



## SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

### CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

☐ Spill or Release ☐ Plug & Abandon ☐ Central Facility Closure ☐ Site/Facility Closure ☒ Other (describe): Pit closure

OGCC Employee:

☐ Spill ☐ Complaint  
☐ Inspection ☐ NOAV

Tracking No: REM #7302

OGCC Operator Number: 96705

Name of Operator: WPX Energy Production, LLC

Address: PO Box 640/ 721 S Main Street

City: Aztec State: NM Zip: 87410

Contact Name and Telephone:

Deborah Watson

No: 505.333.1880/505.386.9693

Fax: 505.333.1805

API Number: 05-067-05518

County: La Plata

Facility Name: Pit

Facility Number: 105404

Well Name: Ignacio 33-8

Well Number: 010

Location: (QtrQtr, Sec, Twp, Rng, Meridian): NENW 2 T33N R8W, NMPM Latitude: 37.13580 Longitude: -107.69011

### TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): Produced water

Site Conditions: Is location within a sensitive area (according to Rule 901e)? ☐ Y ☒ N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): Native-Range

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: Zyme Rock 12-65%

Potential receptors (water wells within 1/4 mi, surface waters, etc.): 3 water wells ~ 150 ft.

Description of Impact (if previously provided, refer to that form or document): Refer to Document #2230490

Impacted Media (check):

Extent of Impact:

How Determined:



Soils

TBD-not anticipated



Vegetation

N/A



Groundwater

TBD-not likely



Surface Water

TBD-not likely

### REMEDIALATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Assessment below the pit tank on location. One soil sample was collected from the deepest point of the excavation from below the location of the former pit tank. One background sample was collected.

Describe how source is to be removed:

Soil sample S-1 was submitted for analysis constituents listed in Table 910-1. Background sample was submitted for analysis of arsenic.

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:

Refer to document #2230490.



Tracking Number:	_____
Name of Operator:	_____
OGCC Operator No:	_____
Received Date:	_____
Well Name & No:	_____
Facility Name & No:	_____

OGCC Employee: \_\_\_\_\_

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

No impact to groundwater, see laboratory results

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

No seeding or surface restoration is planned until site abandonment

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? ☐ Y ☒ N If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

Tank and liner disposed of at Bondad Landfill.

### IMPLEMENTATION SCHEDULE

Date Site Investigation Began: <u>7/27/16</u>	Date Site Investigation Completed: <u>7/27/16</u>	Date Remediation Plan Submitted: <u>8/14/2012</u>
Remediation Start Date: <u>7/27/16</u>	Anticipated Completion Date: <u>7/27/16</u>	Actual Completion Date: <u>7/27/16</u>

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Deborah Watson Signed: Deborah Watson

Title: Environmental Specialist Date: September 13, 2016

OGCC Approved: [Signature] Title: Environmental Protection Specialist Date: 9/19/16

## WPX Energy - New Mexico

Sample Delivery Group: L850257  
Samples Received: 07/30/2016  
Project Number:  
Description: Ignacio 33-8 #010

Report To: Debbie Watson  
PO Box 640  
Aztec, NM 87410

Entire Report Reviewed By:



Shane Gambill  
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## S-1 L850257-01 Solid

Collected by  
Rob Bradshaw

Collected date/time  
07/27/16 13:30

Received date/time  
07/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG894716	1	08/02/16 08:41	08/03/16 02:57	LTB
Calculated Results	WG894720	1	08/02/16 14:23	08/03/16 03:49	LTB
Mercury by Method 7471A	WG894524	1	08/02/16 13:40	08/03/16 10:29	NJB
Metals (ICP) by Method 6010B	WG894720	1	08/02/16 14:23	08/03/16 03:49	LTB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG895031	1	08/02/16 22:47	08/03/16 16:47	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG894300	1	08/01/16 01:10	08/01/16 11:53	KLM
Total Solids by Method 2540 G-2011	WG894785	1	08/03/16 14:00	08/03/16 14:30	KDW
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG895092	1	08/02/16 19:16	08/03/16 14:30	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG895394	1	08/04/16 18:00	08/05/16 13:34	JHH
Wet Chemistry by Method 3060A/7196A	WG894001	1	08/01/16 15:40	08/01/16 16:37	JJL
Wet Chemistry by Method 9045D	WG894184	1	08/01/16 14:50	08/01/16 14:50	JJL
Wet Chemistry by Method 9050AMod	WG894384	1	08/01/16 13:13	08/01/16 13:13	AMC

