FORM 27 Rev 6/99

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

FOR OGCC USE ONLY

REM 9811
Date 08/23/2016
Document 2526822

OGCC Employee:
☐ Spill ☐ Complaint
☐ Inspection ☐ NOAV
Tracking No:

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): _____

OGCC Operator Number: 6720
Name of Operator: Robert L. Bayless, Producer LLC
Address: 2700 N. Farmington Ave., Suite F1
City: Farmington State: NM Zip: 87401

Contact Name and Telephone:
John Thomas
No: 505-326-2659
Fax: 505-326-6911

API Number: 05-107-06123
Facility Name: Grassy Creek 1-24
Well Name: Grassy Creek
Location: (QtrQtr, Sec, Twp, Rng, Meridian): SWNE, SECT 24, T6N, R87W

County: Routt
Facility Number: 117437, 447116, 316762
Well Number: 1-24
Latitude: 40.464811 Longitude: -107.093203

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc): None known

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.): non-cropland

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

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

Impacted Media (check):	Extent of Impact:	How Determined:
☐ Soils	No impacts observed	
☐ Vegetation		
☐ Groundwater		
☐ Surface Water		

REMEDIATION WORKPLAN

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

Initial plan is to close two pits on site:
Pit 1: 117437 (near WH), no fluid
Pit 2: 447116 (north of WH), no fluid, no vegetative growth
The pits have not been used in the past 5+ years

Describe how source is to be removed:

Will have collected soil samples at true pit bottom of each pit. They were to collected between 3" to 5" below surface. ESC Lab Sciences analyzed for BTEX, TPH, metals and inorganics.

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.:

Material utilized to backfill the pit will be the original excavated soil from construction of the pit.

Submit Page 2 with Page 1

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Tracking Number: _____
Name of Operator: Bayless
OGCC Operator No: 6720
Received Date: 8/22/16
Well Name & No: _____
Facility Name & No: 117437, 447116, 316762

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REMEDIATION WORKPLAN (Cont.)

OGCC Employee:

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

Impact on groundwater not anticipated.

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.

We have an approved P&A procedure (Document No. 401083447) and plan on remediating entire well pad for P&A.

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.):

Requesting no further action. The attached test results show soils within Table 910 limits.

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: 08/01/2016	Date Site Investigation Completed: 08/19/2016	Date Remediation Plan Submitted: _____
Remediation Start Date: _____	Anticipated Completion Date: _____	Actual Completion Date: _____

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

Print Name: John D. Thomas Signed: _____

Title: Production and Assett Manager Date: 08/23/2016

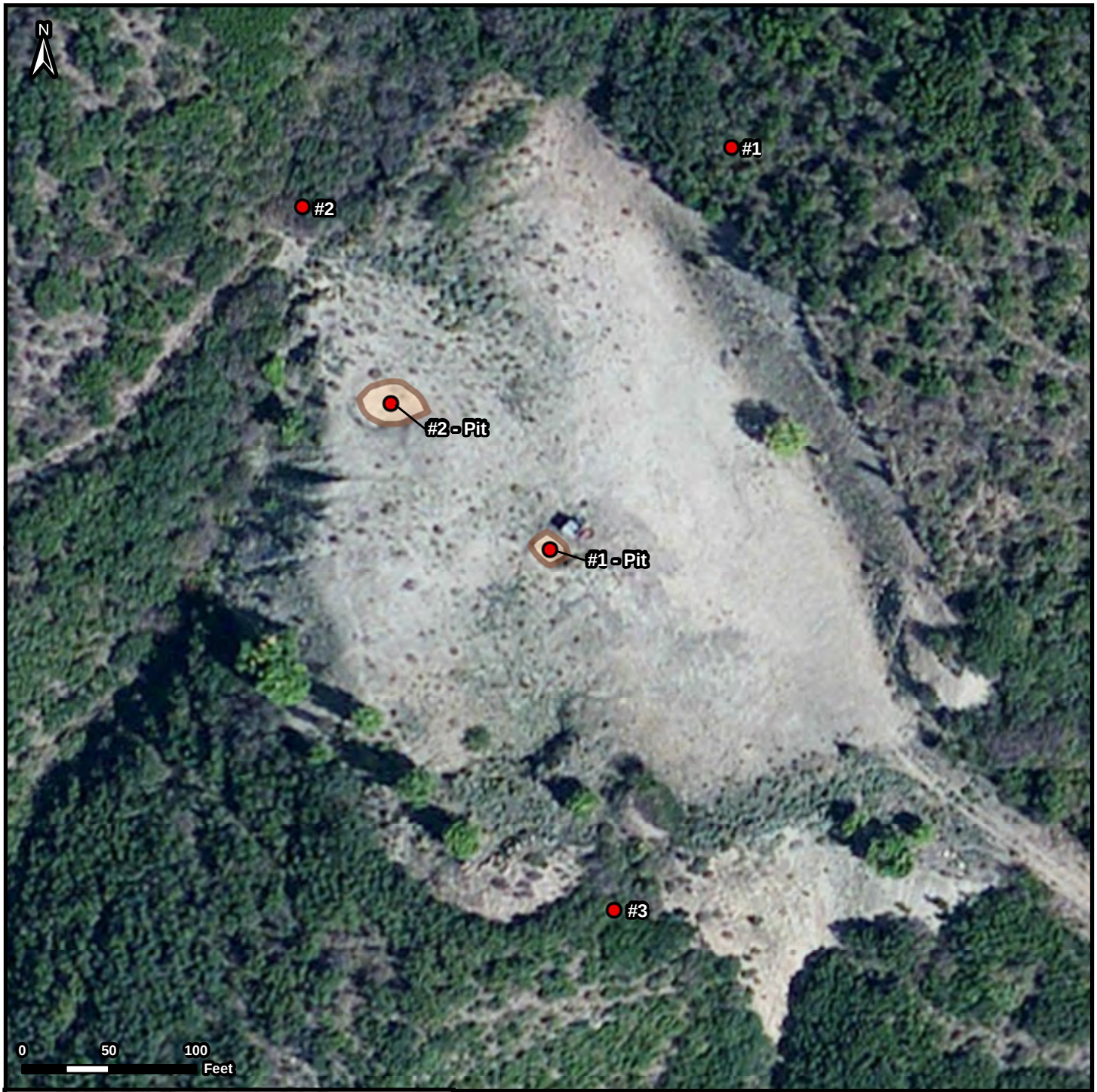
OGCC Approved: _____ Title: EPS Date: 8/25/16

