:33	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:29	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:09	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	2	10/13/16 16:21	10/14/16 10:28	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 12:15	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 03:30	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:28	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

OM B-10 L865265-05 Solid

Collected by: DK Nicholson | Collected date/time: 10/08/16 14:20 | Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:35	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:36	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:32	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:12	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	5	10/13/16 16:21	10/14/16 12:46	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 14:33	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 03:54	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:29	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

OM C-10 L865265-06 Solid

Collected by: DK Nicholson | Collected date/time: 10/08/16 15:00 | Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:38	LTB
Mercury by Method 7471A	WG916215	1	10/11/16 20:20	10/13/16 12:38	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:34	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:14	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	5	10/13/16 16:21	10/14/16 11:37	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 14:51	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 04:18	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:30	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

LR J-15 L865265-07 Solid

Collected by: DK Nicholson | Collected date/time: 10/09/16 09:20 | Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:41	LTB
Mercury by Method 7471A	WG916458	1	10/12/16 13:09	10/13/16 09:30	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:37	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:17	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	1	10/13/16 16:21	10/14/16 09:41	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 10:51	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 04:43	LRL
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:30	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

LR M-15 L865265-08 Solid

Collected by: DK Nicholson | Collected date/time: 10/09/16 09:50 | Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG917714	1	10/17/16 12:38	10/18/16 09:43	LTB
Mercury by Method 7471A	WG916458	1	10/12/16 13:09	10/13/16 09:33	NJB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 08:40	LTB
Metals (ICP) by Method 6010B	WG917158	1	10/17/16 12:00	10/18/16 10:20	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG916689	1	10/13/16 16:21	10/14/16 06:36	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG916684	10	10/17/16 17:37	10/18/16 13:08	ACM
Volatile Organic Compounds (GC) by Method 8015/8021	WG917405	1	10/14/16 14:12	10/16/16 05:07	LRL

LR M-15 L865265-08 Solid

Collected by: DK Nicholson
Collected date/time: 10/09/16 09:50
Received date/time: 10/11/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 3060A/7196A	WG916433	1	10/17/16 14:00	10/18/16 12:30	JJL
Wet Chemistry by Method 9045D	WG916430	1	10/18/16 10:42	10/18/16 13:48	MHM
Wet Chemistry by Method 9050AMod	WG916748	1	10/13/16 22:38	10/13/16 22:38	JLJ

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.

Mark W. Beasley
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
L865265-01	OM K-15	9045D
L865265-02	OM K-15 SM	9045D
L865265-03	OM I-02 SM	9045D
L865265-04	OM L-15	9045D
L865265-05	OM B-10	9045D
L865265-06	OM C-10	9045D
L865265-07	LR J-15	9045D
L865265-08	LR M-15	9045D

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.2		1	10/18/2016 09:24	WG917714

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	10/18/2016 12:28	WG916433

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.18		1	10/18/2016 13:48	WG916430

Sample Narrative:

9045D L865265-03 WG916430: 8.18 at 20.5

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	4300		1	10/13/2016 22:38	WG916748

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0565		0.0200	1	10/13/2016 12:31	WG916215

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.17		2.00	1	10/18/2016 08:26	WG917158
Barium	512		0.500	1	10/18/2016 08:26	WG917158
Boron	ND		10.0	1	10/18/2016 08:26	WG917158
Cadmium	ND		0.500	1	10/18/2016 08:26	WG917158
Chromium	46.9		1.00	1	10/18/2016 08:26	WG917158
Copper	19.4		2.00	1	10/18/2016 08:26	WG917158
Lead	15.6		0.500	1	10/18/2016 08:26	WG917158
Nickel	31.0		2.00	1	10/18/2016 08:26	WG917158
Selenium	ND		2.00	1	10/18/2016 08:26	WG917158
Silver	ND		1.00	1	10/18/2016 08:26	WG917158
Zinc	52.7		5.00	1	10/18/2016 10:06	WG917158

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00135		0.000500	1	10/16/2016 03:05	WG917405
Toluene	ND		0.00500	1	10/16/2016 03:05	WG917405
Ethylbenzene	0.000757		0.000500	1	10/16/2016 03:05	WG917405
Total Xylene	ND		0.00150	1	10/16/2016 03:05	WG917405
TPH (GC/FID) Low Fraction	0.106		0.100	1	10/16/2016 03:05	WG917405
(S) a,a,a-Trifluorotoluene(FID)	*100*		*59.0-128*		*10/16/2016 03:05*	WG917405
(S) a,a,a-Trifluorotoluene(PID)	*104*		*54.0-144*		*10/16/2016 03:05*	WG917405