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

## BACKGROUND L850257-02 Solid

Collected by  
Rob Bradshaw

Collected date/time  
07/27/16 13:40

Received date/time  
07/30/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG894505	1	08/01/16 15:59	08/02/16 03:48	LTB
Total Solids by Method 2540 G-2011	WG894785	1	08/03/16 14:00	08/03/16 14:30	KDW



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.

<u>ESC Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
<a href="#">L850257-01</a>	<a href="#">S-1</a>	9045D

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.268		1	08/03/2016 02:57	WG894716

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al<sup>9</sup> Sc

## Calculated Results

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium, Trivalent	7.37		2.39	1	08/03/2016 03:49	<a href="#">WG894720</a>

## Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.7		1	08/03/2016 14:30	<a href="#">WG894785</a>

## Wet Chemistry by Method 3060A/7196A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Chromium, Hexavalent	ND		2.39	1	08/01/2016 16:37	<a href="#">WG894001</a>

## Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.47		1	08/01/2016 14:50	<a href="#">WG894184</a>

## Sample Narrative:

9045D L850257-01 WG894184: 7.47 at 20.0c

## Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	97.2		1	08/01/2016 13:13	<a href="#">WG894384</a>

## Mercury by Method 7471A

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0239	1	08/03/2016 10:29	<a href="#">WG894524</a>

## Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.27		2.39	1	08/03/2016 03:49	<a href="#">WG894720</a>
Barium	286		0.597	1	08/03/2016 03:49	<a href="#">WG894720</a>
Cadmium	ND		0.597	1	08/03/2016 03:49	<a href="#">WG894720</a>
Chromium	7.37		1.19	1	08/03/2016 03:49	<a href="#">WG894720</a>
Copper	9.89		2.39	1	08/03/2016 03:49	<a href="#">WG894720</a>
Lead	14.3		0.597	1	08/03/2016 03:49	<a href="#">WG894720</a>
Nickel	9.48		2.39	1	08/03/2016 03:49	<a href="#">WG894720</a>
Selenium	ND		2.39	1	08/03/2016 03:49	<a href="#">WG894720</a>
Silver	ND		1.19	1	08/03/2016 03:49	<a href="#">WG894720</a>
Zinc	29.8		5.97	1	08/03/2016 03:49	<a href="#">WG894720</a>



Collected date/time: 07/27/16 13:30

L850257

## Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.119	1	08/03/2016 14:30	<a href="#">WG895092</a>
(S) a,a,a-Trifluorotoluene(FID)	100		59.0-128		08/03/2016 14:30	<a href="#">WG895092</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00119	1	08/05/2016 13:34	<a href="#">WG895394</a>
Toluene	ND		0.00597	1	08/05/2016 13:34	<a href="#">WG895394</a>
Ethylbenzene	ND		0.00119	1	08/05/2016 13:34	<a href="#">WG895394</a>
Total Xylenes	ND		0.00358	1	08/05/2016 13:34	<a href="#">WG895394</a>
(S) Toluene-d8	111		88.7-115		08/05/2016 13:34	<a href="#">WG895394</a>
(S) Dibromofluoromethane	105		76.3-123		08/05/2016 13:34	<a href="#">WG895394</a>
(S) a,a,a-Trifluorotoluene	101		87.2-117		08/05/2016 13:34	<a href="#">WG895394</a>
(S) 4-Bromofluorobenzene	95.9		69.7-129		08/05/2016 13:34	<a href="#">WG895394</a>

## Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		4.78	1	08/01/2016 11:53	<a href="#">WG894300</a>
(S) o-Terphenyl	56.5		50.0-150		08/01/2016 11:53	<a href="#">WG894300</a>