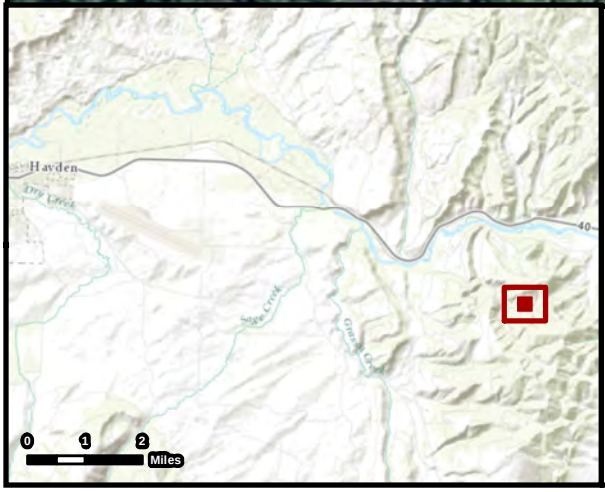
See next page for NFA & comments.

Based on review of information provided, No Further Action is required at this time. Should conditions at the site indicate contaminant concentrations in soils exceeding COGCC standards, further investigation and/or remediation activities may be required at the site.

Final Reclamation of Pits should comply with COGCC 1000 series rules. It is understood that the location is to be reclaimed after well is PA.

Please provide notice to Kris Neidel when pits have been backfilled. The two pit facilities, 117437, 447116 will remain open until they have been physically closed.





NOTES / COMMENTS:

RL Bayless

Sample Location Map

Grassy Creek Coal 1-24

40.464892 -107.093123
Section 24, Township 6 North, Range 87 West

Mapped Features

Sample Location

Pit Location

DISCLAIMER: This representation and the Geographic Information System (GIS) used to create it are designed as a source of reference and not intended to replace official records and/or legal surveys. HCSI assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantees as to the quality or accuracy of the underlying data.

HRL Compliance Solutions, Inc.
Environmental Consultants

Author: E. Fought
Revision: 0
Date: 8/10/2016

ANALYTICAL REPORT

August 15, 2016

HRL Compliance Solutions- CO

Sample Delivery Group:	L852167
Samples Received:	08/09/2016
Project Number:	GRASSY CREEK COAL-PI
Description:	Bayless Grassy Creek Coal 1 Pit #1
Site:	BAYLESS GRASSY CREEK
Report To:	Kris Rowe 2385 F ½ Road Grand Junction, CO 81505

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.

PIT #1 BOTTOM L852167-01 Solid

Collected by: Kris Rowe
Collected date/time: 08/08/16 12:30
Received date/time: 08/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG897320	1	08/12/16 08:08	08/15/16 16:07	CCE
Calculated Results	WG897434	1	08/10/16 13:11	08/12/16 12:12	JJL
Mercury by Method 7471A	WG897544	1	08/10/16 18:30	08/11/16 15:04	NJB
Metals (ICP) by Method 6010B	WG897434	1	08/10/16 13:11	08/11/16 00:11	CCE
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG897764	1	08/11/16 10:46	08/12/16 06:40	KMP
Semi-Volatile Organic Compounds (GC) by Method 8015	WG897780	1	08/10/16 22:41	08/11/16 21:01	DMG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG898051	1	08/11/16 09:00	08/11/16 23:23	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG897614	1	08/12/16 23:37	08/13/16 06:35	LRL
Wet Chemistry by Method 3060A/7196A	WG897137	1	08/12/16 11:32	08/12/16 12:12	JJL
Wet Chemistry by Method 9050AMod	WG897178	1	08/10/16 08:38	08/10/16 08:38	AMC

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. 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

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0327		1	08/15/2016 16:07	WG897320

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	16.5		2.00	1	08/12/2016 12:12	WG897434

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	08/12/2016 12:12	WG897137

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	83.0		1	08/10/2016 08:38	WG897178

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	0.0223		0.0200	1	08/11/2016 15:04	WG897544

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	9.03		2.00	1	08/11/2016 00:11	WG897434
Barium	125		0.500	1	08/11/2016 00:11	WG897434
Cadmium	ND		0.500	1	08/11/2016 00:11	WG897434
Chromium	17.5		1.00	1	08/11/2016 00:11	WG897434
Copper	20.1		2.00	1	08/11/2016 00:11	WG897434
Lead	25.9		0.500	1	08/11/2016 00:11	WG897434
Nickel	17.2		2.00	1	08/11/2016 00:11	WG897434
Selenium	ND		2.00	1	08/11/2016 00:11	WG897434
Silver	ND		1.00	1	08/11/2016 00:11	WG897434
Zinc	80.6		5.00	1	08/11/2016 00:11	WG897434

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.138		0.100	1	08/11/2016 23:23	WG898051
(S) a,a,a-Trifluorotoluene(FID)	*86.7*		*59.0-128*		*08/11/2016 23:23*	WG898051

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/13/2016 06:35	WG897614
Toluene	ND		0.00500	1	08/13/2016 06:35	WG897614
Ethylbenzene	ND		0.00100	1	08/13/2016 06:35	WG897614
Total Xylenes	ND	B	0.00300	1	08/13/2016 06:35	WG897614
(S) Toluene-d8	*101*		*88.7-115*		*08/13/2016 06:35*	WG897614
(S) Dibromofluoromethane	*117*		*76.3-123*		*08/13/2016 06:35*	WG897614
(S) a,a,a-Trifluorotoluene	*108*		*87.2-117*		*08/13/2016 06:35*	WG897614

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
(S) 4-Bromofluorobenzene	*82.4*		*69.7-129*		*08/13/2016 06:35*	WG897614

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	5.36	J3	4.00	1	08/11/2016 21:01	WG897780
(S) o-Terphenyl	*71.1*		*50.0-150*		*08/11/2016 21:01*	WG897780