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	156		40.0	10	10/18/2016 13:58	WG916684
C28-C40 Oil Range	69.0		40.0	10	10/18/2016 13:58	WG916684
(S) o-Terphenyl	*103*		*50.0-150*		*10/18/2016 13:58*	WG916684

Sample Narrative:

8015 L865265-03 WG916684: Dilution due to matrix

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	0.0137		0.0120	2	10/14/2016 10:05	WG916689
Acenaphthene	ND		0.0120	2	10/14/2016 10:05	WG916689
Acenaphthylene	ND		0.0120	2	10/14/2016 10:05	WG916689
Benzo(a)anthracene	ND		0.0120	2	10/14/2016 10:05	WG916689
Benzo(a)pyrene	ND		0.0120	2	10/14/2016 10:05	WG916689
Benzo(b)fluoranthene	ND		0.0120	2	10/14/2016 10:05	WG916689
Benzo(g,h,i)perylene	ND	J3	0.0120	2	10/14/2016 10:05	WG916689
Benzo(k)fluoranthene	ND		0.0120	2	10/14/2016 10:05	WG916689
Chrysene	ND		0.0120	2	10/14/2016 10:05	WG916689
Dibenz(a,h)anthracene	ND	J3	0.0120	2	10/14/2016 10:05	WG916689
Fluoranthene	ND		0.0120	2	10/14/2016 10:05	WG916689
Fluorene	0.0275		0.0120	2	10/14/2016 10:05	WG916689
Indeno(1,2,3-cd)pyrene	ND	J3	0.0120	2	10/14/2016 10:05	WG916689
Naphthalene	0.0606		0.0400	2	10/14/2016 10:05	WG916689
Phenanthrene	0.0286		0.0120	2	10/14/2016 10:05	WG916689
Pyrene	0.0364		0.0120	2	10/14/2016 10:05	WG916689
1-Methylnaphthalene	ND	J3	0.0400	2	10/14/2016 10:05	WG916689
2-Methylnaphthalene	0.0905	J3	0.0400	2	10/14/2016 10:05	WG916689
2-Chloronaphthalene	ND		0.0400	2	10/14/2016 10:05	WG916689
(S) p-Terphenyl-d14	*57.4*		*32.2-131*		*10/14/2016 10:05*	WG916689
(S) Nitrobenzene-d5	*68.4*		*22.1-146*		*10/14/2016 10:05*	WG916689
(S) 2-Fluorobiphenyl	*74.2*		*40.6-122*		*10/14/2016 10:05*	WG916689

Sample Narrative:

8270C-SIM L865265-03 WG916689: Dilution due to matrix

Method Blank (MB)

(MB) R3171299-1 10/18/16 12:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chromium,Hexavalent	U		0.640	2.00

L865238-01 Original Sample (OS) • Duplicate (DUP)

(OS) L865238-01 10/18/16 12:26 • (DUP) R3171299-4 10/18/16 12:26

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	ND	1	0.000		20

L865300-11 Original Sample (OS) • Duplicate (DUP)

(OS) L865300-11 10/18/16 12:40 • (DUP) R3171299-5 10/18/16 12:40

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chromium,Hexavalent	ND	ND	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3171299-2 10/18/16 12:23 • (LCSD) R3171299-3 10/18/16 12:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Chromium,Hexavalent	56.9	46.4	54.4	82.0	96.0	80.0-120			16.0	20

L865300-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865300-11 10/18/16 12:40 • (MS) R3171299-6 10/18/16 12:40 • (MSD) R3171299-7 10/18/16 12:41

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chromium,Hexavalent	20.0	ND	18.7	18.6	86.0	85.0	1	75.0-125			0.000	20

L865170-01 Original Sample (OS) • Duplicate (DUP)

(OS) L865170-01 10/18/16 13:48 • (DUP) WG916430-3 10/18/16 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	6.76	6.76	1	0.000		1

L865938-02 Original Sample (OS) • Duplicate (DUP)

(OS) L865938-02 10/18/16 13:48 • (DUP) WG916430-4 10/18/16 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.44	8.42	1	0.237		1

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG916430-1 10/18/16 13:48 • (LCSD) WG916430-2 10/18/16 13:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	su	su	su	%	%	%			%	%
pH	6.11	6.08	6.12	99.5	100	98.4-102			0.656	1

Method Blank (MB)