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

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Acenaphthene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Acenaphthylene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Benzo(a)anthracene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Benzo(a)pyrene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Benzo(b)fluoranthene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Benzo(g,h,i)perylene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Benzo(k)fluoranthene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Chrysene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Dibenz(a,h)anthracene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Fluoranthene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Fluorene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Indeno(1,2,3-cd)pyrene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Naphthalene	ND		0.0239	1	08/03/2016 16:47	<a href="#">WG895031</a>
Phenanthrene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
Pyrene	ND		0.00716	1	08/03/2016 16:47	<a href="#">WG895031</a>
1-Methylnaphthalene	ND		0.0239	1	08/03/2016 16:47	<a href="#">WG895031</a>
2-Methylnaphthalene	ND		0.0239	1	08/03/2016 16:47	<a href="#">WG895031</a>
2-Chloronaphthalene	ND		0.0239	1	08/03/2016 16:47	<a href="#">WG895031</a>
(S) p-Terphenyl-d14	66.3		32.2-131		08/03/2016 16:47	<a href="#">WG895031</a>
(S) Nitrobenzene-d5	87.2		22.1-146		08/03/2016 16:47	<a href="#">WG895031</a>
(S) 2-Fluorobiphenyl	79.1		40.6-122		08/03/2016 16:47	<a href="#">WG895031</a>





Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	08/03/2016 14:30	<a href="#">WG894785</a>

Metals (ICP) by Method 6010B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.48		2.24	1	08/02/2016 03:48	<a href="#">WG894505</a>

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Total Solids by Method 2540 G-2011

L850257-01,02

### Method Blank (MB)

(MB) R3154406-1 08/03/16 14:30

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%	%
Total Solids	0.000900			

 ${}^1\text{Cp}$  ${}^2\text{Tc}$  ${}^3S_s$  ${}^4\text{Cn}$  $^5\text{Sr}$ <sup>6</sup>Qc

L850243-06 Original Sample (OS) • Duplicate (DUP)

(OS) L850243-06 08/03/16 14:30 • (DUP) R3154406-3 08/03/16 14:30

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	%	%		%		%
Total Solids	76.3	79.4	1	3.95		5

GI

 ${}^8\text{Al}$ <sup>9</sup>Sc

Laboratory Control Sample (LCS)

(LCS) R3154406-2 08/03/16 14:30

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Total Solids	50.0	49.8	99.7	85.0-115	



Method Blank (MB)

(MB) R3153727-1 08/01/16 16:29

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

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

L849617-01 Original Sample (OS) • Duplicate (DUP)

(OS) L849617-01 08/01/16 16:31 • (DUP) R3153727-4 08/01/16 16:31

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

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

(LCS) R3153727-2 08/01/16 16:29 • (LCSD) R3153727-3 08/01/16 16:30

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	53.4	53.6	94.0	94.0	80.0-120			0.000	20

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



L850257-01 Original Sample (OS) • Duplicate (DUP)

(OS) L850257-01 08/01/16 14:50 • (DUP) WG894184-3 08/01/16 14:50						
	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.47	7.51	1	0.534		1

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

L850336-01 Original Sample (OS) • Duplicate (DUP)

(OS) L850336-01 08/01/16 14:50 • (DUP) WG894184-4 08/01/16 14:50						
	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	7.99	1	0.624		1

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

(LCS) WG894184-1 08/01/16 14:50 • (LCSD) WG894184-2 08/01/16 14:50									
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD
Analyte	su	su	su	%	%	%			RPD Limits
pH	6.12	6.09	6.09	99.5	99.5	98.4-102			0.000 1

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) WG894384-5 08/01/16 13:13

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	1.90			

L850182-21 Original Sample (OS) • Duplicate (DUP)

(OS) L850182-21 08/01/16 13:13 • (DUP) WG894384-1 08/01/16 13:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	296	293	1	1.02		20

L850336-13 Original Sample (OS) • Duplicate (DUP)

(OS) L850336-13 08/01/16 13:13 • (DUP) WG894384-2 08/01/16 13:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	38.7	38.6	1	0.259		20

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

(LCS) WG894384-3 08/01/16 13:13 • (LCSD) WG894384-4 08/01/16 13:13

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	umhos/cm	umhos/cm	umhos/cm	%	%	%			%	%
Specific Conductance	653	664	662	102	101	90.0-110			0.302	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3154227-1 08/03/16 09:48

