District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

NMOCD
MAR 26 2019
DISTRICT III

Responsible Party

Responsible Party: **Enduring Resources**	OGRID: **372286**
Contact Name: **Chad Snell**	Contact Telephone: **505-444-0586**
Contact email: **csnell@enduringresources.com**	Incident # *(assigned by OCD)*: ~~**ncs1831938444**~~ NCS1900850599
Contact mailing address: **200 Energy Court**	**Farmington, New Mexico 87401**

PCS1826341898

Location of Release Source

Latitude **36. 144262** Longitude **-107. 576376**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: **NEU 2207 16B**	Site Type: **Recycling Facility**
Date Release Discovered: **12/26/2018**	API# *(if applicable)* **3RF-28**

Unit Letter	Section	Township	Range	County
B	**16**	**22N**	**7W**	**Sandoval**

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls): **20 bbls**	Volume Recovered (bbls): **None**
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
On 12/26/18, a treated water tank at the NEU 2207 16B overflowed, resulting in a 16 bbl produced water release. The water pooled in a bermed area, and ran towards the corner of the pad. No water left the NEU 2207 16B Pad Site. Confirmation sampling for the release took place with the NMOCD on 1/10/2019.

(62)

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Monday, April 8, 2019 2:42 PM
To: 'Chad Snell'
Subject: NEU2207-16B incedent#nCS190850599

Chad,

OCD has approved the Closure report received 3/26/19 for the NEU 16B. The C-141 will be scanned into the 3RF-28 Online File.

Please note Enduring is responsible to remediate the elevated chlorides one the facility is P&A'ed or when the area is no longer needed for the exploration of oil and gas.

NCS1900850599 NEU 16B @ FCS1826342224

General Incident Information

Site Name:	NEU 16B
Well:	
Facility:	[fCS1826342224] NEU 2207-16B WATER RECYCLING FACILITY
Operator:	[372286] ENDURING RESOURCES, LLC
Status:	Closure Approved
Type:	Produced Water Release
District:	Aztec
Incident Location:	B-16-28N-07W Lot: 0 FNL 0 FEL
Lat/Long:	36.144262,-107.576376 NAD83

Thanks,

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Chad Snell <CSnell@enduringresources.com>
Sent: Tuesday, February 26, 2019 6:51 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☐ The source of the release has been stopped.

☐ The impacted area has been secured to protect human health and the environment.

☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	295 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: **Chad Snell** Title: **HSE TECH**

Signature: Chad S Date: 3-25-2019

email: **csnell@enduringresources.com** Telephone: **(505)444-0586**

OCD Only

Received by: OCD Date: 3/26/19

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Cory Date: 4/8/19

Printed Name: Cory Title: Environmental Spec.

* Surface chlorides must be remediated at P&A or when no longer in use.

NEU 2207 16B Remediation Narrative

12/26/2018

On this day a treated water tank at the NEU 2207 16B overflowed resulting in a 16 bbl produced water spill. The water pooled in a bermed area and ran towards the south east corner of the pad. No water had left the pad. The spill was calculated by using Enduring Resources calculation tool.

12/27/2018

Enduring Resources notified the NMOCD that confirmation sampling would take place on December 31st 2018 at 9:00am. See attached *"Email Notification".*

12/31/2018

Confirmation sampling was postponed until a later date due to bad weather. See attached *"Email Notification".*

1/3/2019

NMOCD was notified via email that confirmation sampling would take place on January 7th 2019 at 9:00 am. See attached *"Email Notification".*

1/7/2019

NMOCD canceled confirmation sampling due to road conditions and bad weather. See attached *"Email Notification".*

1/8/2019

NMOCD was notified that confirmation sampling would take place on January 10th 2019 starting at 9:00am. See attached *"Email Notification".*

1/10/2019

Confirmation sampling activities took place with Cory Smith of the NMOCD on site to witness sampling event. A total of eight, five point composite samples were taken from the spill area, also an additional composite sample was taken outside of the fence to ensure the spill did not reach areas outside of Enduring's location. Samples were sent in for analysis of BTEX, TPH (GRO/DRO/ORO).

1/11/2019

Pace Analytical notified Enduring personnel that one sample jar ("Section 3") had broken during shipment.