(MB) WG916748-1 10/13/16 22:38

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	1.73			

L865082-01 Original Sample (OS) • Duplicate (DUP)

(OS) L865082-01 10/13/16 22:38 • (DUP) WG916748-4 10/13/16 22:38

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1410	1470	1	4.10		20

L865608-05 Original Sample (OS) • Duplicate (DUP)

(OS) L865608-05 10/13/16 22:38 • (DUP) WG916748-5 10/13/16 22:38

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	197	196	1	0.560		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) WG916748-2 10/13/16 22:38 • (LCSD) WG916748-3 10/13/16 22:38

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCSD Result umhos/cm	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Specific Conductance	542	544	544	100	100	90.0-110			0.000	20

Method Blank (MB)

(MB) R3170356-1 10/13/16 11:27

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3170356-2 10/13/16 11:30 • (LCSD) R3170356-3 10/13/16 11:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.300	0.290	100	97	80-120			3	20

L865253-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865253-01 10/13/16 11:35 • (MS) R3170356-4 10/13/16 11:37 • (MSD) R3170356-5 10/13/16 11:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.342	U	0.326	0.326	95	95	1	75-125			0	20

Method Blank (MB)

(MB) R3170291-1 10/13/16 09:13

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3170291-2 10/13/16 09:15 • (LCSD) R3170291-3 10/13/16 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.296	0.308	99	103	80-120			4	20

L865388-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865388-05 10/13/16 09:20 • (MS) R3170291-4 10/13/16 09:23 • (MSD) R3170291-5 10/13/16 09:25

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	ND	0.277	0.261	89	84	1	75-125			6	20

Method Blank (MB)

(MB) R3171233-1 10/18/16 07:55

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Boron	U		1.26	10.0
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Copper	U		0.53	2.00
Lead	U		0.19	0.500
Nickel	U		0.49	2.00
Selenium	U		0.74	2.00
Silver	U		0.28	1.00
Zinc	U		0.59	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3171233-2 10/18/16 07:57 • (LCSD) R3171233-3 10/18/16 08:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	103	96.9	103	97	80-120			6	20
Barium	100	105	99.3	105	99	80-120			6	20
Boron	100	104	97.5	104	98	80-120			6	20
Cadmium	100	103	97.3	103	97	80-120			6	20
Chromium	100	102	95.8	102	96	80-120			6	20
Copper	100	103	96.7	103	97	80-120			6	20
Lead	100	102	96.2	102	96	80-120			6	20
Nickel	100	103	97.1	103	97	80-120			6	20
Selenium	100	103	97.7	103	98	80-120			6	20
Silver	100	102	95.7	102	96	80-120			6	20
Zinc	100	102	95.8	102	96	80-120			6	20

L865265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865265-01 10/18/16 09:48 • (MS) R3171233-10 10/18/16 09:56 • (MSD) R3171233-11 10/18/16 09:58

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	2.30	124	106	121	103	1	75-125			16	20
Barium	100	422	593	508	171	86	1	75-125	V		15	20
Boron	100	ND	96.3	97.0	95	95	1	75-125			1	20
Cadmium	100	ND	103	105	102	104	1	75-125			2	20
Chromium	100	36.3	131	132	95	95	1	75-125			0	20

L865265-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865265-01 10/18/16 09:48 • (MS) R3171233-10 10/18/16 09:56 • (MSD) R3171233-11 10/18/16 09:58

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Copper	100	15.3	115	118	100	102	1	75-125			2	20
Lead	100	13.9	117	118	103	105	1	75-125			2	20
Nickel	100	22.7	128	130	105	108	1	75-125			2	20
Selenium	100	ND	101	103	101	103	1	75-125			1	20
Silver	100	ND	104	105	104	105	1	75-125			1	20
Zinc	100	46.2	139	140	93	94	1	75-125			1	20

Method Blank (MB)

(MB) R3171288-5 10/15/16 18:24

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000457	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*103*			*59.0-128*
(S) a,a,a-Trifluorotoluene(PID)	*108*			*54.0-144*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3171288-1 10/15/16 16:23 • (LCSD) R3171288-2 10/15/16 16:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0505	0.0493	101	98.6	70.0-130			2.48	20
Toluene	0.0500	0.0502	0.0483	100	96.7	70.0-130			3.83	20
Ethylbenzene	0.0500	0.0524	0.0506	105	101	70.0-130			3.44	20
Total Xylene	0.150	0.161	0.155	107	103	70.0-130			3.87	20
(S) a,a,a-Trifluorotoluene(FID)				*103*	*103*	*59.0-128*				
(S) a,a,a-Trifluorotoluene(PID)				*107*	*107*	*54.0-144*				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3171288-3 10/15/16 17:11 • (LCSD) R3171288-4 10/15/16 17:35