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

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

(LCS) R3154227-2 08/03/16 09:50 • (LCSD) R3154227-3 08/03/16 09:53

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Mercury	0.300	0.278	0.266	93	89	80-120			4	20

L850320-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850320-07 08/03/16 09:56 • (MS) R3154227-4 08/03/16 09:58 • (MSD) R3154227-5 08/03/16 10:06

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Mercury	0.300	0.0167	0.315	0.291	99	91	1	75-125			8	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3153789-1 08/02/16 02:29

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.65	2.00

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

(LCS) R3153789-2 08/02/16 02:32 • (LCSD) R3153789-3 08/02/16 02:34

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Arsenic	100	97.9	98.7	98	99	80-120			1	20

L850016-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850016-21 08/02/16 02:37 • (MS) R3153789-6 08/02/16 02:45 • (MSD) R3153789-7 08/02/16 02:48

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	28.2	133	133	105	105	1	75-125			0	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc



Method Blank (MB)

(MB) R3154087-1 08/03/16 03:28

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
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

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

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

(LCS) R3154087-2 08/03/16 03:31 • (LCSD) R3154087-3 08/03/16 03:33

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	96.3	100	96	100	80-120			4	20
Barium	100	98.3	102	98	102	80-120			4	20
Cadmium	100	96.8	100	97	100	80-120			3	20
Chromium	100	96.9	100	97	100	80-120			4	20
Copper	100	94.3	98.5	94	99	80-120			4	20
Lead	100	98.5	102	99	102	80-120			4	20
Nickel	100	97.8	101	98	101	80-120			4	20
Selenium	100	99.3	103	99	103	80-120			3	20
Silver	100	94.8	98.6	95	99	80-120			4	20
Zinc	100	96.2	99.7	96	100	80-120			4	20

L850352-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850352-13 08/03/16 03:36 • (MS) R3154087-6 08/03/16 03:44 • (MSD) R3154087-7 08/03/16 03:46

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	9.19	104	107	95	98	1	75-125			3	20
Barium	100	225	307	324	82	99	1	75-125			5	20
Cadmium	100	19.4	114	124	94	104	1	75-125			8	20
Chromium	100	20.6	109	112	89	92	1	75-125			3	20
Copper	100	93.2	182	219	89	126	1	75-125		J5	18	20
Lead	100	197	381	367	185	170	1	75-125	J5	J5	4	20
Nickel	100	14.3	117	118	102	103	1	75-125			1	20





[L850257-01](#)

L850352-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850352-13 08/03/16 03:36 • (MS) R3154087-6 08/03/16 03:44 • (MSD) R3154087-7 08/03/16 03:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Selenium	100	ND	92.1	96.9	91	95	1	75-125			5	20
Silver	100	ND	92.9	96.9	93	97	1	75-125			4	20
Zinc	100	1820	1780	2320	0	497	1	75-125	<u>E V</u>	<u>E J3 V</u>	26	20

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc



Method Blank (MB)

(MB) R3154548-3 08/03/16 11:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			59.0-128

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3154548-1 08/03/16 10:48 • (LCSD) R3154548-2 08/03/16 11:09

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	5.86	6.11	107	111	63.5-137			4.07	20
(S) a,a,a-Trifluorotoluene(FID)				104	104	59.0-128				

L850584-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850584-05 08/03/16 14:51 • (MS) R3154548-4 08/03/16 12:45 • (MSD) R3154548-5 08/03/16 13:06

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	U	3.51	1.92	63.8	35.0	1	28.5-138		J3	58.4	23.6
(S) a,a,a-Trifluorotoluene(FID)					96.9	98.0		59.0-128				



Method Blank (MB)

(MB) R3154719-3 08/04/16 17:50

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000270	0.00100
Ethylbenzene	U		0.000297	0.00100
Toluene	U		0.000434	0.00500
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	99.1			88.7-115
(S) Dibromofluoromethane	98.2			76.3-123
(S) a,a,a-Trifluorotoluene	96.9			87.2-117
(S) 4-Bromofluorobenzene	91.3			69.7-129