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	08/12/2016 06:40	WG897764
Acenaphthene	ND		0.00600	1	08/12/2016 06:40	WG897764
Acenaphthylene	ND		0.00600	1	08/12/2016 06:40	WG897764
Benzo(a)anthracene	ND		0.00600	1	08/12/2016 06:40	WG897764
Benzo(a)pyrene	ND		0.00600	1	08/12/2016 06:40	WG897764
Benzo(b)fluoranthene	ND		0.00600	1	08/12/2016 06:40	WG897764
Benzo(g,h,i)perylene	ND		0.00600	1	08/12/2016 06:40	WG897764
Benzo(k)fluoranthene	ND		0.00600	1	08/12/2016 06:40	WG897764
Chrysene	ND		0.00600	1	08/12/2016 06:40	WG897764
Dibenz(a,h)anthracene	ND		0.00600	1	08/12/2016 06:40	WG897764
Fluoranthene	ND		0.00600	1	08/12/2016 06:40	WG897764
Fluorene	ND		0.00600	1	08/12/2016 06:40	WG897764
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	08/12/2016 06:40	WG897764
Naphthalene	ND		0.0200	1	08/12/2016 06:40	WG897764
Phenanthrene	ND		0.00600	1	08/12/2016 06:40	WG897764
Pyrene	ND		0.00600	1	08/12/2016 06:40	WG897764
1-Methylnaphthalene	ND		0.0200	1	08/12/2016 06:40	WG897764
2-Methylnaphthalene	ND		0.0200	1	08/12/2016 06:40	WG897764
2-Chloronaphthalene	ND		0.0200	1	08/12/2016 06:40	WG897764
(S) p-Terphenyl-d14	*69.1*		*32.2-131*		*08/12/2016 06:40*	WG897764
(S) Nitrobenzene-d5	*48.9*		*22.1-146*		*08/12/2016 06:40*	WG897764
(S) 2-Fluorobiphenyl	*74.2*		*40.6-122*		*08/12/2016 06:40*	WG897764

Method Blank (MB)

(MB) R3156398-1 08/12/16 11:38

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

L852096-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852096-01 08/12/16 11:56 • (DUP) R3156398-4 08/12/16 11:57

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

L852169-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852169-01 08/12/16 12:13 • (DUP) R3156398-8 08/12/16 12:13

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) R3156398-2 08/12/16 11:41 • (LCSD) R3156398-3 08/12/16 11:41

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	53.0	53.4	93.0	94.0	80.0-120			1.00	20

L852096-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852096-01 08/12/16 11:56 • (MS) R3156398-5 08/12/16 11:58 • (MSD) R3156398-6 08/12/16 11:59

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 %
Chromium,Hexavalent	20.0	ND	17.2	17.2	81.0	81.0	1	75.0-125			0.000	20

Method Blank (MB)

(MB) WG897178-5 08/10/16 08:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	1.60			

L852007-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852007-01 08/10/16 08:38 • (DUP) WG897178-1 08/10/16 08:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	umhos/cm	umhos/cm		%		%
Specific Conductance	362	361	1	0.277		20

L852169-02 Original Sample (OS) • Duplicate (DUP)

(OS) L852169-02 08/10/16 08:38 • (DUP) WG897178-2 08/10/16 08:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	umhos/cm	umhos/cm		%		%
Specific Conductance	79.1	79.2	1	0.126		20

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

(LCS) WG897178-3 08/10/16 08:38 • (LCSD) WG897178-4 08/10/16 08:38

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	umhos/cm	umhos/cm	umhos/cm	%	%	%			%	%
Specific Conductance	653	669	668	102	102	90.0-110			0.150	20

Method Blank (MB)

(MB) R3156143-1 08/11/16 14:13

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) R3156143-2 08/11/16 14:15 • (LCSD) R3156143-3 08/11/16 14:18

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	0.285	0.288	95	96	80-120			1	20

L852177-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852177-01 08/11/16 14:20 • (MS) R3156143-4 08/11/16 14:23 • (MSD) R3156143-5 08/11/16 14:25

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	0.00884	0.308	0.309	100	100	1	75-125			1	20

Method Blank (MB)

(MB) R3155925-1 08/10/16 22:58

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	0.229	J	0.19	0.500
Nickel	U		0.49	2.00
Selenium	U		0.74	2.00
Silver	U		0.28	1.00
Zinc	1.17	J	0.59	5.00

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

(LCS) R3155925-2 08/10/16 23:17 • (LCSD) R3155925-3 08/10/16 23:19

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	99.5	99.8	100	100	80-120			0	20
Barium	100	105	105	105	105	80-120			0	20
Cadmium	100	103	104	103	104	80-120			1	20
Chromium	100	105	105	105	105	80-120			0	20
Copper	100	100	101	100	101	80-120			1	20
Lead	100	105	106	105	106	80-120			1	20
Nickel	100	104	104	104	104	80-120			1	20
Selenium	100	102	102	102	102	80-120			0	20
Silver	100	102	100	102	100	80-120			2	20
Zinc	100	107	106	107	106	80-120			0	20

L852164-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852164-01 08/10/16 23:22 • (MS) R3155925-6 08/10/16 23:30 • (MSD) R3155925-7 08/10/16 23:32

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	13.2	105	116	92	103	1	75-125			10	20
Barium	100	27.5	122	131	95	103	1	75-125			7	20
Cadmium	100	1.15	96.4	107	95	105	1	75-125			10	20
Chromium	100	2.48	97.0	110	94	107	1	75-125			12	20
Copper	100	66.3	183	172	117	105	1	75-125			6	20
Lead	100	43.8	140	148	96	104	1	75-125			6	20
Nickel	100	1.70	98.6	109	97	107	1	75-125			10	20

L852164-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852164-01 08/10/16 23:22 • (MS) R3155925-6 08/10/16 23:30 • (MSD) R3155925-7 08/10/16 23:32

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 %
Selenium	100	U	93.5	104	93	104	1	75-125			11	20
Silver	100	U	93.5	105	94	105	1	75-125			11	20
Zinc	100	136	241	244	105	107	1	75-125			1	20

Method Blank (MB)

(MB) R3156281-3 08/11/16 10:55

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*

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

(LCS) R3156281-1 08/11/16 09:48 • (LCSD) R3156281-2 08/11/16 10:11

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	5.92	5.94	108	108	63.5-137			0.260	20
(S) a,a,a-Trifluorotoluene(FID)				*107*	*107*	*59.0-128*				