1/14/2019

Cory Smith of the NMOCD was contacted with the NMOCD by phone and followed by email of the situation that the sample jar had broken during shipment. He approved the resample of the section. See attached *"Email Notification"*

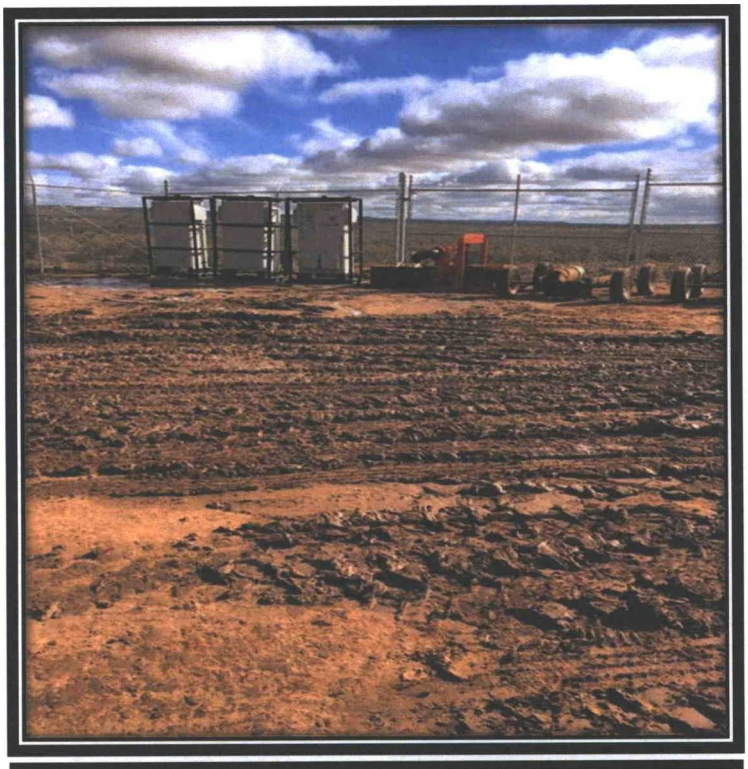
1/18/2019

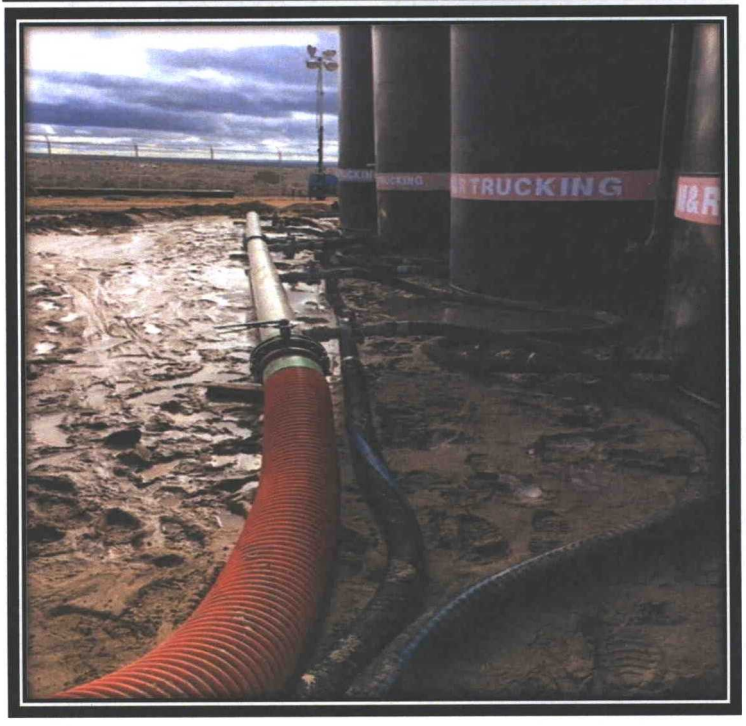
Returned results were below regulatory standards for this location See attached *"Analytical Report"*. Location was ranked by a cathodic that was drilled at the North Escavada 329H, determining ground water to be approximately 295 Ft. below surface of location of release. This set the standards to 50 ppm BTEX, 10 ppm Benzene, 1,000 ppm GRO+DRO, 2,500 ppm TPH (GRO/DRO/ORO), and 20,000 ppm Chlorides. No remediation is required at this time. See attached *"Depth to ground water proof"*.

