



October 8, 2015

Stan Spencer
NW Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
796 Megan Ave, Suite 201,
Rifle, CO 81650

Re: Parachute Centralized E&P WMF produced water spill closure request

Dear Mr. Spencer,

Attached are the laboratory results and the sample location map for soil samples collected from the impacted area and nearby non-impacted native soil in order to close the produced water spill discovered on July 13, 2015 at the Parachute Centralized E&P WMF.

Soil samples collected from the impacted area were analyzed for a reduced list of analytes which included organic compounds and inorganics listed in COGCC Table 910-1. The abbreviated list of analytes was approved by COGCC via supplemental Form 19. Three grab samples were collected from nearby non-impacted, native soil to establish the background concentrations for arsenic. In accordance with the COGCC Rule 910.b.(3)E, one grab sample was analyzed for inorganics to establish background soil conditions.

As the attached lab reports indicate, all organic compounds listed in the COGCC Table 910-1 are in compliance with the cleanup requirements. The excavated area was backfilled with the excavated material.

Please do not hesitate to contact me at (970) 683-2295 should you have any questions or concerns regarding this information.

Sincerely,

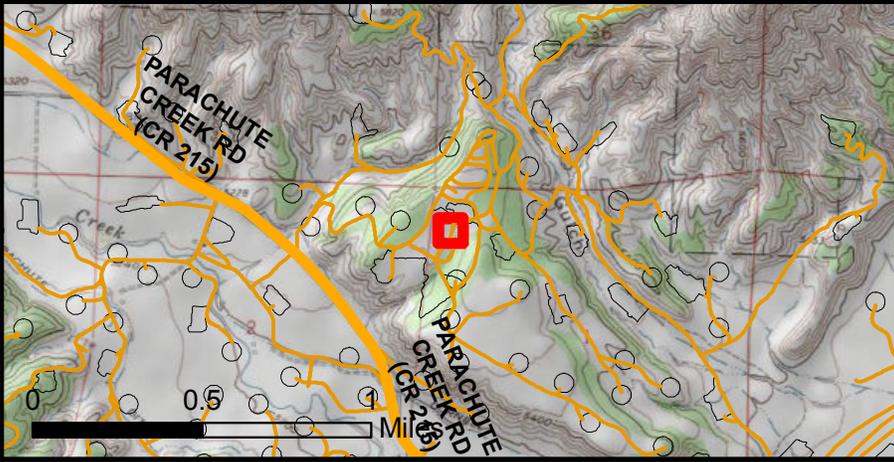
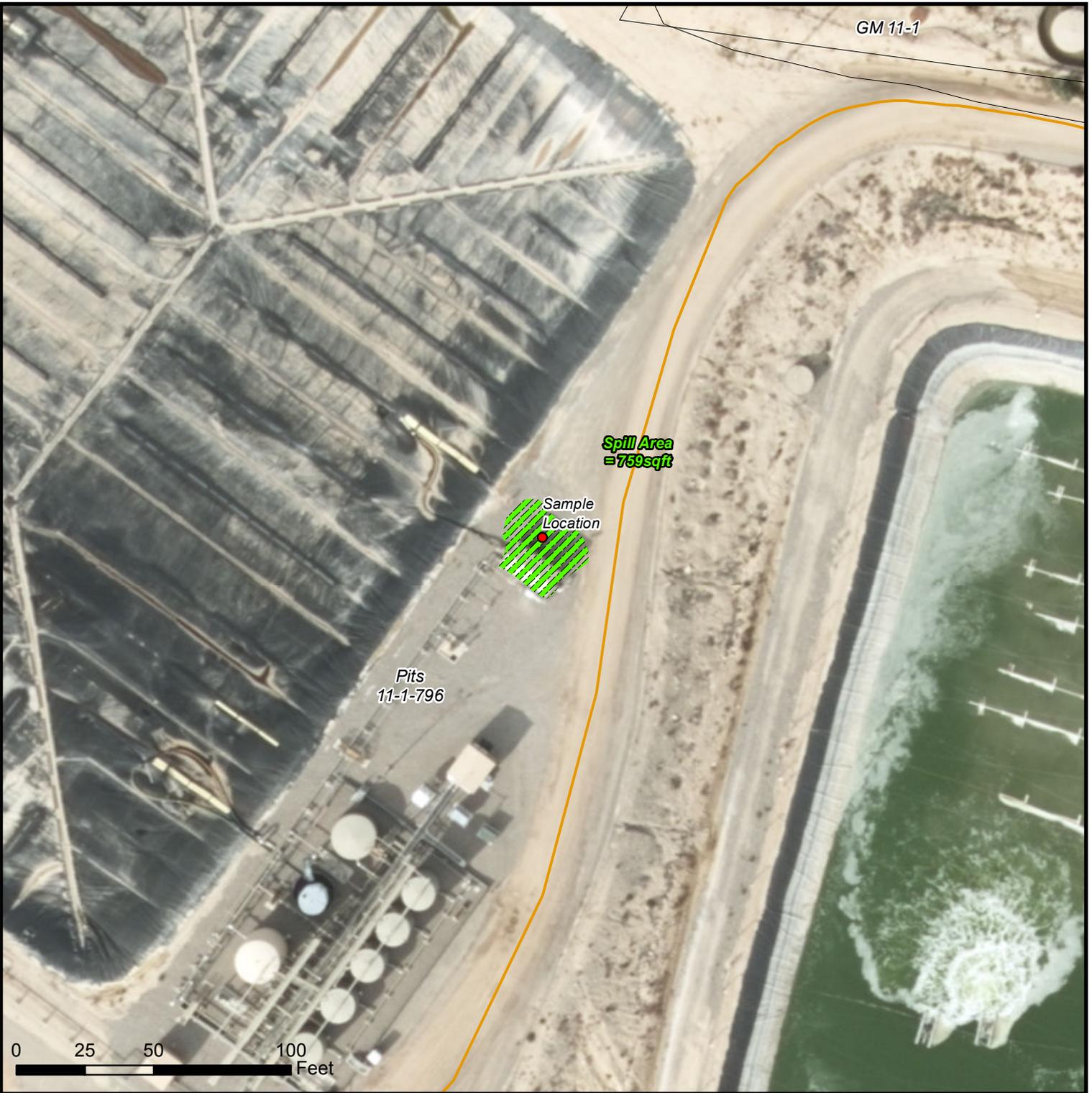
A handwritten signature in blue ink that reads "Karolina Blaney". The signature is written in a cursive, flowing style.

