



**Nicholson GeoSolutions LLC**

3433 East Lake Drive  
Centennial, CO 80121

June 21, 2018

Mr. Terry Pape  
HRM Resources, LLC  
410 17<sup>th</sup> Street, Suite 1600  
Denver, CO 80202

**Subject: Barfknecht No. 1 Landfarm Removal and Footprint Sampling Results  
COGCC Remediation #9049**

Dear Terry:

Nicholson GeoSolutions LLC was retained by HRM Resources II LLC (HRM) to conduct soil sampling of the landfarm footprint on the Barfknecht No. 1 lease, Washington County, Colorado. The landfarm material was removed and sent to the Denver Arapahoe Disposal (DADS) Landfill in Aurora, Colorado during early June 2018 by Jayhawk Grading, Inc. A total of 476 yards of impacted material was sent to the landfill. Appendix A provides the landfill gatehouse summary.

Sampling of the landfarm footprint was conducted at four locations on June 6<sup>th</sup>, 2018. The locations of the footprint samples are shown on Figure 1. All footprint samples were analyzed for Total Volatile Petroleum Hydrocarbons (TVPH – gasoline range), Total Extractable Petroleum Hydrocarbons (TEPH – diesel and motor oil range), BTEX (benzene, toluene, ethylbenzene, and xylenes), sodium adsorption ratio (SAR), pH, and conductivity to evaluate compliance with the COGCC Table 910-1 standards.

Table 1 provides a summary of the analytical results for the samples. The laboratory report is contained in Appendix B. All results were below the COGCC standards and no further action is required at this site.

Nicholson GeoSolutions LLC

A handwritten signature in blue ink that reads "DK Nicholson".

David K. Nicholson, P.G.  
Principal Geologist

**Table 1          Barfknecht No. 1 Landfarm Footprint Sample Results – June 6, 2018**

	<b>Table 910-1 Standards</b>	<b>Barfknecht- 1</b>	<b>Barfknecht- 2</b>	<b>Barfknecht- 3</b>	<b>Barfknecht- 4</b>
TVPH – gasoline range	500 <sup>1</sup>	<0.1	<0.1	<0.1	<0.1
TEPH – diesel and motor oil range		194.8	14.81	45.9	134
benzene	0.17	0.000782	0.000815	0.001	0.000882
toluene	85	<0.005	<0.005	<0.005	<0.005
ethylbenzene	100	<0.0005	0.000537	0.000572	0.000513
xylenes	175	<0.0015	<0.0015	<0.0015	<0.0015
pH	6-9 units	8.37	8.40	8.82	8.60
Specific Conductivity	<4 mmhos/cm	0.504	0.181	0.339	0.205
SAR	<12	3.61	1.02	3.29	0.84

<sup>1</sup>The standard is 500 for the combined total of TVPH and TEPH    All units in mg/kg except where indicated



**APPENDIX A**  
**Landfill Gatehouse Summary**

Criteria: 05/20/2018 12:00 AM to 06/16/2018 11:59 PM  
Business Unit Name: S04012 - Denver Arapahoe Disposal (USA)  
User: SLA  
Date: Jun 21 2018, 12:15:06 PM  
Operation Type: All  
Customer Name: HRMRESOURCESIILLC(HRM RESOURCES II LLC)  
Ticket Type: All  
Customer Type: All  
PMT Category: All