There are areas of the release that did not meet the 600 mg/kg reclamation requirement, however these areas are currently in use for the exploration and production of oil and gas. Once the areas are no longer in use or at final abandon, Enduring Resources will return to the impacted areas and ensure the area is remediated per 19.15.29 NMAC.

Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28

Photos: Impacted area

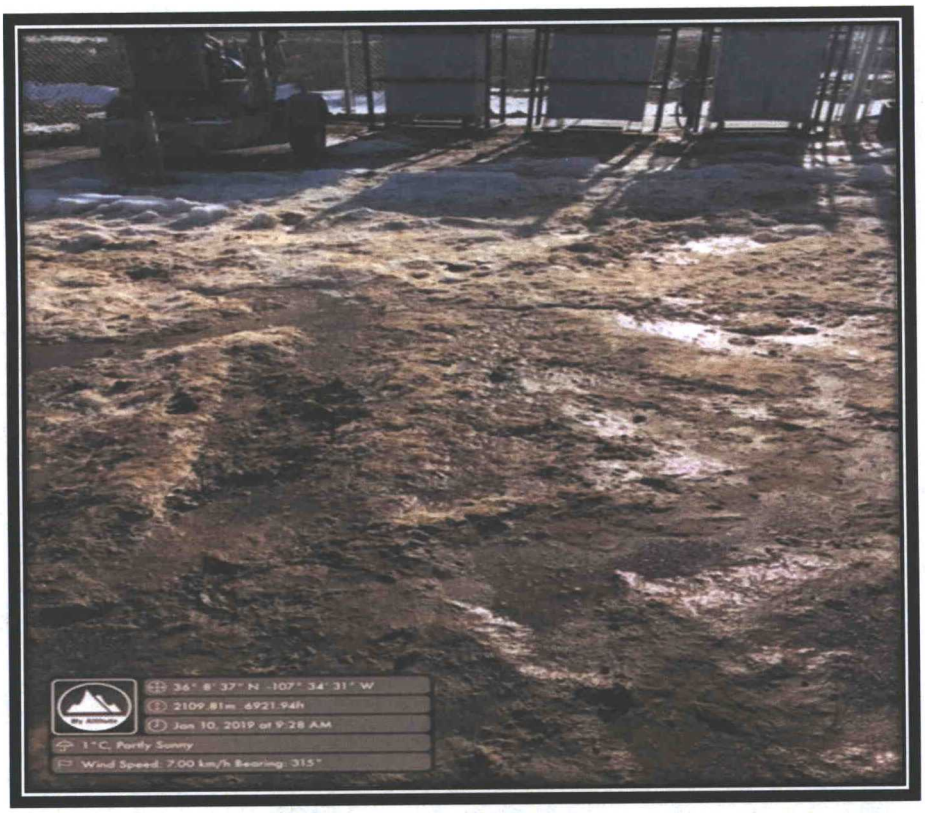




Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28

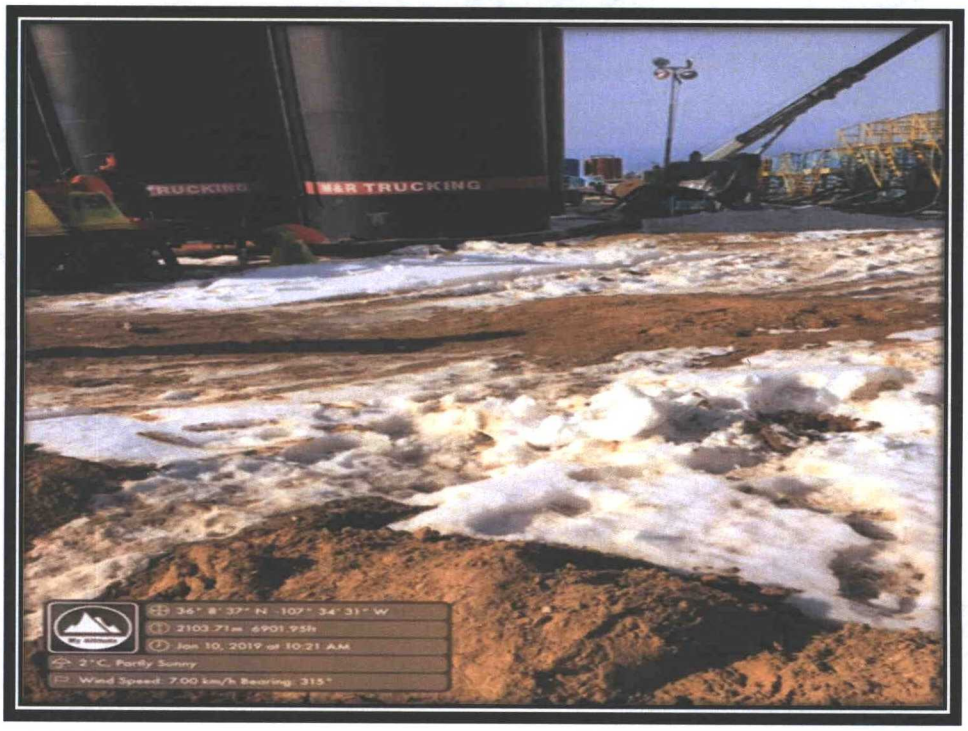
Photo: Sampling photos

Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28

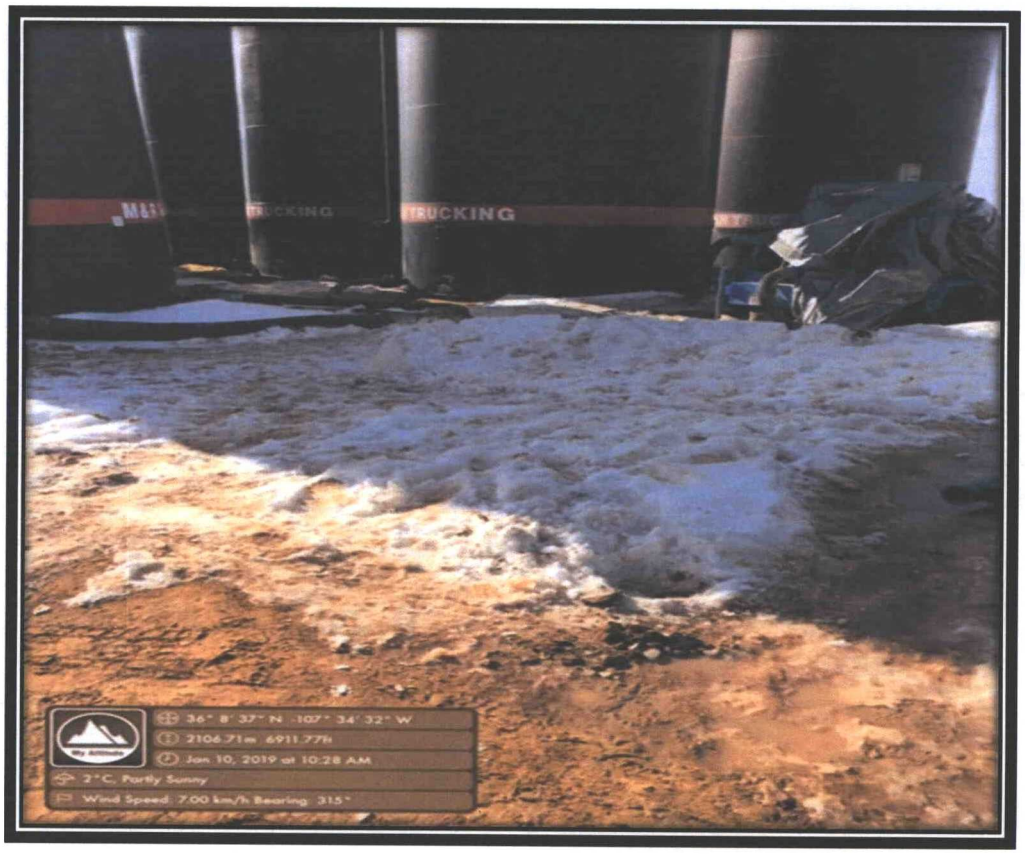