Karolina Blaney
Environmental Specialist

Attachments (2)

- Sampling Location Map
- Laboratory Reports

GM 11-1



Spill Closure Map

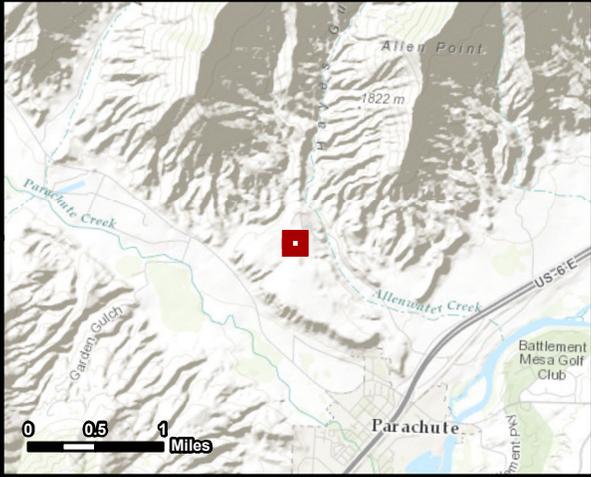
Parachute WMF

39.471308 -108.065741

Section 1, Township 7 South, Range 96 West

- Sample Location
- ▨ Impacted Area
- Road (from Garfield County)
- Existing Road
- Stream
- Existing Pad
- River





NOTES / COMMENTS:

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. HCSL assumes no responsibility for any risks, dangers, or liabilities that may result from its use and makes no guarantee as to the quality or accuracy of the underlying data.



Background Location Map
Parachute Centralized E&P WM Facility

39.473323 -108.065146
 Section 36, Township 6 South, Range 96 West

Mapped Features	Transportation	Hydrography
Background Locations	CO Highways	Ditch
PLSS	County Roads	Intermittent Stream
Township	Local Streets	Perennial Stream
Section	Access Roads	Waterbody
		Watershed