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.22	5.13	94.9	93.2	63.5-137			1.81	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*59.0-128*				
(S) a,a,a-Trifluorotoluene(PID)				*121*	*121*	*54.0-144*				

L865270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865270-01 10/16/16 00:14 • (MS) R3171288-6 10/15/16 22:13 • (MSD) R3171288-7 10/15/16 22:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.124	0.722	0.723	21.1	21.1	56.75	49.7-127	J6	J6	0.150	23.5
Toluene	0.0500	ND	0.866	0.823	28.1	26.6	56.75	49.8-132	J6	J6	5.12	23.5
Ethylbenzene	0.0500	0.0624	1.23	1.20	41.2	39.9	56.75	40.8-141		J6	3.05	23.8
Total Xylene	0.150	0.275	3.96	3.80	43.3	41.4	56.75	41.2-140	J6	J6	4.17	23.7
(S) a,a,a-Trifluorotoluene(FID)					*103*	*103*		*59.0-128*				

L865270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865270-01 10/16/16 00:14 • (MS) R3171288-6 10/15/16 22:13 • (MSD) R3171288-7 10/15/16 22:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
(S) a,a,a-Trifluorotoluene(PID)					*109*	*108*		*54.0-144*				

L865270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865270-01 10/16/16 00:14 • (MS) R3171288-8 10/15/16 23:01 • (MSD) R3171288-9 10/15/16 23:26

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	11.3	123	129	35.9	37.8	56.75	28.5-138			4.86	23.6
(S) a,a,a-Trifluorotoluene(FID)					*96.9*	*96.3*		*59.0-128*				
(S) a,a,a-Trifluorotoluene(PID)					*110*	*110*		*54.0-144*				

Method Blank (MB)

(MB) R3171402-1 10/18/16 09:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*111*			*50.0-150*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3171402-2 10/18/16 09:58 • (LCSD) R3171402-3 10/18/16 10:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
C10-C28 Diesel Range	60.0	44.1	40.8	73.4	67.9	50.0-150			7.82	20
(S) o-Terphenyl				*110*	*103*	*50.0-150*				

L865082-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865082-01 10/18/16 11:08 • (MS) R3171402-4 10/18/16 11:24 • (MSD) R3171402-5 10/18/16 11:41

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
C10-C28 Diesel Range	6.00	885	1010	954	210	115	10	50.0-150	V		5.79	20
(S) o-Terphenyl					*73.1*	*56.2*		*50.0-150*				

Method Blank (MB)

(MB) R3170583-3 10/14/16 04:18

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) p-Terphenyl-d14	*69.5*			*32.2-131*
(S) Nitrobenzene-d5	*75.2*			*22.1-146*
(S) 2-Fluorobiphenyl	*77.5*			*40.6-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3170583-1 10/14/16 03:31 • (LCSD) R3170583-2 10/14/16 03:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0800	0.0721	0.0692	90.1	86.4	50.3-130			4.11	20
Acenaphthene	0.0800	0.0703	0.0684	87.8	85.5	52.4-120			2.71	20
Acenaphthylene	0.0800	0.0753	0.0727	94.1	90.9	49.6-120			3.47	20
Benzo(a)anthracene	0.0800	0.0826	0.0803	103	100	46.7-125			2.79	20
Benzo(a)pyrene	0.0800	0.0665	0.0653	83.1	81.6	42.3-119			1.84	20
Benzo(b)fluoranthene	0.0800	0.0678	0.0661	84.8	82.6	43.6-124			2.58	20
Benzo(g,h,i)perylene	0.0800	0.0635	0.0844	79.4	105	45.1-132		J3	28.2	20
Benzo(k)fluoranthene	0.0800	0.0676	0.0705	84.5	88.1	46.1-131			4.19	20
Chrysene	0.0800	0.0836	0.0831	105	104	49.5-131			0.610	20
Dibenz(a,h)anthracene	0.0800	0.0636	0.0836	79.5	105	44.8-133		J3	27.3	20
Fluoranthene	0.0800	0.0712	0.0690	89.0	86.2	49.3-128			3.12	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3170583-1 10/14/16 03:31 • (LCSD) R3170583-2 10/14/16 03:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	0.0800	0.0701	0.0672	87.6	84.0	50.6-121			4.22	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0615	0.0811	76.9	101	46.1-135		J3	27.5	20
Naphthalene	0.0800	0.0672	0.0664	84.0	83.0	49.6-115			1.18	20
Phenanthrene	0.0800	0.0717	0.0692	89.6	86.5	48.8-121			3.50	20
Pyrene	0.0800	0.0917	0.0909	115	114	44.7-130			0.960	20
1-Methylnaphthalene	0.0800	0.0875	0.0553	109	69.1	50.6-122		J3	45.1	20
2-Methylnaphthalene	0.0800	0.0891	0.0564	111	70.5	50.4-120		J3	45.0	20
2-Chloronaphthalene	0.0800	0.0700	0.0647	87.6	80.9	53.9-121			7.88	20
(S) p-Terphenyl-d14				*71.6*	*72.2*	*32.2-131*				
(S) Nitrobenzene-d5				*94.7*	*79.9*	*22.1-146*				
(S) 2-Fluorobiphenyl				*87.0*	*85.9*	*40.6-122*				