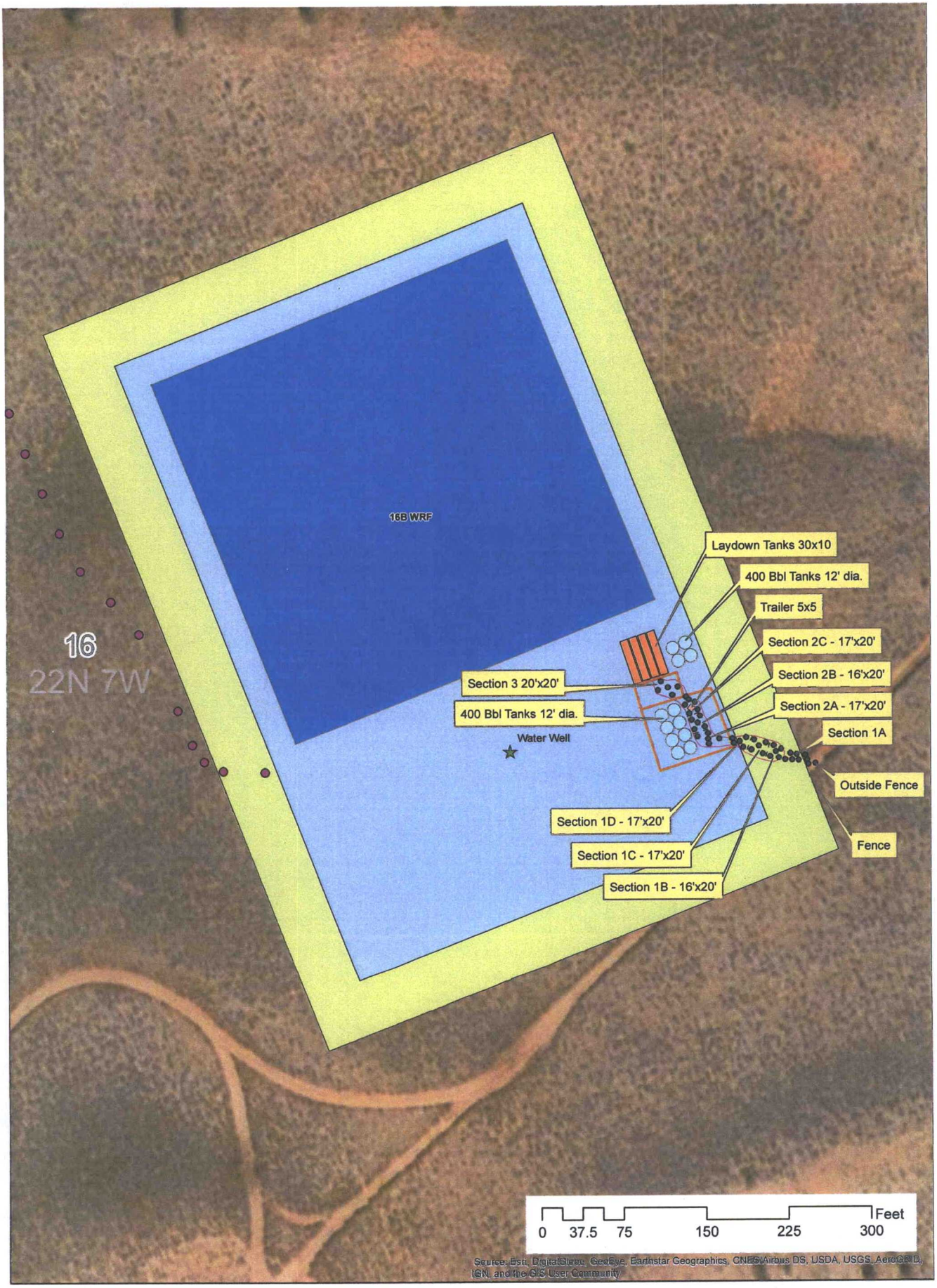
Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28

Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28



Enduring Resources, LLC
Spill Closure Report
NEU 2207 16B Pond
3RF-28





Pipeline Points
Sample Points
12' diameter tank
AOI
Berm
Laydown tank
Pond
Trailer
Pad
Constr Disturb