Ticket Date	Ticket ID	Cust Code	MAS Uniq	Customer	Generator	Manifest	Profile	Truck	Material	Mat. Desc.	Origin	Rt. Qty	Yards
6/4/2018	3134875	15549	419453005	HRM RESOL	125-HRMR	468943	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134878	15549	419453005	HRM RESOL	125-HRMR	468944	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134883	15549	419453005	HRM RESOL	125-HRMR	468945	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134889	15549	419453005	HRM RESOL	125-HRMR	468946	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134895	15549	419453005	HRM RESOL	125-HRMR	468951	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134898	15549	419453005	HRM RESOL	125-HRMR	468952	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134903	15549	419453005	HRM RESOL	125-HRMR	468953	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3134907	15549	419453005	HRM RESOL	125-HRMR	468954	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135039	15549	419453005	HRM RESOL	125-HRMR	468942	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135043	15549	419453005	HRM RESOL	125-HRMR	468949	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135088	15549	419453005	HRM RESOL	125-HRMR	468950	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135296	15549	419453005	HRM RESOL	125-HRMR	446365	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135298	15549	419453005	HRM RESOL	125-HRMR	446366	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135301	15549	419453005	HRM RESOL	125-HRMR	446372	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135307	15549	419453005	HRM RESOL	125-HRMR	446370	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135311	15549	419453005	HRM RESOL	125-HRMR	446367	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135355	15549	419453005	HRM RESOL	125-HRMR	446369	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135357	15549	419453005	HRM RESOL	125-HRMR	446373	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135359	15549	419453005	HRM RESOL	125-HRMR	446371	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135650	15549	419453005	HRM RESOL	125-HRMR	446364	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135652	15549	419453005	HRM RESOL	125-HRMR	468940	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135657	15549	419453005	HRM RESOL	125-HRMR	446375	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135660	15549	419453005	HRM RESOL	125-HRMR	468941	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/4/2018	3135662	15549	419453005	HRM RESOL	125-HRMR	468948	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/5/2018	3135988	15549	419453005	HRM RESOL	125-HRMR	468947	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/5/2018	3135997	15549	419453005	HRM RESOL	125-HRMR	446374	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/5/2018	3136266	15549	419453005	HRM RESOL	125-HRMR	446360	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
6/7/2018	3138026	15549	419453005	HRM RESOL	125-HRMR	448557	120980CO	1	ContSoilPei	Cont. Soil	BARFKNECHT	17	17.0
													476.0

**APPENDIX B**  
**Laboratory Report**

June 11, 2018

## HRM Resources, LLC - Denver, CO

Sample Delivery Group: L999863  
Samples Received: 06/07/2018  
Project Number:  
Description: HRM Landfarm Sampling

Report To: Dave Nicholson  
410 17th St., Ste. 1600  
Denver, CO 80202

Entire Report Reviewed By:



Mark W. Beasley  
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.



Cp: Cover Page	1	<sup>1</sup> Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	<sup>2</sup> Tc
Cn: Case Narrative	6	
Sr: Sample Results	7	<sup>3</sup> Ss
LIPPLEMANN P-1 L999863-01	7	
COWLES P-1 L999863-02	8	<sup>4</sup> Cn
COWLES P-4 L999863-03	9	<sup>5</sup> Sr
ANDERSON-1 L999863-04	10	
ANDERSON-2 L999863-05	11	<sup>6</sup> Qc
ANDERSON-3 L999863-06	12	
ANDERSON-4 L999863-07	13	<sup>7</sup> Gl
BARFKNECHT-1 L999863-08	14	<sup>8</sup> Al
BARFKNECHT-2 L999863-09	15	
BARFKNECHT-3 L999863-10	16	<sup>9</sup> Sc
BARFKNECHT-4 L999863-11	17	
Qc: Quality Control Summary	18	
Wet Chemistry by Method 9045D	18	
Wet Chemistry by Method 9050AMod	19	
Volatile Organic Compounds (GC) by Method 8015/8021	20	
Semi-Volatile Organic Compounds (GC) by Method 8015	22	
Gl: Glossary of Terms	23	
Al: Accreditations & Locations	24	
Sc: Sample Chain of Custody	25	



# SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## LIPPLEMANN P-1 L999863-01 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 10:30

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 15:53	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 17:42	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	10	06/07/18 23:12	06/08/18 18:05	MTJ

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

## COWLES P-1 L999863-02 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 11:30

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:03	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 18:05	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	1	06/07/18 23:12	06/08/18 15:29	MTJ

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

## COWLES P-4 L999863-03 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 11:35

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:07	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 18:27	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	5	06/07/18 23:12	06/08/18 17:27	MTJ

<sup>9</sup> Sc

## ANDERSON-1 L999863-04 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 12:45

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:10	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 18:49	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	10	06/07/18 23:12	06/08/18 18:17	MTJ

## ANDERSON-2 L999863-05 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 12:50

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:13	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 19:12	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	5	06/07/18 23:12	06/08/18 17:14	MTJ

ACCOUNT:

HRM Resources, LLC - Denver, CO

PROJECT:

SDG:

L999863

DATE/TIME:

06/11/18 14:41

PAGE:

3 of 27

## SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



## ANDERSON-3 L999863-06 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 13:00

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:17	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 19:34	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	5	06/07/18 23:12	06/08/18 17:39	MTJ

<sup>1</sup> Cp<sup>2</sup> Tc<sup>3</sup> Ss<sup>4</sup> Cn

## ANDERSON-4 L999863-07 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 13:05

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:20	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 19:56	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	10	06/07/18 23:12	06/08/18 17:52	MTJ