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

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

(LCS) R3154719-1 08/04/16 16:31 • (LCSD) R3154719-2 08/04/16 16:51

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	0.0250	0.0250	0.0246	99.8	98.2	72.6-120			1.58	20
Ethylbenzene	0.0250	0.0238	0.0241	95.1	96.2	78.6-124			1.18	20
Toluene	0.0250	0.0245	0.0242	97.9	96.9	76.7-116			1.07	20
Xylenes, Total	0.0750	0.0712	0.0702	94.9	93.6	78.1-123			1.42	20
(S) Toluene-d8				98.7	99.8	88.7-115				
(S) Dibromofluoromethane				97.9	97.6	76.3-123				
(S) a,a,a-Trifluorotoluene				95.0	95.9	87.2-117				
(S) 4-Bromofluorobenzene				91.6	91.9	69.7-129				

L850369-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850369-14 08/04/16 19:41 • (MS) R3154719-4 08/04/16 18:40 • (MSD) R3154719-5 08/04/16 19:01

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 %
Benzene	0.0300	0.0677	0.426	0.406	86.8	82.0	13.75	47.8-131			4.69	22.8
Ethylbenzene	0.0300	0.0669	0.392	0.377	78.7	75.1	13.75	44.8-135			3.89	26.9
Toluene	0.0300	0.244	0.592	0.571	84.3	79.4	13.75	47.8-127			3.47	24.3
Xylenes, Total	0.0901	0.787	1.70	1.64	73.9	68.7	13.75	42.7-135			3.81	26.6
(S) Toluene-d8					97.9	99.3		88.7-115				
(S) Dibromofluoromethane					96.0	96.3		76.3-123				
(S) a,a,a-Trifluorotoluene					96.0	97.8		87.2-117				
(S) 4-Bromofluorobenzene					82.4	82.4		69.7-129				



Method Blank (MB)

(MB) R3153741-1 08/01/16 10:26

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) High Fraction	1.58	⬇	0.769	4.00
(S) o-Terphenyl	71.5			50.0-150

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

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

(LCS) R3153741-2 08/01/16 10:37 • (LCSD) R3153741-3 08/01/16 10:48

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) High Fraction	60.0	39.6	42.3	66.0	70.6	50.0-150			6.71	20
(S) o-Terphenyl				69.0	71.2	50.0-150				

L850330-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850330-03 08/01/16 12:37 • (MS) R3153741-4 08/01/16 12:48 • (MSD) R3153741-5 08/01/16 12:59

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) High Fraction	60.0	ND	44.1	43.7	71.6	70.9	1	50.0-150			0.900	20
(S) o-Terphenyl					62.3	63.4		50.0-150				



Method Blank (MB)

(MB) R3154245-3 08/03/16 08:50

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	0.000772	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	0.00178	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	78.9			32.2-131
(S) Nitrobenzene-d5	96.5			22.1-146
(S) 2-Fluorobiphenyl	85.3			40.6-122

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

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

(LCS) R3154245-1 08/03/16 08:08 • (LCSD) R3154245-2 08/03/16 08:29

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	0.0685	0.0684	85.6	85.5	50.3-130			0.120	20
Acenaphthene	0.0800	0.0702	0.0703	87.7	87.9	52.4-120			0.140	20
Acenaphthylene	0.0800	0.0726	0.0726	90.7	90.8	49.6-120			0.0500	20
Benzo(a)anthracene	0.0800	0.0685	0.0712	85.6	89.0	46.7-125			3.85	20
Benzo(a)pyrene	0.0800	0.0671	0.0667	83.9	83.4	42.3-119			0.640	20
Benzo(b)fluoranthene	0.0800	0.0641	0.0680	80.1	85.0	43.6-124			5.89	20
Benzo(g,h,i)perylene	0.0800	0.0717	0.0743	89.6	92.9	45.1-132			3.61	20
Benzo(k)fluoranthene	0.0800	0.0719	0.0756	89.9	94.5	46.1-131			5.00	20
Chrysene	0.0800	0.0716	0.0746	89.5	93.3	49.5-131			4.10	20
Dibenz(a,h)anthracene	0.0800	0.0762	0.0799	95.3	99.8	44.8-133			4.66	20
Fluoranthene	0.0800	0.0771	0.0784	96.4	98.0	49.3-128			1.67	20