L852096-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852096-02 08/12/16 03:28 • (MS) R3156281-8 08/11/16 21:54 • (MSD) R3156281-9 08/11/16 22:17

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	ND	5.26	5.72	94.7	103	1	28.5-138			8.37	23.6
(S) a,a,a-Trifluorotoluene(FID)					*100*	*92.9*		*59.0-128*				

Method Blank (MB)

(MB) R3156584-3 08/12/16 23:14

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	*98.3*			*88.7-115*
(S) Dibromofluoromethane	*94.3*			*76.3-123*
(S) a,a,a-Trifluorotoluene	*100*			*87.2-117*
(S) 4-Bromofluorobenzene	*96.4*			*69.7-129*

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

(LCS) R3156584-1 08/12/16 21:54 • (LCSD) R3156584-2 08/12/16 22:13

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	0.0226	0.0240	90.5	96.1	72.6-120			6.10	20
Ethylbenzene	0.0250	0.0269	0.0266	108	106	78.6-124			1.33	20
Toluene	0.0250	0.0247	0.0258	98.9	103	76.7-116			4.19	20
Xylenes, Total	0.0750	0.0801	0.0788	107	105	78.1-123			1.56	20
(S) Toluene-d8				*97.3*	*101*	*88.7-115*				
(S) Dibromofluoromethane				*87.9*	*90.8*	*76.3-123*				
(S) a,a,a-Trifluorotoluene				*101*	*103*	*87.2-117*				
(S) 4-Bromofluorobenzene				*97.9*	*94.0*	*69.7-129*				

Method Blank (MB)

(MB) R3156020-1 08/11/16 09:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	*79.9*			*50.0-150*

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

(LCS) R3156020-2 08/11/16 09:42 • (LCSD) R3156020-3 08/11/16 09:53

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	%	%	%			%	%
TPH (GC/FID) High Fraction	60.0	40.1	46.3	66.8	77.2	50.0-150			14.3	20
(S) o-Terphenyl				*69.3*	*81.5*	*50.0-150*				

L852167-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852167-01 08/11/16 21:01 • (MS) R3156020-4 08/11/16 21:12 • (MSD) R3156020-5 08/11/16 21:24

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	%	%		%			%	%
TPH (GC/FID) High Fraction	60.0	5.36	38.9	49.9	55.9	74.2	1	50.0-150		J3	24.7	20
(S) o-Terphenyl					*57.9*	*75.0*		*50.0-150*				

Method Blank (MB)

(MB) R3156347-3 08/12/16 01:56

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	*80.2*			*32.2-131*
(S) Nitrobenzene-d5	*55.1*			*22.1-146*
(S) 2-Fluorobiphenyl	*85.4*			*40.6-122*

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

(LCS) R3156347-1 08/12/16 01:13 • (LCSD) R3156347-2 08/12/16 01:34

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	0.0697	0.0740	87.2	92.4	50.3-130			5.89	20
Acenaphthene	0.0800	0.0639	0.0672	79.9	84.1	52.4-120			5.09	20
Acenaphthylene	0.0800	0.0640	0.0672	80.0	84.0	49.6-120			4.86	20
Benzo(a)anthracene	0.0800	0.0595	0.0628	74.4	78.5	46.7-125			5.33	20
Benzo(a)pyrene	0.0800	0.0581	0.0591	72.6	73.9	42.3-119			1.83	20
Benzo(b)fluoranthene	0.0800	0.0582	0.0639	72.7	79.9	43.6-124			9.41	20
Benzo(g,h,i)perylene	0.0800	0.0615	0.0649	76.9	81.1	45.1-132			5.39	20
Benzo(k)fluoranthene	0.0800	0.0647	0.0660	80.9	82.5	46.1-131			1.92	20
Chrysene	0.0800	0.0625	0.0660	78.1	82.5	49.5-131			5.45	20
Dibenz(a,h)anthracene	0.0800	0.0675	0.0710	84.3	88.8	44.8-133			5.15	20
Fluoranthene	0.0800	0.0646	0.0684	80.7	85.5	49.3-128			5.74	20

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

(LCS) R3156347-1 08/12/16 01:13 • (LCSD) R3156347-2 08/12/16 01:34

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	0.0645	0.0677	80.7	84.7	50.6-121			4.86	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0660	0.0692	82.5	86.5	46.1-135			4.64	20
Naphthalene	0.0800	0.0614	0.0648	76.8	81.0	49.6-115			5.31	20
Phenanthrene	0.0800	0.0623	0.0652	77.8	81.5	48.8-121			4.58	20
Pyrene	0.0800	0.0638	0.0678	79.7	84.8	44.7-130			6.13	20
1-Methylnaphthalene	0.0800	0.0709	0.0754	88.7	94.3	50.6-122			6.11	20
2-Methylnaphthalene	0.0800	0.0690	0.0727	86.3	90.9	50.4-120			5.25	20
2-Chloronaphthalene	0.0800	0.0615	0.0647	76.8	80.9	53.9-121			5.16	20
(S) p-Terphenyl-d14				*75.6*	*82.3*	*32.2-131*				
(S) Nitrobenzene-d5				*53.6*	*58.2*	*22.1-146*				
(S) 2-Fluorobiphenyl				*81.7*	*89.1*	*40.6-122*				

L852096-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852096-02 08/12/16 02:18 • (MS) R3156347-4 08/12/16 02:40 • (MSD) R3156347-5 08/12/16 03:01