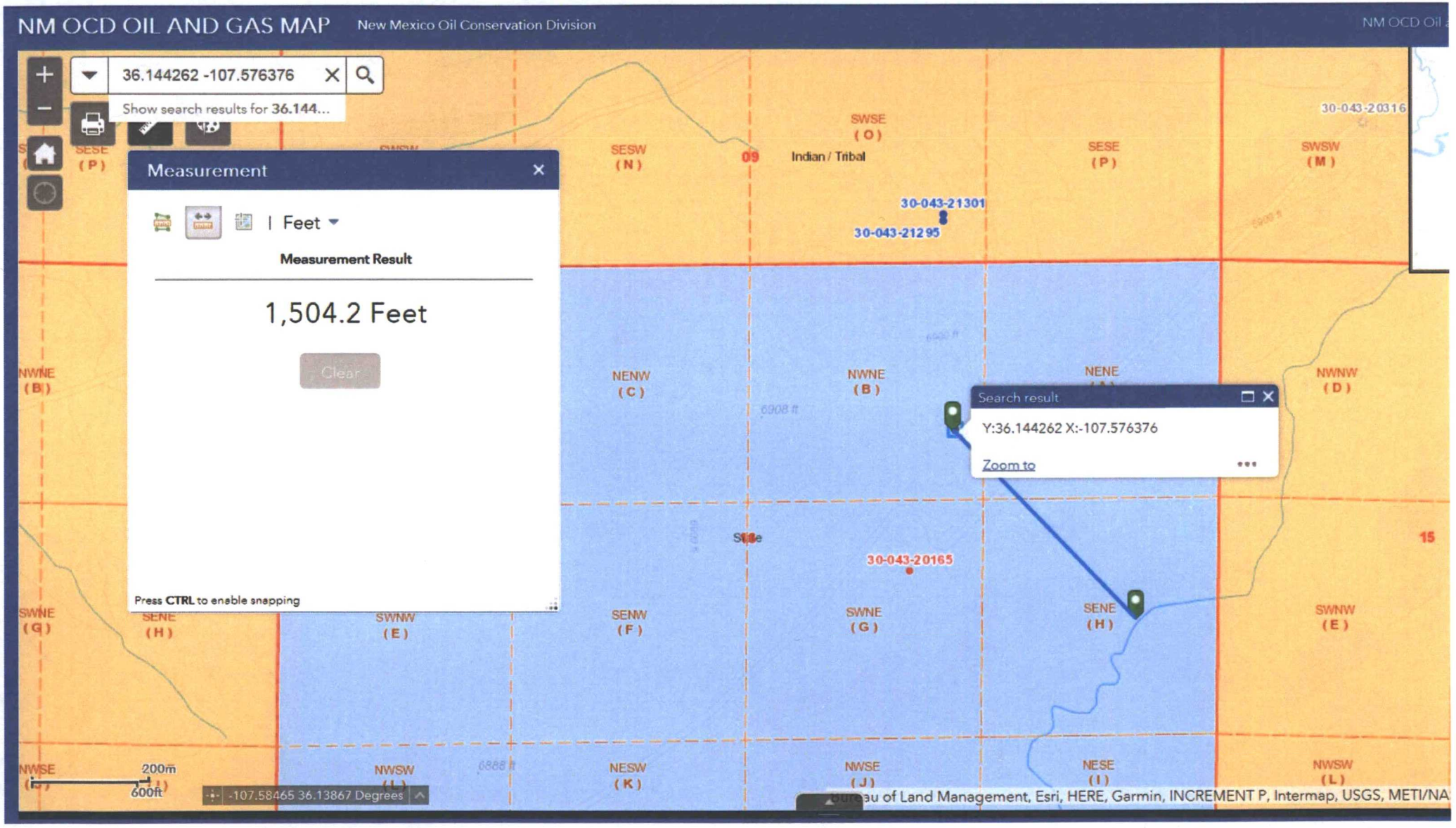
NEU_16B_pwinkler_20190306

NEU 2207-16B

Water Facility

Updated: 3/25/2019

ENDURING RESOURCES, LLC


NM OCD OIL AND GAS MAP
New Mexico Oil Conservation Division
36.144262 -107.576376
Show search results for 36.144...
Measurement
Feet
Measurement Result
1,504.2 Feet
Clear
Press CTRL to enable snapping
Search result
Y:36.144262 X:-107.576376
Zoom to
Indian / Tribal
30-043-21301
30-043-21295
30-043-20316
30-043-20165
SWSE (O)
SESW (N)
SESE (P)
SWSW (M)
NWNE (B)
NENW (C)
NWNE (B)
NENE (A)
NWNW (D)
SWNE (G)
SENE (H)
SWNW (E)
SENW (F)
SWNE (G)
SENE (H)
SWNW (E)
NWSE (I)
NWSW (L)
NESW (K)
NWSE (J)
NESE (I)
NWSW (L)
15
200m
600ft
-107.58465 36.13867 Degrees
Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NA

NEU 2207 16B Sample Results Table

Sample Name	Description	Date	Time	DRO	GRO	DRO+ GRO	ORO	Total TPH	Benzene	Toluene	Ethylbenzen	Xylenes	Total BTEX	Chlorides
				NA	NA	1000	NA	2500	10	NA	NA	NA	50	20,000
STANDARD	>100 feet to GW	NA	NA	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Outside Fence	Composite	1/10/2019	9:20 AM	37	< 0.128	**37**	7.13	**44.1**	**< 0.000641**	< 0.00641	< 0.000641	<0.00192	**<0.009612**	**292**
Section 1A	Composite	1/10/2019	9:25 AM	11.4	< 0.124	**11.52**	16.1	**27.6**	**< 0.000620**	< 0.00620	< 0.00620	< 0.00186	**< 0.0093**	**395**
Section 1B	Composite	1/10/2019	9:30 AM	27.1	<0.124	**27.22**	23.5	**50.7**	**< 0.000622**	< 0.00622	<0.000622	<0.00187	**<0.009334**	**125**