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

(LCS) R3154245-1 08/03/16 08:08 • (LCSD) R3154245-2 08/03/16 08:29

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	0.0716	0.0722	89.4	90.2	50.6-121			0.850	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0745	0.0776	93.2	97.0	46.1-135			4.06	20
Naphthalene	0.0800	0.0707	0.0703	88.4	87.9	49.6-115			0.570	20
Phenanthrene	0.0800	0.0698	0.0707	87.3	88.3	48.8-121			1.15	20
Pyrene	0.0800	0.0711	0.0733	88.9	91.7	44.7-130			3.07	20
1-Methylnaphthalene	0.0800	0.0772	0.0763	96.5	95.3	50.6-122			1.20	20
2-Methylnaphthalene	0.0800	0.0750	0.0743	93.7	92.9	50.4-120			0.900	20
2-Chloronaphthalene	0.0800	0.0666	0.0669	83.3	83.6	53.9-121			0.380	20
(S) p-Terphenyl-d14				77.0	76.8	32.2-131				
(S) Nitrobenzene-d5				100	97.5	22.1-146				
(S) 2-Fluorobiphenyl				89.2	87.6	40.6-122				

L850395-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L850395-02 08/03/16 15:45 • (MS) R3154245-4 08/03/16 16:05 • (MSD) R3154245-5 08/03/16 16:26

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 %
Anthracene	0.0949	ND	0.0748	0.0703	78.8	74.0	1	26.5-141			6.17	21.2
Acenaphthene	0.0949	ND	0.0749	0.0704	78.9	74.2	1	31.9-130			6.22	20
Acenaphthylene	0.0949	ND	0.0781	0.0731	82.3	76.9	1	33.7-129			6.70	20
Benzo(a)anthracene	0.0949	ND	0.0722	0.0688	76.1	72.5	1	18.3-136			4.84	24.6
Benzo(a)pyrene	0.0949	ND	0.0808	0.0778	85.1	82.0	1	16.9-135			3.77	25.2
Benzo(b)fluoranthene	0.0949	ND	0.0672	0.0643	70.8	67.7	1	10.0-134			4.51	30.9
Benzo(g,h,i)perylene	0.0949	ND	0.0560	0.0544	59.0	57.3	1	14.1-140			2.92	25.5
Benzo(k)fluoranthene	0.0949	ND	0.0741	0.0706	78.0	74.4	1	18.2-138			4.79	25.6
Chrysene	0.0949	ND	0.0744	0.0710	78.4	74.8	1	17.1-145			4.72	24.2
Dibenz(a,h)anthracene	0.0949	ND	0.0669	0.0651	70.5	68.6	1	18.5-138			2.75	24.3
Fluoranthene	0.0949	ND	0.0834	0.0792	87.9	83.4	1	15.4-144			5.28	27.1
Fluorene	0.0949	ND	0.0752	0.0706	79.2	74.4	1	23.5-136			6.28	20
Indeno(1,2,3-cd)pyrene	0.0949	ND	0.0632	0.0615	66.6	64.8	1	14.5-142			2.75	25.8
Naphthalene	0.0949	ND	0.0767	0.0721	80.8	76.0	1	29.2-128			6.14	20
Phenanthrene	0.0949	ND	0.0735	0.0695	77.4	73.2	1	20.1-134			5.57	23.6
Pyrene	0.0949	ND	0.0753	0.0716	79.3	75.4	1	11.0-148			4.95	26.1
1-Methylnaphthalene	0.0949	ND	0.0824	0.0772	86.8	81.3	1	28.4-137			6.61	20
2-Methylnaphthalene	0.0949	ND	0.0804	0.0757	84.7	79.8	1	26.6-137			6.02	20
2-Chloronaphthalene	0.0949	ND	0.0724	0.0667	76.3	70.3	1	38.6-126			8.21	20
(S) p-Terphenyl-d14					67.1	62.3		32.2-131				
(S) Nitrobenzene-d5					88.8	81.2		22.1-146				
(S) 2-Fluorobiphenyl					78.6	71.5		40.6-122				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

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Gl

8

Al

9

Sc



## 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

E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
V	The sample concentration is too high to evaluate accurate spike recoveries.