HRL COMPLIANCE SOLUTIONS, INC.
 Environmental Consultants

Author: E. Fought
 Revision: 0
 Date: 10/5/2015

		Location	Parachute Evap impacted area	BKGD 1	BKGD 2	BKGD 3
Contaminant of Concern ↓	COGCC standards	Date	9/28/2015	10/17/2014	10/17/2014	10/17/2014
Organic Compounds in Soil						
TPH (DRO+GRO)	500	mg/kg	ND			
DRO		mg/kg	ND			
GRO		mg/kg	ND			
Benzene	0.17	mg/kg	ND			
Toluene	85	mg/kg	ND			
Ethylbenzene	100	mg/kg	ND			
Xylenes (Total)	175	mg/kg	ND			
Acenaphthene	1,000	mg/kg	ND			
Anthracene	1,000	mg/kg	ND			
Benzo(A)anthracene	0.22	mg/kg	ND			
Benzo(B)fluoranthene	0.22	mg/kg	ND			
Benzo(K)fluoranthene	2.2	mg/kg	ND			
Benzo(A)pyrene	0.022	mg/kg	ND			
Chrysene	22	mg/kg	ND			
Dibenzo(A,H)anthracene	0.022	mg/kg	ND			
Fluoranthene	1,000	mg/kg	ND			
Fluorene	1,000	mg/kg	ND			
Indeno(1,2,3-cd)pyrene	0.22	mg/kg	ND			
Naphthalene	23	mg/kg	ND			
Pyrene	1,000	mg/kg	ND			
Inorganics in Soil						
EC	<4 or 2 x background	mmhos/cm	1.6			1
SAR	<12		18			0.62
pH	6-9		9.7			8.5
Metals in Soil						
Arsenic	0.39	mg/kg		21	24	9.7

Note:

ND = Non Detect

mg/Kg = milligrams per kilogram = parts per million

Exceeds COGCC standards



07-Oct-2015

Karolina Blaney
WPX Energy Rocky Mountain, LLC
1058 Country Rd 215
Parachute, CO 81635

Re: **Parachute Evap**

Work Order: **15091653**

Dear Karolina,

ALS Environmental received 1 sample on 29-Sep-2015 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Les Arnold".

Electronically approved by: Les Arnold

Les Arnold
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS Environmental logo icon consisting of a stylized green and blue shape.

www.alsglobal.com

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Client: WPX Energy Rocky Mountain, LLC
Project: Parachute Evap
Work Order: 15091653

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
15091653-01	Parachute Evap	Soil		9/28/2015 12:05	9/29/2015 09:00	<input type="checkbox"/>

Client: WPX Energy Rocky Mountain, LLC
Project: Parachute Evap
Work Order: 15091653

Case Narrative

Samples for the above noted Work Order were received on 09/29/2015. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Sample Receiving:

No deviations or anomalies were noted.

Volatile Organics:

No deviations or anomalies were noted.

Extractable Organics:

No deviations or anomalies were noted.

Metals:

No deviations or anomalies were noted.

Wet Chemistry:

No deviations or anomalies were noted.

Client: WPX Energy Rocky Mountain, LLC
 Project: Parachute Evap
 Sample ID: Parachute Evap
 Collection Date: 9/28/2015 12:05 PM

Work Order: 15091653
 Lab ID: 15091653-01
 Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			SW8015M		Prep: SW3541 / 10/2/15	Analyst: IT
DRO (C10-C28)	ND		4.1	mg/Kg-dry	1	10/5/2015 12:01 PM
Surr: 4-Terphenyl-d14	57.4		39-133	%REC	1	10/5/2015 12:01 PM
GASOLINE RANGE ORGANICS BY GC-FID			SW8015D		Prep: SW5035 / 9/29/15	Analyst: IT
GRO (C6-C10)	ND		2.5	mg/Kg-dry	1	9/29/2015 04:08 PM
Surr: Toluene-d8	111		50-150	%REC	1	9/29/2015 04:08 PM
SOLUBLE CATIONS FOR SAR			SW846 6010C		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Calcium	13		5.0	mg/L	10	10/5/2015 12:09 PM
Magnesium	2.9		2.0	mg/L	10	10/5/2015 12:09 PM
Sodium	270		2.0	mg/L	10	10/5/2015 12:09 PM
SODIUM ADSORPTION RATIO			USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JEC
Sodium Adsorption Ratio	18		0.010	none	1	10/5/2015
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3541 / 10/2/15	Analyst: RS
Acenaphthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(a)anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(a)pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(b)fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Benzo(k)fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Chrysene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Dibenzo(a,h)anthracene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Fluoranthene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Fluorene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Indeno(1,2,3-cd)pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Naphthalene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Pyrene	ND		0.0067	mg/Kg-dry	1	10/3/2015 05:24 AM
Surr: 2-Fluorobiphenyl	58.1		12-100	%REC	1	10/3/2015 05:24 AM
Surr: 4-Terphenyl-d14	73.8		25-137	%REC	1	10/3/2015 05:24 AM
Surr: Nitrobenzene-d5	60.5		37-107	%REC	1	10/3/2015 05:24 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B		Prep: SW5035 / 9/29/15	Analyst: AK
Benzene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
m,p-Xylene	ND		0.061	mg/Kg-dry	1	10/7/2015 01:17 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Toluene	ND		0.030	mg/Kg-dry	1	10/7/2015 01:17 PM
Xylenes, Total	ND		0.091	mg/Kg-dry	1	10/7/2015 01:17 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 07-Oct-15