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	0.0800	ND	0.0690	0.0621	86.2	77.7	1	26.5-141			10.4	21.2
Acenaphthene	0.0800	ND	0.0625	0.0556	78.1	69.5	1	31.9-130			11.6	20
Acenaphthylene	0.0800	ND	0.0628	0.0560	78.5	70.0	1	33.7-129			11.5	20
Benzo(a)anthracene	0.0800	ND	0.0589	0.0513	73.6	64.1	1	18.3-136			13.8	24.6
Benzo(a)pyrene	0.0800	ND	0.0652	0.0569	81.6	71.2	1	16.9-135			13.6	25.2
Benzo(b)fluoranthene	0.0800	ND	0.0608	0.0515	76.0	64.4	1	10.0-134			16.5	30.9
Benzo(g,h,i)perylene	0.0800	ND	0.0599	0.0521	74.9	65.1	1	14.1-140			14.0	25.5
Benzo(k)fluoranthene	0.0800	ND	0.0600	0.0536	75.0	67.0	1	18.2-138			11.2	25.6
Chrysene	0.0800	ND	0.0609	0.0538	76.1	67.2	1	17.1-145			12.4	24.2
Dibenz(a,h)anthracene	0.0800	ND	0.0651	0.0571	81.4	71.4	1	18.5-138			13.0	24.3
Fluoranthene	0.0800	ND	0.0639	0.0569	79.9	71.2	1	15.4-144			11.5	27.1
Fluorene	0.0800	ND	0.0626	0.0553	78.2	69.2	1	23.5-136			12.3	20
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0630	0.0550	78.8	68.8	1	14.5-142			13.5	25.8
Naphthalene	0.0800	ND	0.0603	0.0539	75.4	67.4	1	29.2-128			11.2	20
Phenanthrene	0.0800	ND	0.0603	0.0540	75.3	67.5	1	20.1-134			10.9	23.6
Pyrene	0.0800	ND	0.0636	0.0558	79.5	69.8	1	11.0-148			13.1	26.1
1-Methylnaphthalene	0.0800	ND	0.0697	0.0620	87.1	77.5	1	28.4-137			11.7	20
2-Methylnaphthalene	0.0800	ND	0.0676	0.0603	84.5	75.4	1	26.6-137			11.5	20
2-Chloronaphthalene	0.0800	ND	0.0602	0.0533	75.3	66.6	1	38.6-126			12.2	20
(S) p-Terphenyl-d14					*77.0*	*68.0*		*32.2-131*				
(S) Nitrobenzene-d5					*54.3*	*48.6*		*22.1-146*				
(S) 2-Fluorobiphenyl					*82.6*	*73.5*		*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.

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
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		

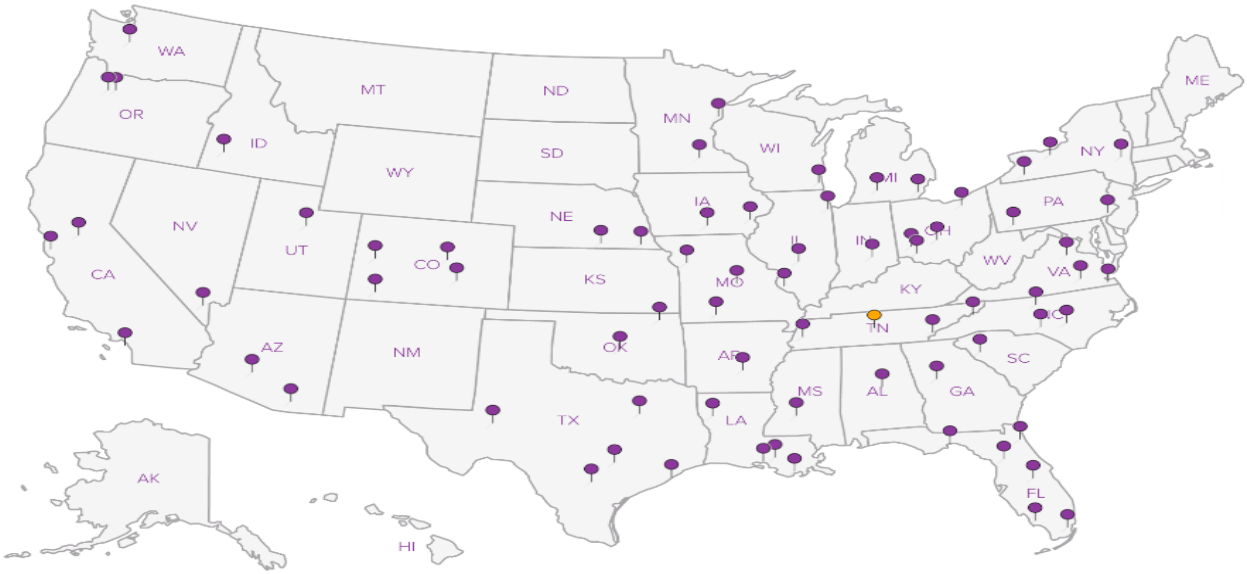
Third Party & Federal Accreditations

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:
HRL Compliance Solutions
2385 F ½ Road
Grand Junction, CO 81505

Billing Information:
HRL Compliance Solutions
2385 F ½ Road
Grand Junction, CO 81505
Quote #: HRL CSCO-072016S

Report to: Kris Rowe

Email To: **KROWE@HRLCOMP.COM**

Project Description: Bayless- Grassy Creek Coal 1-24 - Pit #1

City/State Collected: **Colorado**

Phone: **970-243-3271**
Fax: **970-243-3280**

Client Project # Grassy Creek Coal -Pit #1

Lab Project #

Collected by (print): Kris Rowe

Site/Facility ID # **Bayless Grassy Creek**

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y ✓

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

Date Results Needed: STD 5 DAY - 8/16/16

Email? ___No ✓Yes
FAX? ✓No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX	DRO	GRO	910-1 Metals	SAR / EC / pH						Rem./Contaminant	Sample # (lab only)
Pit #1 Bottom	Comp	SS	3"-5"	8/8/2016	1230	3	X	X	X	X	X							01

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

Remarks: **Samples were collected from true pit bottom.**

pH _____ Temp _____

Flow _____ Other _____

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	8/8/16	1645	
Relinquished by : (Signature)	Date: 8/8/16	Time: 1700	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

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

Temp: 1.8 °C Bottles Received: 3

Date: 8/9/16 Time: 0900

Hold #

Condition: DNB9 (lab use only) a

COC Seal Intact: ____Y ____N ____NA

pH Checked: NCF:

Chain of Custody Page ___ of ___

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 # 352167

G079

Acctnum: HRLCSCO
Template: T97067
Prelogin:
TSR: Shane Gambill
Cooler:
Shipped Via:

ESC
L·A·B S·C·I·E·N·C·E·S
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Cooler Receipt Checklist

Client: HRLCSCO SDG# 852167

Cooler Received/Opened On: 8-9-16 By Jeremy Watkins

Temperature Upon Receipt: 1.8 °c

Jeremy Watkins
(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)		✓	

ANALYTICAL REPORT

August 17, 2016

HRL Compliance Solutions- CO

Sample Delivery Group:	L852169
Samples Received:	08/09/2016
Project Number:	GRASSY CREEK COAL -P
Description:	Bayless-Grassy Creek Coal 1 Pit #2
Site:	BAYLESS GRASSY CREEK
Report To:	Kris Rowe 2385 F ½ Road Grand Junction, CO 81505

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.