L865265-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L865265-06 10/14/16 11:37 • (MS) R3170583-4 10/14/16 12:00 • (MSD) R3170583-5 10/14/16 12:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0160	ND	0.0528	0.0558	45.2	48.9	5	26.5-141			5.37	21.2
Acenaphthene	0.0160	ND	0.0594	0.0607	61.3	63.0	5	31.9-130			2.27	20
Acenaphthylene	0.0160	ND	0.0634	0.0641	79.3	80.2	5	33.7-129			1.10	20
Benzo(a)anthracene	0.0160	0.116	0.102	0.122	0.000	7.30	5	18.3-136	J6	J6	17.1	24.6
Benzo(a)pyrene	0.0160	0.173	0.107	0.128	0.000	0.000	5	16.9-135	J6	J6	17.5	25.2
Benzo(b)fluoranthene	0.0160	0.389	0.158	0.195	0.000	0.000	5	10.0-134	V	V	20.8	30.9
Benzo(g,h,i)perylene	0.0160	0.264	0.128	0.162	0.000	0.000	5	14.1-140	J6	J6	23.5	25.5
Benzo(k)fluoranthene	0.0160	0.0873	0.0891	0.108	2.23	25.5	5	18.2-138	J6		19.0	25.6
Chrysene	0.0160	0.191	0.124	0.141	0.000	0.000	5	17.1-145	J6	J6	12.6	24.2
Dibenz(a,h)anthracene	0.0160	0.0734	0.0617	0.0719	0.000	0.000	5	18.5-138	J6	J6	15.3	24.3
Fluoranthene	0.0160	0.0911	0.0844	0.0945	0.000	4.20	5	15.4-144	J6	J6	11.2	27.1
Fluorene	0.0160	ND	0.0631	0.0638	55.6	56.5	5	23.5-136			1.12	20
Indeno(1,2,3-cd)pyrene	0.0160	0.173	0.0881	0.111	0.000	0.000	5	14.5-142	J6	J6	23.2	25.8
Naphthalene	0.0160	ND	0.125	0.128	33.0	35.8	5	29.2-128			1.81	20
Phenanthrene	0.0160	0.0910	0.0913	0.0975	0.331	8.09	5	20.1-134	J6	J6	6.57	23.6
Pyrene	0.0160	0.104	0.109	0.127	6.53	29.1	5	11.0-148	J6		15.2	26.1
1-Methylnaphthalene	0.0160	ND	0.0953	0.0974	22.6	25.2	5	28.4-137	J6	J6	2.15	20
2-Methylnaphthalene	0.0160	0.178	0.158	0.156	0.000	0.000	5	26.6-137	J6	J6	1.19	20
2-Chloronaphthalene	0.0160	ND	0.0573	0.0591	71.6	73.9	5	38.6-126			3.21	20
(S) p-Terphenyl-d14					*53.3*	*53.2*		*32.2-131*				
(S) Nitrobenzene-d5					*70.8*	*70.7*		*22.1-146*				
(S) 2-Fluorobiphenyl					*70.4*	*71.9*		*40.6-122*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(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.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