Client: WPX Energy Rocky Mountain, LLC

Project: Parachute Evap

Work Order: 15091653

Sample ID: Parachute Evap

Lab ID: 15091653-01

Collection Date: 9/28/2015 12:05 PM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 1,2-Dichloroethane-d4	97.7		70-130	%REC	1	10/7/2015 01:17 PM
Surr: 4-Bromofluorobenzene	102		70-130	%REC	1	10/7/2015 01:17 PM
Surr: Dibromofluoromethane	95.0		70-130	%REC	1	10/7/2015 01:17 PM
Surr: Toluene-d8	95.6		70-130	%REC	1	10/7/2015 01:17 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO		Prep: USDA Method 20B / 10/5/15	Analyst: JB
Electrical Conductivity @ Saturation	1.6		0.050	mmhos/cm @2	10	10/5/2015 04:30 PM
MOISTURE			E160.3M			Analyst: TM
Moisture	1.0		0.050	% of sample	1	9/30/2015 04:16 PM
PH			SW9045D		Prep: EXTRACT / 9/30/15	Analyst: STP
pH	9.7			s.u.	1	9/30/2015 02:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ORIGIN ID: RILA (616) 288-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
PARACHUTE SERVICE CENTER
127 EAST 1ST ST
PARACHUTE, CO 81635
UNITED STATES US

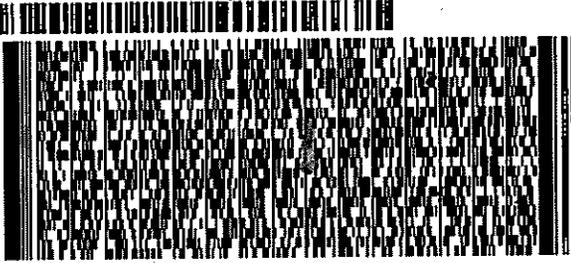
SHIP DATE: 28SEP15
ACTWGT: 78.00 LB
CAD: 2284840/NET3870
DIMS: 24x15x15 IN
BILL SENDER:

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424

(616) 399-6070 REF: 092815-1
INV. PC: PARACHUTE DEPT.

539.129707/61D0



REL#
3785346

2 of 3

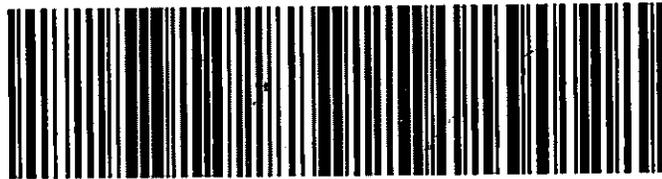
MPS# 7746 1479 8550
0283
Mstr# 7746 1479 8458

TUE - 29 SEP 10:30A
PRIORITY OVERNIGHT

0201

XX HLMA

MI-US 49424
GRR



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment.

Warning: Use only the printed origin in additional billing charges; along with use of this system constitutes your will not be responsible for any claim of sales, income interest, profit, attorney fees, or other damages. The maximum liability for loss of or damage to contents is limited to the greater of \$100 or the declared value. For more information on our liability limitations, please refer to the current FedEx Service Guide.

ALS Environmental

Client: ALS Environmental
Sample ID: 3785346
Date: 9/28/15
Analysis: GRR

3352 128th Avenue
Holland, MI 49424
616-399-6070

be read and scanned.
poses is fraudulent and could result in a delay, non-delivery, misdelivery, or and file a timely claim. Limitations of the package, loss of contents, consequential, or special loss. Maximum for items of value is in our Service Guide. Written

Sample Receipt Checklist

Client Name: **WPX**

Date/Time Received: **29-Sep-15 09:00**

Work Order: **15091653**

Received by: **NML**

Checklist completed by Diane Shaw 29-Sep-15
eSignature Date

Reviewed by: Lee Arnold 29-Sep-15
eSignature Date

Matrices: **Soil**
 Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="3.2/3.2 c"/>		<input type="text" value="SR2"/>
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<input type="text" value="9/29/2015 1:35:11 PM"/>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____
 Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:



27-Oct-2014

Mark Mumby
HRL Compliance Solutions, Inc
2385 F 1/2 Road
Grand Junction, CO 81505

Re: **WPX WM Facility Backgrounds 10.17.14**

Work Order: **14101135**

Dear Mark,

ALS Environmental received 3 samples on 18-Oct-2014 11:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 15.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS

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Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Work Order: 14101135

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
14101135-01	BKGD 01	Soil		10/17/2014 11:18	10/18/2014 11:00	<input type="checkbox"/>
14101135-02	BKGD 02	Soil		10/17/2014 11:20	10/18/2014 11:00	<input type="checkbox"/>
14101135-03	BKGD 03	Soil		10/17/2014 11:25	10/18/2014 11:00	<input type="checkbox"/>

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Work Order: 14101135

Case Narrative

Batch R150976 duplicate data for % Moisture is not related to this project's samples. No data requires qualification.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 01
Collection Date: 10/17/2014 11:18 AM

Work Order: 14101135
Lab ID: 14101135-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	21		SW846 6010C 0.46	mg/Kg-dry	1	Prep: SW3050B / 10/21/14 Analyst: JEC 10/21/2014 01:05 PM
MOISTURE						
Moisture	14		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 02
Collection Date: 10/17/2014 11:20 AM

Work Order: 14101135
Lab ID: 14101135-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	24		SW846 6010C 0.38	mg/Kg-dry	1	Prep: SW3050B / 10/21/14 Analyst: JEC 10/21/2014 01:57 PM
MOISTURE						
Moisture	13		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 27-Oct-14

Client: HRL Compliance Solutions, Inc
Project: WPX WM Facility Backgrounds 10.17.14
Sample ID: BKGD 03
Collection Date: 10/17/2014 11:25 AM

Work Order: 14101135
Lab ID: 14101135-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	9.7		SW846 6010C 0.38	mg/Kg-dry	Prep: SW3050B / 10/21/14 1	Analyst: JEC 10/21/2014 02:03 PM
SOLUBLE CATIONS FOR SAR						
Calcium	140		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 10/22/14 10	Analyst: JEC 10/22/2014 01:30 PM
Magnesium	22		2.0	mg/L	10	10/22/2014 01:30 PM
Sodium	30		2.0	mg/L	10	10/22/2014 01:30 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.62		USDA H60 METHOD 0.010	none	Prep: USDA Method 20B / 10/22/14 1	Analyst: JEC 10/22/2014
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.0		USDA H60 METHOD 0.050	mmhos/cm @25	Prep: USDA Method 20B / 10/22/14 10	Analyst: JB 10/23/2014 12:45 PM
MOISTURE						
Moisture	9.8		A2540 G 0.050	% of sample	1	Analyst: RLM 10/22/2014 12:48 PM
PH						
pH	8.5		SW9045D	s.u.	Prep: EXTRACT / 10/20/14 1	Analyst: STP 10/20/2014 12:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64148** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-64148-64148				Units: mg/Kg		Analysis Date: 10/21/2014 12:36 PM		
Client ID:		Run ID: ICP2_141021A		SeqNo: 2992393		Prep Date: 10/21/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								

LCS		Sample ID: LCS-64148-64148				Units: mg/Kg		Analysis Date: 10/21/2014 12:42 PM		
Client ID:		Run ID: ICP2_141021A		SeqNo: 2992396		Prep Date: 10/21/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.184	0.25	5	0	104	80-120	0			

MS		Sample ID: 14101135-01AMS				Units: mg/Kg		Analysis Date: 10/21/2014 01:11 PM		
Client ID: BKGD 01		Run ID: ICP2_141021A		SeqNo: 2992411		Prep Date: 10/21/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	26.37	0.39	7.899	17.64	111	75-125	0			

MSD		Sample ID: 14101135-01AMSD				Units: mg/Kg		Analysis Date: 10/21/2014 01:17 PM		
Client ID: BKGD 01		Run ID: ICP2_141021A		SeqNo: 2992413		Prep Date: 10/21/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	25.32	0.39	7.886	17.64	97.5	75-125	26.37	4.04	20	

The following samples were analyzed in this batch: 14101135-01A 14101135-02A 14101135-03A