<sup>5</sup> Sr<sup>6</sup> Qc<sup>7</sup> Gl<sup>8</sup> Al

## BARFKNECHT-1 L999863-08 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 13:35

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:23	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 20:18	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	1	06/07/18 23:12	06/08/18 17:01	MTJ

<sup>9</sup> Sc

## BARFKNECHT-2 L999863-09 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 13:45

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:27	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 20:41	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	1	06/07/18 23:12	06/08/18 15:43	MTJ

## BARFKNECHT-3 L999863-10 Solid

Collected by  
David Cox

Collected date/time  
06/06/18 13:50

Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:30	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 21:03	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	1	06/07/18 23:12	06/08/18 15:57	MTJ

ACCOUNT:

HRM Resources, LLC - Denver, CO

PROJECT:

SDG:

L999863

DATE/TIME:

06/11/18 14:41

PAGE:

4 of 27



## BARFKNECHT-4 L999863-11 Solid

Collected by  
David CoxCollected date/time  
06/06/18 14:00Received date/time  
06/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Calculated Results	WG1121485	1	06/08/18 14:04	06/09/18 16:34	WBD
Wet Chemistry by Method 9045D	WG1121586	1	06/08/18 09:29	06/08/18 10:45	MLW
Wet Chemistry by Method 9050AMod	WG1121617	1	06/08/18 09:43	06/08/18 11:23	MJA
Volatile Organic Compounds (GC) by Method 8015/8021	WG1121817	1	06/07/18 22:30	06/08/18 21:25	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1121510	1	06/07/18 23:12	06/08/18 16:11	MTJ

<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



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Mark W. Beasley  
Technical Service Representative

<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	3.61		1	06/09/2018 16:23	WG1121485

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.37	T8	1	06/08/2018 10:45	<a href="#">WG1121586</a>

## Sample Narrative:

L999863-08 WG1121586: 8.37 at 21.9C

## Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	504		10.0	1	06/08/2018 11:23	<a href="#">WG1121617</a>

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.000782		0.000500	1	06/08/2018 20:18	<a href="#">WG1121817</a>
Toluene	ND		0.00500	1	06/08/2018 20:18	<a href="#">WG1121817</a>
Ethylbenzene	ND		0.000500	1	06/08/2018 20:18	<a href="#">WG1121817</a>
Total Xylene	ND		0.00150	1	06/08/2018 20:18	<a href="#">WG1121817</a>
TPH (GC/FID) Low Fraction	ND		0.100	1	06/08/2018 20:18	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(FID)	92.6		77.0-120		06/08/2018 20:18	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(PID)	93.6		75.0-128		06/08/2018 20:18	<a href="#">WG1121817</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	97.4		4.00	1	06/08/2018 17:01	<a href="#">WG1121510</a>
C28-C40 Oil Range	97.4		4.00	1	06/08/2018 17:01	<a href="#">WG1121510</a>
(S) o-Terphenyl	57.4		18.0-148		06/08/2018 17:01	<a href="#">WG1121510</a>

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



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.02		1	06/09/2018 16:27	WG1121485

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.40	T8	1	06/08/2018 10:45	<a href="#">WG1121586</a>

## Sample Narrative:

L999863-09 WG1121586: 8.4 at 22.2C

## Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	181		10.0	1	06/08/2018 11:23	<a href="#">WG1121617</a>

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.000815		0.000500	1	06/08/2018 20:41	<a href="#">WG1121817</a>
Toluene	ND		0.00500	1	06/08/2018 20:41	<a href="#">WG1121817</a>
Ethylbenzene	0.000537		0.000500	1	06/08/2018 20:41	<a href="#">WG1121817</a>
Total Xylene	ND		0.00150	1	06/08/2018 20:41	<a href="#">WG1121817</a>
TPH (GC/FID) Low Fraction	ND		0.100	1	06/08/2018 20:41	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(FID)	91.7		77.0-120		06/08/2018 20:41	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(PID)	92.9		75.0-128		06/08/2018 20:41	<a href="#">WG1121817</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.24		4.00	1	06/08/2018 15:43	<a href="#">WG1121510</a>
C28-C40 Oil Range	9.57		4.00	1	06/08/2018 15:43	<a href="#">WG1121510</a>
(S) o-Terphenyl	68.3		18.0-148		06/08/2018 15:43	<a href="#">WG1121510</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.29		1	06/09/2018 16:30	WG1121485

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.82	T8	1	06/08/2018 10:45	<a href="#">WG1121586</a>