Section 1C	Composite	1/10/2019	9:35 AM	156	2.58	**158.6**	12.8	**171.4**	**< 0.000636**	< 0.00636	0.0044	0.0193	**0.030696**	**563**
Section 1D	Composite	1/10/2019	9:40 AM	20.2	< 0.128	**20.33**	22.4	**42.7**	**< 0.000640**	< 0.00640	< 0.000640	< 0.00192	**< 0.0096**	**332**
Section 2A	Composite	1/10/2019	10:25 AM	<4.95	0.143	**5.093**	<4.95	**10.0**	**0.00516**	< 0.00619	0.00391	0.015	**0.03026**	**661**
Section 2B	Composite	1/10/2019	10:30 AM	25	<0.122	**25.12**	24.4	**49.5**	**0.000826**	< 0.00609	<0.000609	0.00229	**0.009815**	**1110**
Section 2C	Composite	1/10/2019	10:21 AM	<4.8	<0.120	**<4.92**	6.01	**10.9**	**<.000600**	<.00600	<.000600	<0.00180	**0.007875**	**1360**
Section 3	Composite	1/14/2019	9:30 AM	28.4	<0.129	**28.52**	11.7	**40.2**	**<0.000643**	< 0.00643	<0.000643	0.00298	**0.010696**	**997**

CLOSURE SAMPLES

Ground Bed Drilling Log

Company: WPX Energy | Well: North Escavada Unit #329H | Date: 10-12-2016

Location: Sec 10 T32N R7W | State: New Mexico | Rig: Stacy #1

Ground Bed Depth: 340' | Water Depth: 0 | Diameter: 10"

Fuel: 88 gal. | Latitude: 36.146522 | Longitude: -107.567754

DEPTH	FORMATION	OTHER
0-60	Sand Stone, Shale, Sand w/ Shale w/ Sand	PVC
60-100	Sand Stone, Shale, Sand w/ Shale w/ Sand	
100-140	Sand Stone, Shale, Sand w/ Shale w/ Sand	
140-190	Sand Stone, Shale, Sand w/ Shale w/ Sand	
190-250	Sand Stone, Shale, Sand w/ Shale w/ Sand	
250-300	Sand Stone, Shale, Sand w/ Shale w/ Sand	
300-340	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	
	Sand Stone, Shale, Sand w/ Shale w/ Sand	