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



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	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
Connecticut	PH-0197	North Carolina <sup>1</sup>	DW21704
Florida	E87487	North Carolina <sup>2</sup>	41
Georgia	NELAP	North Dakota	R-140
Georgia <sup>1</sup>	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 <sup>1</sup>	90010	South Dakota	n/a
Kentucky <sup>2</sup>	16	Tennessee <sup>14</sup>	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas <sup>5</sup>	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		

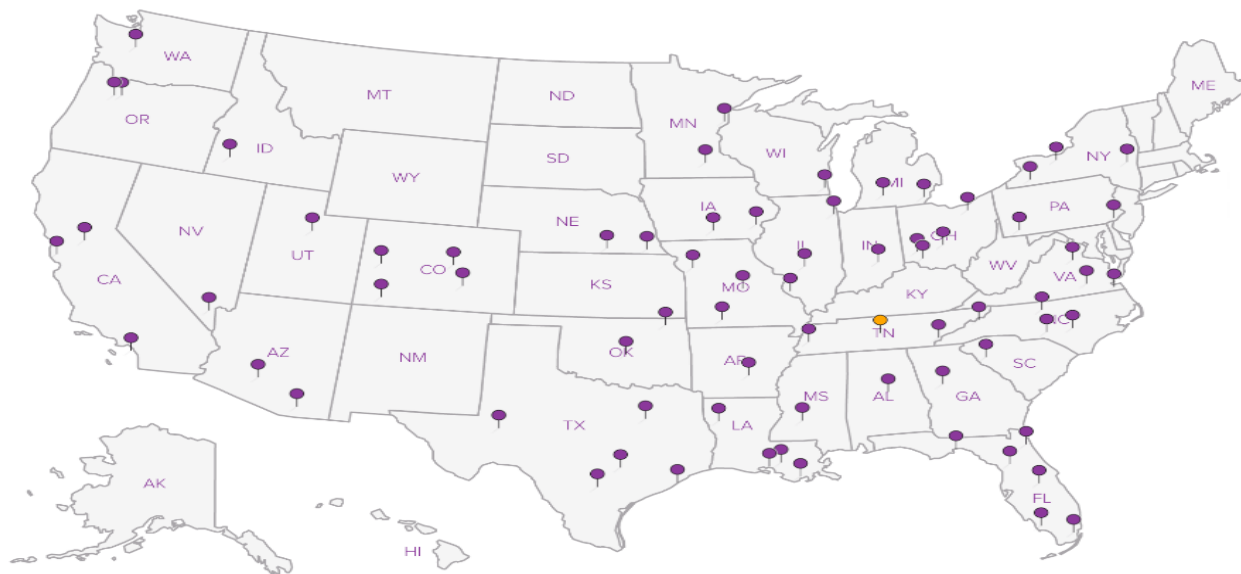
## Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>n/a</sup> 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.**





[illegible]



L.A.B. S.C.I.E.N.C.E.S.

YOUR LAB OF CHOICE

## Cooler Receipt Checklist

Client: WPXANN SDG# L850257

Cooler Received/Opened On: 7-30-16 By: Dakota Busby

Temperature Upon Receipt: 3.2 °C

Dakota Busby  
(Signature)

Cooler Receipt Check List		
	Yes	No N/A
Were custody seals on outside of cooler and intact?		<input checked="" type="checkbox"/>
Were custody papers properly filled out (ink, signed, etc.)?	<input checked="" type="checkbox"/>	
Did all bottles arrive in good condition?	<input checked="" type="checkbox"/>	
Were correct bottles used for the analyses requested?	<input checked="" type="checkbox"/>	
Was sufficient amount of sample sent in each bottle?	<input checked="" type="checkbox"/>	
Were correct preservatives used?		<input checked="" type="checkbox"/>
Were all applicable sample containers checked for preservation?		<input checked="" type="checkbox"/>
(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)	<input checked="" type="checkbox"/>	