## Sample Narrative:

L999863-10 WG1121586: 8.82 at 21.9C

## Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	339		10.0	1	06/08/2018 11:23	<a href="#">WG1121617</a>

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.00100		0.000500	1	06/08/2018 21:03	<a href="#">WG1121817</a>
Toluene	ND		0.00500	1	06/08/2018 21:03	<a href="#">WG1121817</a>
Ethylbenzene	0.000572		0.000500	1	06/08/2018 21:03	<a href="#">WG1121817</a>
Total Xylene	ND		0.00150	1	06/08/2018 21:03	<a href="#">WG1121817</a>
TPH (GC/FID) Low Fraction	ND		0.100	1	06/08/2018 21:03	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(FID)	92.1		77.0-120		06/08/2018 21:03	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(PID)	93.0		75.0-128		06/08/2018 21:03	<a href="#">WG1121817</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	20.7		4.00	1	06/08/2018 15:57	<a href="#">WG1121510</a>
C28-C40 Oil Range	25.2		4.00	1	06/08/2018 15:57	<a href="#">WG1121510</a>
(S) o-Terphenyl	60.0		18.0-148		06/08/2018 15:57	<a href="#">WG1121510</a>

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



## Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.840		1	06/09/2018 16:34	WG1121485

## Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.60	T8	1	06/08/2018 10:45	<a href="#">WG1121586</a>

## Sample Narrative:

L999863-11 WG1121586: 8.6 at 21.7C

## Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	205		10.0	1	06/08/2018 11:23	<a href="#">WG1121617</a>

## Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Benzene	0.000882		0.000500	1	06/08/2018 21:25	<a href="#">WG1121817</a>
Toluene	ND		0.00500	1	06/08/2018 21:25	<a href="#">WG1121817</a>
Ethylbenzene	0.000513		0.000500	1	06/08/2018 21:25	<a href="#">WG1121817</a>
Total Xylene	ND		0.00150	1	06/08/2018 21:25	<a href="#">WG1121817</a>
TPH (GC/FID) Low Fraction	ND		0.100	1	06/08/2018 21:25	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(FID)	91.5		77.0-120		06/08/2018 21:25	<a href="#">WG1121817</a>
(S) a,a,a-Trifluorotoluene(PID)	91.9		75.0-128		06/08/2018 21:25	<a href="#">WG1121817</a>

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	59.7		4.00	1	06/08/2018 16:11	<a href="#">WG1121510</a>
C28-C40 Oil Range	74.3		4.00	1	06/08/2018 16:11	<a href="#">WG1121510</a>
(S) o-Terphenyl	52.3		18.0-148		06/08/2018 16:11	<a href="#">WG1121510</a>

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





L999504-01 Original Sample (OS) • Duplicate (DUP)

(OS) L999504-01 06/08/18 10:45 • (DUP) R3316472-3 06/08/18 10:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	4.88	4.90	1	0.409		1

Sample Narrative:

OS: 4.88 at 22.8C

DUP: 4.9 at 22.3C



L999863-10 Original Sample (OS) • Duplicate (DUP)

(OS) L999863-10 06/08/18 10:45 • (DUP) R3316472-4 06/08/18 10:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.82	8.85	1	0.340		1

Sample Narrative:

OS: 8.82 at 21.9C

DUP: 8.85 at 21.9C

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

(LCS) R3316472-1 06/08/18 10:45 • (LCSD) R3316472-2 06/08/18 10:45

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	su	su	su	%	%	%			%	%
pH	10.0	9.96	9.97	99.6	99.7	99.0-101			0.100	1

Sample Narrative:

LCS: 9.96 at 20.5C

LCSD: 9.97 at 20.6C



Method Blank (MB)

(MB) R3316456-1 06/08/18 11:23

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

<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

L999790-01 Original Sample (OS) • Duplicate (DUP)

(OS) L999790-01 06/08/18 11:23 • (DUP) R3316456-4 06/08/18 11:23

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	519	520	1	0.192		20

L999863-07 Original Sample (OS) • Duplicate (DUP)

(OS) L999863-07 06/08/18 11:23 • (DUP) R3316456-5 06/08/18 11:23

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1350	1350	1	0.743		20

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

(LCS) R3316456-2 06/08/18 11:23 • (LCSD) R3316456-3 06/08/18 11:23

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	877	876	875	99.9	99.8	85.0-115			0.114	20



Method Blank (MB)

(MB) R3316721-5 06/08/18 13:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	U		0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-120
(S) a,a,a-Trifluorotoluene(PID)	98.5			75.0-128