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64156** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 14101133-02CDUP				Units: mg/L		Analysis Date: 10/22/2014 01:18 PM			
Client ID:		Run ID: ICP2_141022A				SeqNo: 2994883		Prep Date: 10/22/2014		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Calcium	409.8	5.0	0	0	0	0-0	0				
Magnesium	84.26	2.0	0	0	0	0-0	0				

DUP		Sample ID: 14101133-02CDUP				Units: mg/L		Analysis Date: 10/22/2014 02:03 PM			
Client ID:		Run ID: ICP2_141022A				SeqNo: 2994891		Prep Date: 10/22/2014		DF: 100	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sodium	5096	20	0	0	0	0-0	0				

DUP		Sample ID: 14101133-02CDUP				Units: none		Analysis Date: 10/22/2014			
Client ID:		Run ID: SAR_141022A				SeqNo: 2995158		Prep Date: 10/22/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sodium Adsorption Ratio	59.9	0.010	0	0	0		59.75	0.253	50		

The following samples were analyzed in this batch: 14101135-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64112** Instrument ID **WETCHEM** Method: **SW9045D**

DUP		Sample ID: 1410964-02A DUP				Units: s.u.		Analysis Date: 10/20/2014 12:50 PM		
Client ID:		Run ID: WETCHEM_141020J		SeqNo: 2989419		Prep Date: 10/20/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.44	0	0	0	0	0-0	7.39	0.674	20	

DUP		Sample ID: 1410968-02A DUP				Units: s.u.		Analysis Date: 10/20/2014 12:50 PM		
Client ID:		Run ID: WETCHEM_141020J		SeqNo: 2989422		Prep Date: 10/20/2014		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.78	0	0	0	0	0-0	7.75	0.386	20	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: HRL Compliance Solutions, Inc
Work Order: 14101135
Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **64156** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP	Sample ID: 14101133-02C DUP		Units: mmhos/cm @25°C		Analysis Date: 10/23/2014 12:45 PM					
Client ID:	Run ID: WETCHEM_141023D		SeqNo: 2996473		Prep Date: 10/22/2014		DF: 10			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	29	0.050	0	0	0		30.4	4.71	50	

The following samples were analyzed in this batch:

Client: HRL Compliance Solutions, Inc
 Work Order: 14101135
 Project: WPX WM Facility Backgrounds 10.17.14

QC BATCH REPORT

Batch ID: **R150976** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R150976				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:	Run ID: MOIST_141022C			SeqNo: 2997050		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS	Sample ID: LCS-R150976				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:	Run ID: MOIST_141022C			SeqNo: 2997049		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 14101169-03A DUP				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:	Run ID: MOIST_141022C			SeqNo: 2997037		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 28.65 0.050 0 0 0 0-0 29.62 3.33 20

DUP	Sample ID: 14101210-01A DUP				Units: % of sample			Analysis Date: 10/22/2014 12:48 PM		
Client ID:	Run ID: MOIST_141022C			SeqNo: 2997048		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.3 0.050 0 0 0 0-0 14.04 1.83 20 H

The following samples were analyzed in this batch: 14101135-01A 14101135-02A 14101135-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Sample Receipt Checklist

Client Name: **HRL**

Date/Time Received: **18-Oct-14 11:00**

Work Order: **14101135**

Received by: **DS**

Checklist completed by Ann Preston 19-Oct-14
eSignature Date

Reviewed by: Ann Preston 19-Oct-14
eSignature Date

Matrices: soil
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.4°C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>11/10/19/201400</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (816) 399-0070
Nick Martinez
ALS Environmental
127 E. 1st Street
Parachute, CO 81635

Origin ID: RLA



Ship Date: 17OCT14
ActWgt: 64.0 LB
CAD: 2264840/NET3550
Dim: 24 X 15 X 15 IN

Delivery Address Bar Code



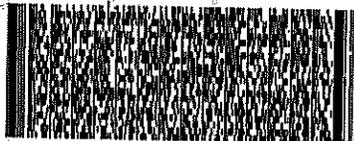
SHIP TO: (816) 399-6970
sample receiving
ALS Laboratory Group
3352 128TH AVE
HOLLAND, MI 49424

BILL SENDER

Ref # 101714-1
Invoice # Parachute
PO #
Dept #

SATURDAY 12:00P
PRIORITY OVERNIGHT

TRK# 7715 4172 0198
E201



XO HLMA

49424
MI-US
GRR



522G10F848AC3

After printing this label:

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ALS Parachute Custody Seal

DATE 10/17/14 Time 7:00

Name [Signature]