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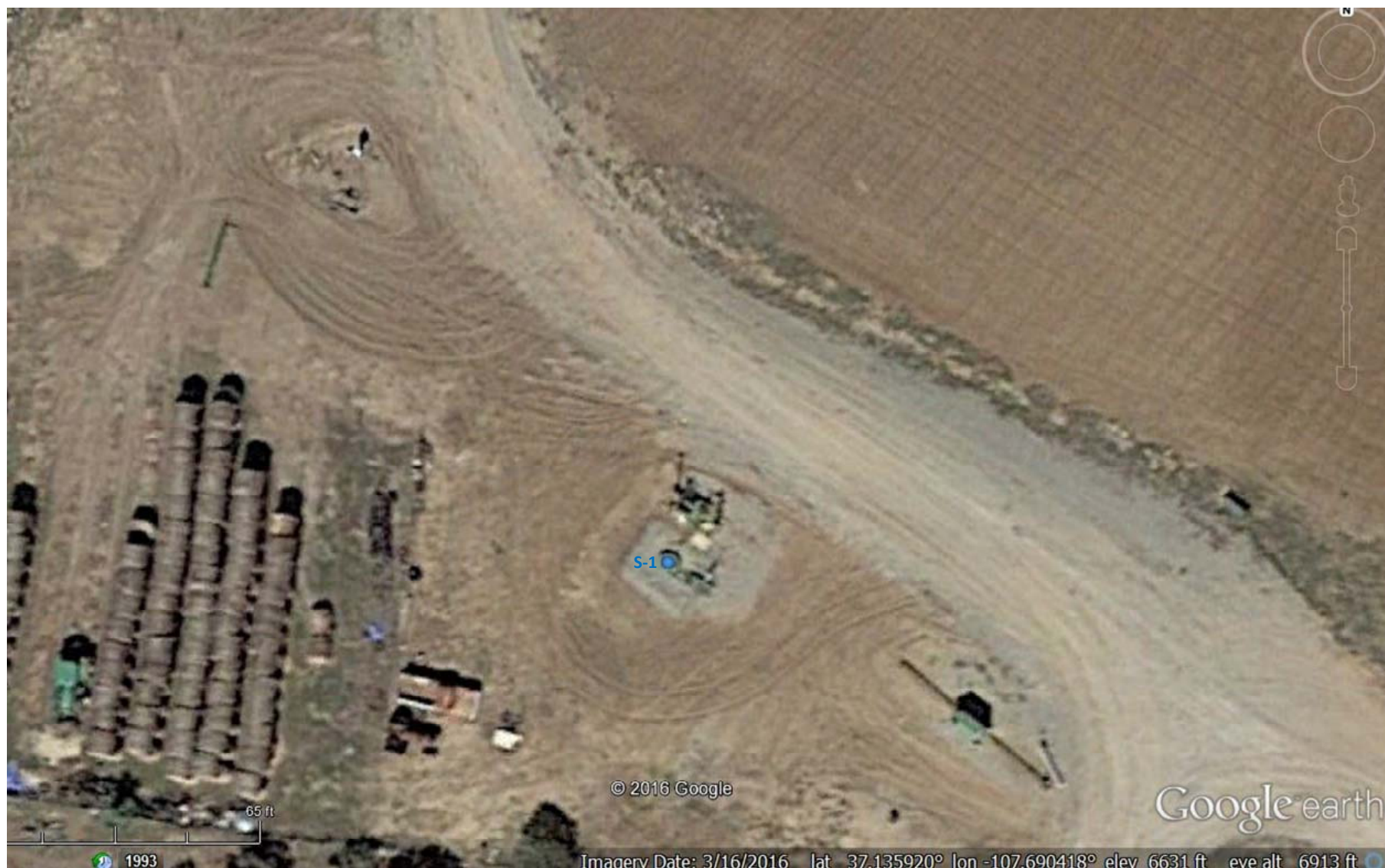
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www.esclabsciences.com • sales@esclabsciences.com

ONE LAB



NAT'L WIDE



**Ignacio 33-8 #010**  
Pit Sample Location  
Section 2, Township 33N, Range 08W  
N37.135582, W107.689880  
La Plata County, CO