1  
Cp

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Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

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

(LCS) R3316721-1 06/08/18 11:44 • (LCSD) R3316721-2 06/08/18 12:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0480	0.0488	96.0	97.5	71.0-121			1.61	20
Toluene	0.0500	0.0495	0.0496	99.1	99.1	72.0-120			0.0949	20
Ethylbenzene	0.0500	0.0491	0.0499	98.3	99.7	76.0-121			1.49	20
Total Xylene	0.150	0.148	0.150	98.9	100	75.0-124			1.21	20
(S) a,a,a-Trifluorotoluene(FID)				97.6	97.1	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				96.7	97.0	75.0-128				

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

(LCS) R3316721-3 06/08/18 12:28 • (LCSD) R3316721-4 06/08/18 12:51

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 %
TPH (GC/FID) Low Fraction	5.50	5.78	5.75	105	104	70.0-136			0.579	20
(S) a,a,a-Trifluorotoluene(FID)				102	102	77.0-120				
(S) a,a,a-Trifluorotoluene(PID)				108	108	75.0-128				



L999863-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999863-06 06/08/18 19:34 • (MS) R3316721-6 06/08/18 21:47 • (MSD) R3316721-7 06/08/18 22:10

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	ND	0.0201	0.0187	40.2	37.3	1	10.0-146			7.54	29
Toluene	0.0500	ND	0.0111	0.0136	20.7	25.7	1	10.0-143			20.1	30
Ethylbenzene	0.0500	ND	0.00496	0.00779	9.93	15.6	1	10.0-147	J6	J3	44.3	31
Total Xylene	0.150	ND	0.0123	0.0196	7.86	12.7	1	10.0-149	J6	J3 J6	45.7	30
(S) a,a,a-Trifluorotoluene(FID)					87.4	87.4		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					87.9	88.9		75.0-128				

L999863-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999863-06 06/08/18 19:34 • (MS) R3316721-8 06/08/18 22:32 • (MSD) R3316721-9 06/08/18 22:54

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	2.25	2.16	40.8	39.4	1	10.0-147			3.64	30
(S) a,a,a-Trifluorotoluene(FID)					86.6	88.5		77.0-120				
(S) a,a,a-Trifluorotoluene(PID)					90.2	93.5		75.0-128				

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

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Qc

7  
Gl

8  
Al

9  
Sc



Method Blank (MB)

(MB) R3316537-1 06/08/18 12:59

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	74.8			18.0-148

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

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

(LCS) R3316537-3 06/08/18 13:40 • (LCSD) R3316537-2 06/08/18 13:26

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 %
C10-C28 Diesel Range	50.0	30.7	30.0	61.4	60.0	50.0-150			2.26	20
(S) o-Terphenyl				69.9	71.1	18.0-148				

L999790-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L999790-01 06/08/18 14:07 • (MS) R3316537-4 06/08/18 14:21 • (MSD) R3316537-5 06/08/18 14:35

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 %
C10-C28 Diesel Range	50.0	ND	35.2	37.3	70.3	74.6	1	50.0-150			5.92	20
(S) o-Terphenyl					76.3	85.3		18.0-148				



## Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

### Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

### Qualifier Description

J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 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.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN2000002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1 6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1 4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

## Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
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>6</sup> Wastewater n/a Accreditation not applicable

## Our Locations

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



Company Name/Address:

**Nicholson GeoSolutions. LLC.****3433 E. Lake Dr.  
Centennial, CO 80121**

Billing Information:

**Terry Pape  
HRM Resources II, LLC  
410 17th Street, Suite 1600  
Denver, CO 80202**

Analysis / Container / Preservative

Chain of Custody Page 1 of 2



YOUR LAB OF CHOICE

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

Report to:

**Dave Nicholson & Dave Cox**

Email To:

**dknicholson@q.com**Project  
Description: **HRM Landfarm Sampling**

City/State

Collected:

Phone: **303-601-2023**

Client Project #

Lab Project #

Fax:

Collected by (print):

**D. COX**

Site/Facility ID #

P.O. #

Collected by (signature):

*D. Cox***Rush? (Lab MUST Be Notified)**

Same Day .....200%

Next Day .....100%

☒ Two Day .....50%

Three Day .....25%

Date Results Needed

Email? ☐ No ☐ YesFAX? ☐ No ☐ YesNo.  
of  
CntrsImmediately  
Packed on Ice N ☒

Sample ID

Comp/Grab

Matrix \*

Depth

Date

Time

Cntrs

**Lipplemann P-1****G****SS****6-6-18****1030****4****Cowles P-1****G****SS****1130****4****Cowles P-4****G****SS****1135****4****Anderson - 1****G****SS****1245****4****Anderson - 2****G****SS****1250****4****Anderson - 3****G****SS****1300****4****Anderson - 4****G****SS****1305****4****SS****2****SS****2****SS****2**\* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