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

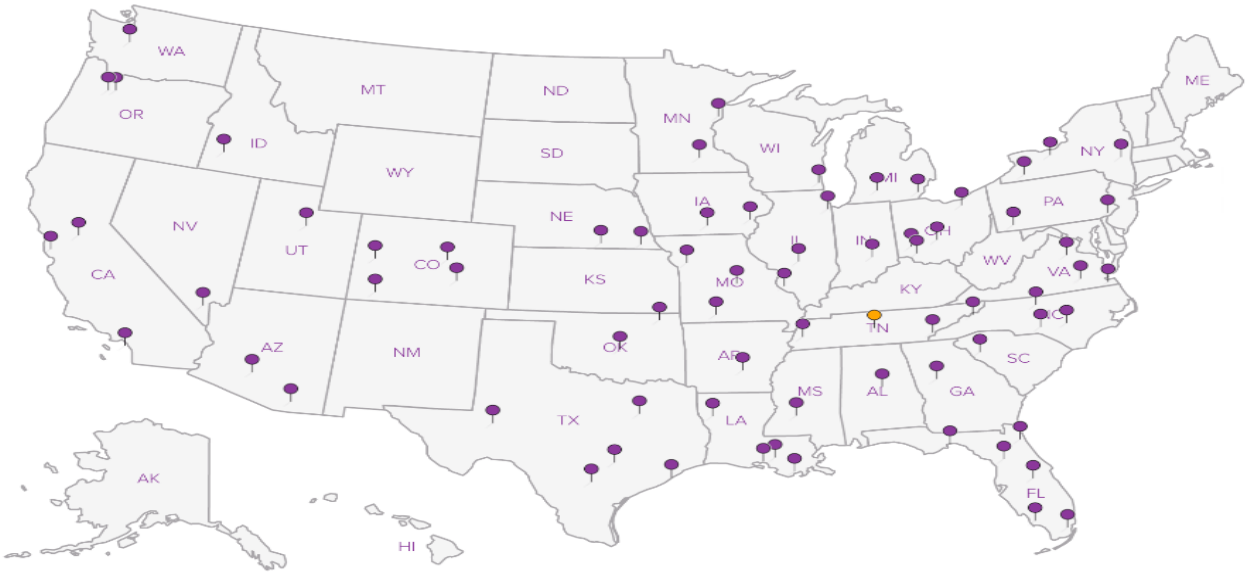
Third Party & Federal Accreditations

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

[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.**



Company Name/Address:
Nicholson GeoSolutions, LLC
3433 E. Lake Dr.
Centennial, CO 80121

Billing Information:
Tom Hogelin
Linn Energy LLC
235 Callahan Ave
Parachute, CO 81635

Report to: **Dave Nicholson**

Email To: **dknicholson@q.com**

Project Description: **Pit Reclamation**

City/State Collected:

Phone: **303-601-2023**
Fax:

Client Project #

Lab Project # **BERPETDCO030615S**

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature): DK Nicholson
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 (X)Yes
FAX? (X)No ___Yes

Chain of Custody Page 1 of 1

ESC LABORATORY 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 # 1865265
E153
Acctnum: BERPETDCO
Template:
Prelogin:
TSR:
Cooler:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	SAR, Metals, Cr6 (1) 4oz Clear - No Pres	BTEX/TVPH (1) 4oz Clear - No Pres	TEPH(8015)Diesel & Oil Range (1) 4oz Clear-No Pres	SPCON, pH (1) 4oz Clear - No Pres	PAHSIM 8270 (1) 4oz Soil Jar	Rem./Contaminant	Sample # (lab only)
OM K-15		SS		10/8	1300	5	X	X	X	X	X		-01
OM K-15 SM		SS		↓	1250	5	X	X	X	X	X		-02
OM I-02 SM		SS		↓	1040	5	X	X	X	X	X		-03
OM L-15		SS		~~10/7~~ 10/8	1330	5	X	X	X	X	X		-04
OM B-10		SS		↓	1420	5	X	X	X	X	X		-05
OM C-10		SS		↓	1500	5	X	X	X	X	X		-06
LR J-15		SS		10/9	0920	5	X	X	X	X	X		-07
LR M-15		SS		11	0950	5	X	X	X	X	X		-08
		SS				5							
		SS				5							

Analysis / Container / Preservative

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

Remarks: **As, Ba, B, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn, Cr6**

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
DK Nicholson	10/10/16	1100	FedEx
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 2.6 °C Bottles Received: 40 4oz
Date: 10-11-16 Time: 9:00

Condition: (lab use only) JW1 OK
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 Form

Client: BERPETDCO	SDG#	L865265
Cooler Received/Opened On: 10/11/2016	Temperature Upon Receipt:	2.6 °c
Received By: Timiesha Scott		
Signature:		

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?			✓
Were custody papers properly filled out?	✓		
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 all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?			✓
Non Conformance Generated. (If yes see attached NCF)			