PIT #2 BOTTOM 3-5 IN L852169-01 Solid

Collected by: Kris Rowe
Collected date/time: 08/08/16 12:45
Received date/time: 08/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG897320	1	08/12/16 08:08	08/15/16 16:10	CCE
Calculated Results	WG897434	1	08/10/16 13:11	08/12/16 12:13	JJL
Mercury by Method 7471A	WG897544	1	08/10/16 18:30	08/11/16 15:06	NJB
Metals (ICP) by Method 6010B	WG897434	1	08/10/16 13:11	08/11/16 00:14	CCE
Semi-Volatile Organic Compounds (GC) by Method 8015	WG897780	1	08/10/16 22:41	08/11/16 21:46	DMG
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG898051	1	08/11/16 09:00	08/11/16 23:46	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG897614	1	08/12/16 23:37	08/15/16 02:16	JHH
Wet Chemistry by Method 3060A/7196A	WG897137	1	08/12/16 11:32	08/12/16 12:13	JJL
Wet Chemistry by Method 9045D	WG899169	1	08/16/16 12:22	08/16/16 12:22	MHM
Wet Chemistry by Method 9050AMod	WG897178	1	08/10/16 08:38	08/10/16 08:38	AMC

BKGD 1 0-4 IN L852169-02 Solid

Collected by: Kris Rowe
Collected date/time: 08/08/16 13:00
Received date/time: 08/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG897320	1	08/12/16 08:08	08/15/16 14:17	LTB
Metals (ICP) by Method 6010B	WG897434	1	08/10/16 13:11	08/11/16 00:22	CCE
Wet Chemistry by Method 9045D	WG897141	1	08/11/16 10:18	08/11/16 10:18	JJL
Wet Chemistry by Method 9050AMod	WG897178	1	08/10/16 08:38	08/10/16 08:38	AMC

BKGD 2 0-4 IN L852169-03 Solid

Collected by: Kris Rowe
Collected date/time: 08/08/16 13:10
Received date/time: 08/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG897434	1	08/10/16 13:11	08/11/16 00:24	CCE

BKGD 3 0-4 IN L852169-04 Solid

Collected by: Kris Rowe
Collected date/time: 08/08/16 13:15
Received date/time: 08/09/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG897434	1	08/10/16 13:11	08/11/16 00:27	CCE

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
L852169-01	PIT #2 BOTTOM 3-5 IN	9045D
L852169-02	BKGD 1 0-4 IN	9045D

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.0463		1	08/15/2016 16:10	WG897320

Calculated Results

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Chromium,Trivalent	14.4		2.00	1	08/12/2016 12:13	WG897434

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	08/12/2016 12:13	WG897137

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.64		1	08/16/2016 12:22	WG899169

Sample Narrative:

9045D L852169-01 WG899169: 7.64 at 22.9c

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	Dilution	Analysis date / time	Batch
Specific Conductance	127		1	08/10/2016 08:38	WG897178

Mercury by Method 7471A

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Mercury	ND		0.0200	1	08/11/2016 15:06	WG897544

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.01		2.00	1	08/11/2016 00:14	WG897434
Barium	93.1		0.500	1	08/11/2016 00:14	WG897434
Cadmium	ND		0.500	1	08/11/2016 00:14	WG897434
Chromium	14.4		1.00	1	08/11/2016 00:14	WG897434
Copper	17.5		2.00	1	08/11/2016 00:14	WG897434
Lead	26.0		0.500	1	08/11/2016 00:14	WG897434
Nickel	15.5		2.00	1	08/11/2016 00:14	WG897434
Selenium	ND		2.00	1	08/11/2016 00:14	WG897434
Silver	ND		1.00	1	08/11/2016 00:14	WG897434
Zinc	73.7		5.00	1	08/11/2016 00:14	WG897434

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.106		0.100	1	08/11/2016 23:46	WG898051
(S) a,a,a-Trifluorotoluene(FID)	*91.5*		*59.0-128*		*08/11/2016 23:46*	WG898051

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	08/15/2016 02:16	WG897614
Toluene	ND		0.00500	1	08/15/2016 02:16	WG897614
Ethylbenzene	ND		0.00100	1	08/15/2016 02:16	WG897614
Total Xylenes	ND		0.00300	1	08/15/2016 02:16	WG897614
(S) Toluene-d8	*101*		*88.7-115*		*08/15/2016 02:16*	WG897614
(S) Dibromofluoromethane	*94.8*		*76.3-123*		*08/15/2016 02:16*	WG897614
(S) a,a,a-Trifluorotoluene	*103*		*87.2-117*		*08/15/2016 02:16*	WG897614
(S) 4-Bromofluorobenzene	*100*		*69.7-129*		*08/15/2016 02:16*	WG897614

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	6.89		4.00	1	08/11/2016 21:46	WG897780
(S) o-Terphenyl	*51.7*		*50.0-150*		*08/11/2016 21:46*	WG897780

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.288		1	08/15/2016 14:17	WG897320

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
pH	7.40		1	08/11/2016 10:18	WG897141

Sample Narrative:

9045D L852169-02 WG897141: 7.40 at 21.5c

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	umhos/cm				
Specific Conductance	79.1		1	08/10/2016 08:38	WG897178

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	4.02		2.00	1	08/11/2016 00:22	WG897434

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	7.13		2.00	1	08/11/2016 00:24	WG897434

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	12.5		2.00	1	08/11/2016 00:27	WG897434

Method Blank (MB)

(MB) R3156398-1 08/12/16 11:38

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

L852096-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852096-01 08/12/16 11:56 • (DUP) R3156398-4 08/12/16 11:57