Flow \_\_\_\_\_ Other \_\_\_\_\_

Hold #

Relinquished by: (Signature)

Date:

**6-6-18**

Time:

**1730**

Received by: (Signature)

Samples returned via: ☐ UPS

Condition: (lab use only)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **0215** °C Bottles Received: **42**COC Seal Intact: ☒ Y ☐ N ☐ NA

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **6/7/18**Time: **0845**

pH Checked:

NCF:



<b>Company Name/Address:</b> <b>Nicholson GeoSolutions. LLC.</b> 3433 E. Lake Dr. Centennial, CO 80121						<b>Billing Information:</b> <b>Terry Pape</b> <b>HRM Resources II, LLC</b> 410 17th Street, Suite 1600 Denver, CO 80202						Chain of Custody Page <b>2</b> of <b>2</b>  <b>L.A.B S.C.I.E.N.C.E.S</b> <hr/> <b>YOUR LAB OF CHOICE</b> <small>12065 Lebanon Rd          Mount Juliet, TN 37122          Phone: 615-758-5858          Phone: 800-767-5859          Fax: 615-758-5859</small> 						
<b>Report to:</b> <b>Dave Nicholson &amp; Dave Cox</b>						<b>Email To:</b> palisadestech@gmail.com dknicholson@q.com												
<b>Project Description:</b> <b>HRM Landfarm Sampling</b>						<b>City/State:</b> <b>Collected:</b>						Analysis / Container / Preservative  TEPH(8015) Diesel & Oil Range (1) 4oz Clear-No Pres BTEX/TVPH (1) 4oz Clear - No Pres SAR (1) 4oz Clear - No Pres SPCON, pH (1) 4oz Clear - No Pres						
<b>Phone:</b> 303-601-2023 <b>Fax:</b>			<b>Client Project #</b>			<b>Lab Project #</b>												
<b>Collected by (print):</b> D. Cox			<b>Site/Facility ID #</b>			<b>P.O. #</b>												
<b>Collected by (signature):</b> 			<b>Rush? (Lab MUST Be Notified)</b> <input type="checkbox"/> Same Day .....200% <input type="checkbox"/> Next Day .....100% <input checked="" type="checkbox"/> Two Day .....50% <input type="checkbox"/> Three Day .....25%			<b>Date Results Needed</b>												
<b>Immediately Packed on Ice N ___ Y <u>X</u></b>			<b>Email? ___ No ___ Yes</b> <b>FAX? ___ No ___ Yes</b>			<b>No. of Cntrs</b>												
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	TEPH(8015) Diesel & Oil Range (1) 4oz Clear-No Pres	BTEX/TVPH (1) 4oz Clear - No Pres	SAR (1) 4oz Clear - No Pres	SPCON, pH (1) 4oz Clear - No Pres								
Barfknecht-1	G	SS		6-6-18	1335	4	X	X	X	X								-08
Barfknecht-2	G	SS		↓	1345	4	X	X	X	X								109
Barfknecht-3	G	SS		↓	1350	4	X	X	X	X								110
Barfknecht-4	G	SS		↓	1400	4	X	X	X	X								111
		SS				2												
		SS				2												
		SS				2												
		SS				2												
		SS				2												
		SS				2												
		SS				2												

\* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_


Flow \_\_\_\_\_ Other \_\_\_\_\_

Remarks:

Relinquished by : (Signature) 	Date: 6-6-18	Time: 1730	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> _____	Condition: (lab use only)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: 0213 42	COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) 	Date: 6/7/18 Time: 0845	pH Checked: NCF:

## ESC LAB SCIENCES

### Cooler Receipt Form

Client: <b>HR MRES DCO</b>	SDG#	<b>999863</b>		
Cooler Received/Opened On: <b>6/7/18</b>	Temperature:	<b>0.2°</b>		
Received By: <b>Eric Struck</b>				
Signature: 				
Receipt Check List		NP	Yes	No
		/		
COC Signed / Accurate?			/	
Bottles arrive intact?			/	
Correct bottles used?			/	
Sufficient volume sent?			/	
If Applicable				
VOA Zero headspace?				
Preservation Correct / Checked?				