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

L852169-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852169-01 08/12/16 12:13 • (DUP) R3156398-8 08/12/16 12:13

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) R3156398-2 08/12/16 11:41 • (LCSD) R3156398-3 08/12/16 11:41

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	53.0	53.4	93.0	94.0	80.0-120			1.00	20

L852096-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852096-01 08/12/16 11:56 • (MS) R3156398-5 08/12/16 11:58 • (MSD) R3156398-6 08/12/16 11:59

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 %
Chromium,Hexavalent	20.0	ND	17.2	17.2	81.0	81.0	1	75.0-125			0.000	20

L851993-01 Original Sample (OS) • Duplicate (DUP)

(OS) L851993-01 08/11/16 10:18 • (DUP) WG897141-3 08/11/16 10:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	6.05	6.10	1	0.823		1

L852579-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852579-01 08/11/16 10:18 • (DUP) WG897141-4 08/11/16 10:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.60	8.60	1	0.000		1

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

(LCS) WG897141-1 08/11/16 10:18 • (LCSD) WG897141-2 08/11/16 10:18

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	6.03	6.04	98.7	98.9	98.4-102			0.166	1

L853464-04 Original Sample (OS) • Duplicate (DUP)

(OS) L853464-04 08/16/16 12:22 • (DUP) WG899169-3 08/16/16 12:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.87	7.87	1	0.765		1

L853608-02 Original Sample (OS) • Duplicate (DUP)

(OS) L853608-02 08/16/16 12:22 • (DUP) WG899169-4 08/16/16 12:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.11	9.12	1	0.110		1

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

(LCS) WG899169-1 08/16/16 12:22 • (LCSD) WG899169-2 08/16/16 12:22

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	6.14	6.16	100	101	98.4-102			0.325	1

Method Blank (MB)

(MB) WG897178-5 08/10/16 08:38

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	1.60			

L852007-01 Original Sample (OS) • Duplicate (DUP)

(OS) L852007-01 08/10/16 08:38 • (DUP) WG897178-1 08/10/16 08:38

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	362	361	1	0.277		20

L852169-02 Original Sample (OS) • Duplicate (DUP)

(OS) L852169-02 08/10/16 08:38 • (DUP) WG897178-2 08/10/16 08:38

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	79.1	79.2	1	0.126		20

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

(LCS) WG897178-3 08/10/16 08:38 • (LCSD) WG897178-4 08/10/16 08:38

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	653	669	668	102	102	90.0-110			0.150	20

Method Blank (MB)

(MB) R3156143-1 08/11/16 14:13

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) R3156143-2 08/11/16 14:15 • (LCSD) R3156143-3 08/11/16 14:18

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	0.285	0.288	95	96	80-120			1	20

L852177-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852177-01 08/11/16 14:20 • (MS) R3156143-4 08/11/16 14:23 • (MSD) R3156143-5 08/11/16 14:25

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	0.00884	0.308	0.309	100	100	1	75-125			1	20

Method Blank (MB)

(MB) R3155925-1 08/10/16 22:58

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	0.229	J	0.19	0.500
Nickel	U		0.49	2.00
Selenium	U		0.74	2.00
Silver	U		0.28	1.00
Zinc	1.17	J	0.59	5.00

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

(LCS) R3155925-2 08/10/16 23:17 • (LCSD) R3155925-3 08/10/16 23:19

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	99.5	99.8	100	100	80-120			0	20
Barium	100	105	105	105	105	80-120			0	20
Cadmium	100	103	104	103	104	80-120			1	20
Chromium	100	105	105	105	105	80-120			0	20
Copper	100	100	101	100	101	80-120			1	20
Lead	100	105	106	105	106	80-120			1	20
Nickel	100	104	104	104	104	80-120			1	20
Selenium	100	102	102	102	102	80-120			0	20
Silver	100	102	100	102	100	80-120			2	20
Zinc	100	107	106	107	106	80-120			0	20

L852164-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852164-01 08/10/16 23:22 • (MS) R3155925-6 08/10/16 23:30 • (MSD) R3155925-7 08/10/16 23:32

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 %
Arsenic	106	14.0	112	124	92	103	1	75-125			10	20
Barium	106	29.2	130	139	95	103	1	75-125			7	20
Cadmium	106	1.22	102	113	95	105	1	75-125			10	20
Chromium	106	2.63	103	116	94	107	1	75-125			12	20
Copper	106	70.4	194	182	117	105	1	75-125			6	20
Lead	106	46.5	148	157	96	104	1	75-125			6	20

L852164-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852164-01 08/10/16 23:22 • (MS) R3155925-6 08/10/16 23:30 • (MSD) R3155925-7 08/10/16 23:32

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 %
Nickel	106	1.81	105	115	97	107	1	75-125			10	20
Selenium	106	U	99.2	110	93	104	1	75-125			11	20
Silver	106	U	99.2	111	94	105	1	75-125			11	20
Zinc	106	145	256	259	105	107	1	75-125			1	20

Method Blank (MB)

(MB) R3156281-3 08/11/16 10:55

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*

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

(LCS) R3156281-1 08/11/16 09:48 • (LCSD) R3156281-2 08/11/16 10:11

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	5.92	5.94	108	108	63.5-137			0.260	20
(S) a,a,a-Trifluorotoluene(FID)				*107*	*107*	*59.0-128*				

L852096-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852096-02 08/12/16 03:28 • (MS) R3156281-8 08/11/16 21:54 • (MSD) R3156281-9 08/11/16 22:17

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	ND	5.26	5.72	94.7	103	1	28.5-138			8.37	23.6
(S) a,a,a-Trifluorotoluene(FID)					*100*	*92.9*		*59.0-128*				

Method Blank (MB)

(MB) R3156584-3 08/12/16 23:14

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	*98.3*			*88.7-115*
(S) Dibromofluoromethane	*94.3*			*76.3-123*
(S) a,a,a-Trifluorotoluene	*100*			*87.2-117*
(S) 4-Bromofluorobenzene	*96.4*			*69.7-129*

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

(LCS) R3156584-1 08/12/16 21:54 • (LCSD) R3156584-2 08/12/16 22:13

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	0.0226	0.0240	90.5	96.1	72.6-120			6.10	20
Ethylbenzene	0.0250	0.0269	0.0266	108	106	78.6-124			1.33	20
Toluene	0.0250	0.0247	0.0258	98.9	103	76.7-116			4.19	20
Xylenes, Total	0.0750	0.0801	0.0788	107	105	78.1-123			1.56	20
(S) Toluene-d8				*97.3*	*101*	*88.7-115*				
(S) Dibromofluoromethane				*87.9*	*90.8*	*76.3-123*				
(S) a,a,a-Trifluorotoluene				*101*	*103*	*87.2-117*				
(S) 4-Bromofluorobenzene				*97.9*	*94.0*	*69.7-129*				

Method Blank (MB)

(MB) R3156020-1 08/11/16 09:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
TPH (GC/FID) High Fraction	U		0.769	4.00
(S) o-Terphenyl	*79.9*			*50.0-150*

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

(LCS) R3156020-2 08/11/16 09:42 • (LCSD) R3156020-3 08/11/16 09:53

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	%	%	%			%	%
TPH (GC/FID) High Fraction	60.0	40.1	46.3	66.8	77.2	50.0-150			14.3	20
(S) o-Terphenyl				*69.3*	*81.5*	*50.0-150*				

L852167-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L852167-01 08/11/16 21:01 • (MS) R3156020-4 08/11/16 21:12 • (MSD) R3156020-5 08/11/16 21:24

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	%	%		%			%	%
TPH (GC/FID) High Fraction	60.0	5.36	38.9	49.9	55.9	74.2	1	50.0-150		J3	24.7	20
(S) o-Terphenyl					*57.9*	*75.0*		*50.0-150*				

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
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.

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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		

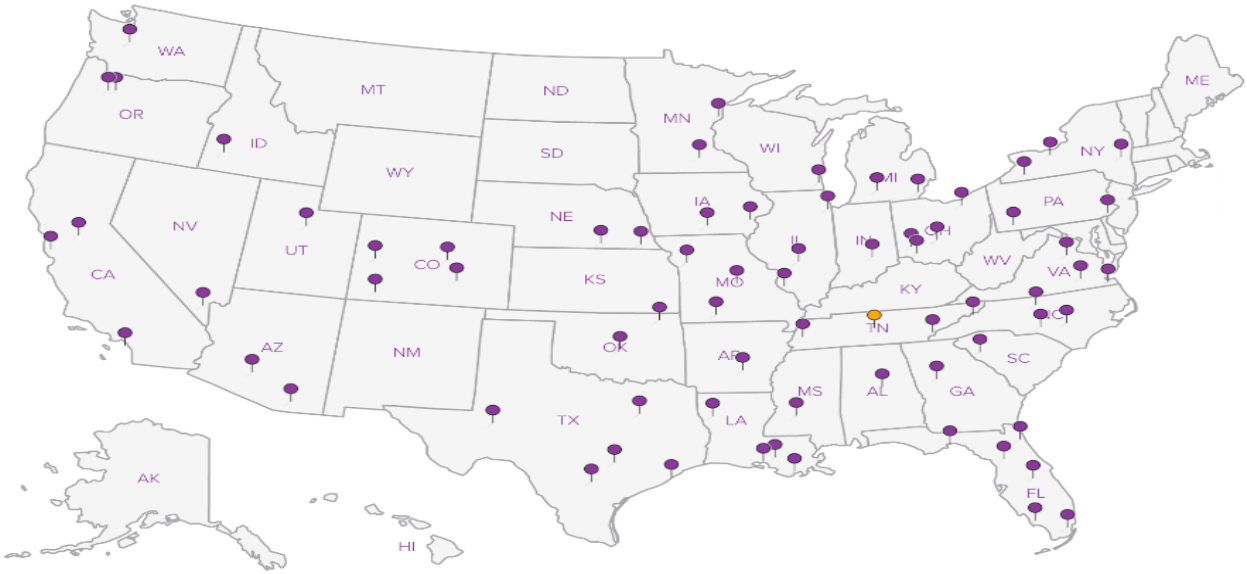
Third Party & Federal Accreditations

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:
HRL Compliance Solutions
2385 F ½ Road
Grand Junction, CO 81505

Billing Information:
HRL Compliance Solutions
2385 F ½ Road
Grand Junction, CO 81505
Quote #: HRL CSCO-072016S

Report to: Kris Rowe
Email To: **KROWE@HRLCOMP.COM**

Project Description: Bayless- Grassy Creek Coal 1-24 - Pit #2
City/State Collected: **Colorado**

Phone: **970-243-3271**
Fax: **970-243-3280**
Client Project #: Grassy Creek Coal -Pit #2
Lab Project #

Collected by (print): Kris Rowe
Site/Facility ID #: **Bayless Grassy Creek**
P.O. #

Collected by (signature):
Immediately Packed on Ice N ____ Y ✓

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

Date Results Needed: STD 5 DAY - 8/16/16
Email? ___No ✓Yes
FAX? ✓No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	BTEX	DRO	GRO	910-1 Metals	SAR / EC / pH	Arsenic	Rem./Contaminant	Sample # (lab only)
Pit #2 Bottom	Comp	SS	3"-5"	8/8/2016	1245	3	X	X	X	X	X			01
BKGD 1	Grab	SS	0-4"	8/8/2016	1300	1					X	X		02
BKGD 2	Grab	SS	0-4"	8/8/2016	1310	↓						X		03
BKGD 3	Grab	SS	0-4"	8/8/2016	1315	↓						X		04

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

Remarks: **Samples were collected from true pit bottom.**

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	8/8/16	1645	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	8/8/16	1700	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 1.8 °C Bottles Received: 6
Date: 8/9/16 Time: 0900

Hold #
Condition: NCB9 (lab use only) a
COC Seal Intact: ____Y ____N ____NA
pH Checked: NCF:

Chain of Custody Page ___ of ___

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# 852169
G080
Acctnum: **HRLCSCO**
Template: **T97067**
Prelogin:
TSR: **Shane Gambill**
Cooler:
Shipped Via:

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

Cooler Receipt Checklist

Client: HRLCSCO SDG# 852165

Cooler Received/Opened On: 8-9-16 By Jeremy Watkins

Temperature Upon Receipt: 1.8 °c

Jeremy Watkins
(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)		✓	