GROUNDWATER DEPTH LOG

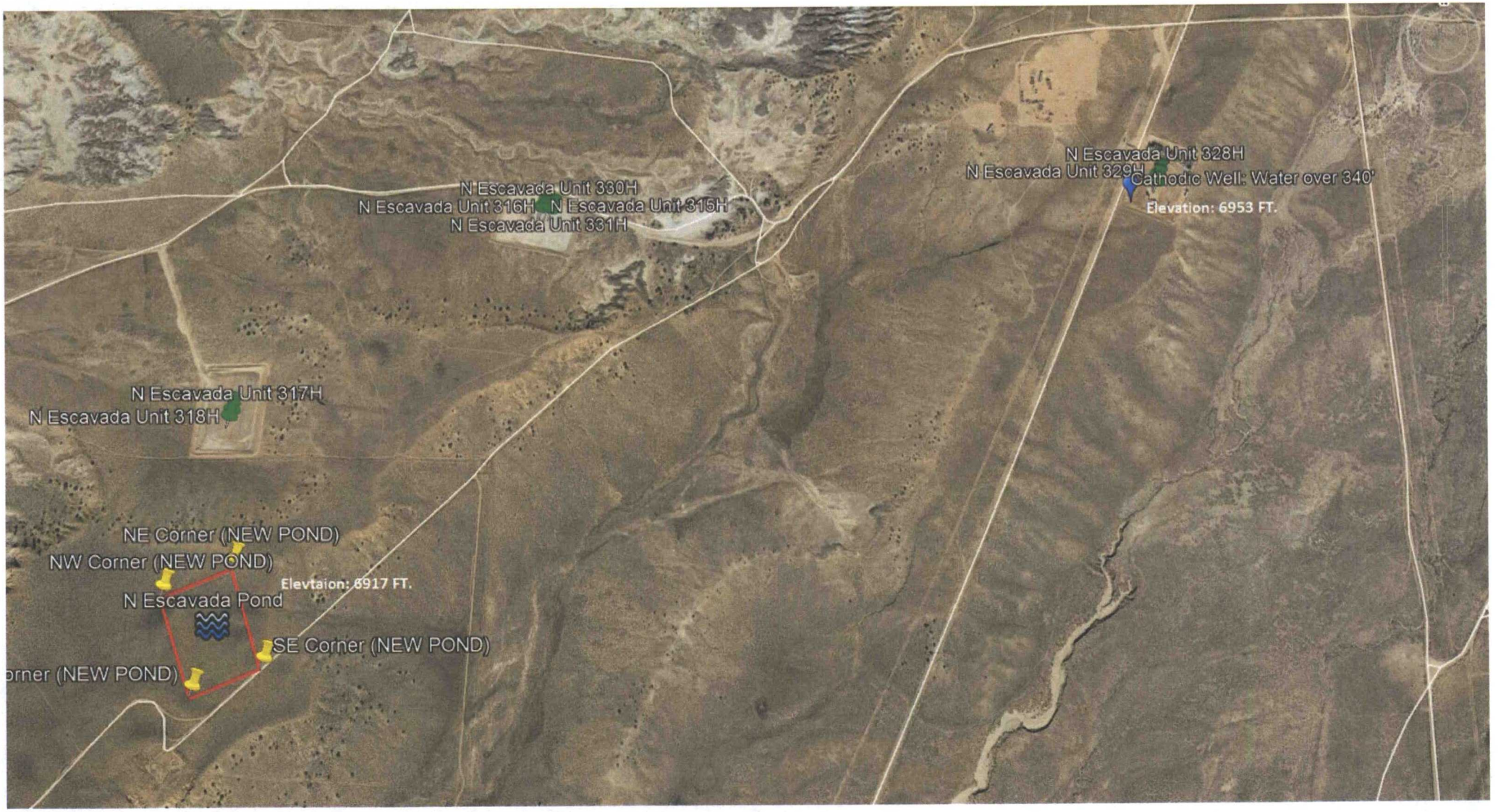
Company: WPX Energy | Location: North Escavada Unit #329H | Lat/Long: 36.146522/-107.567754 | Elevation:

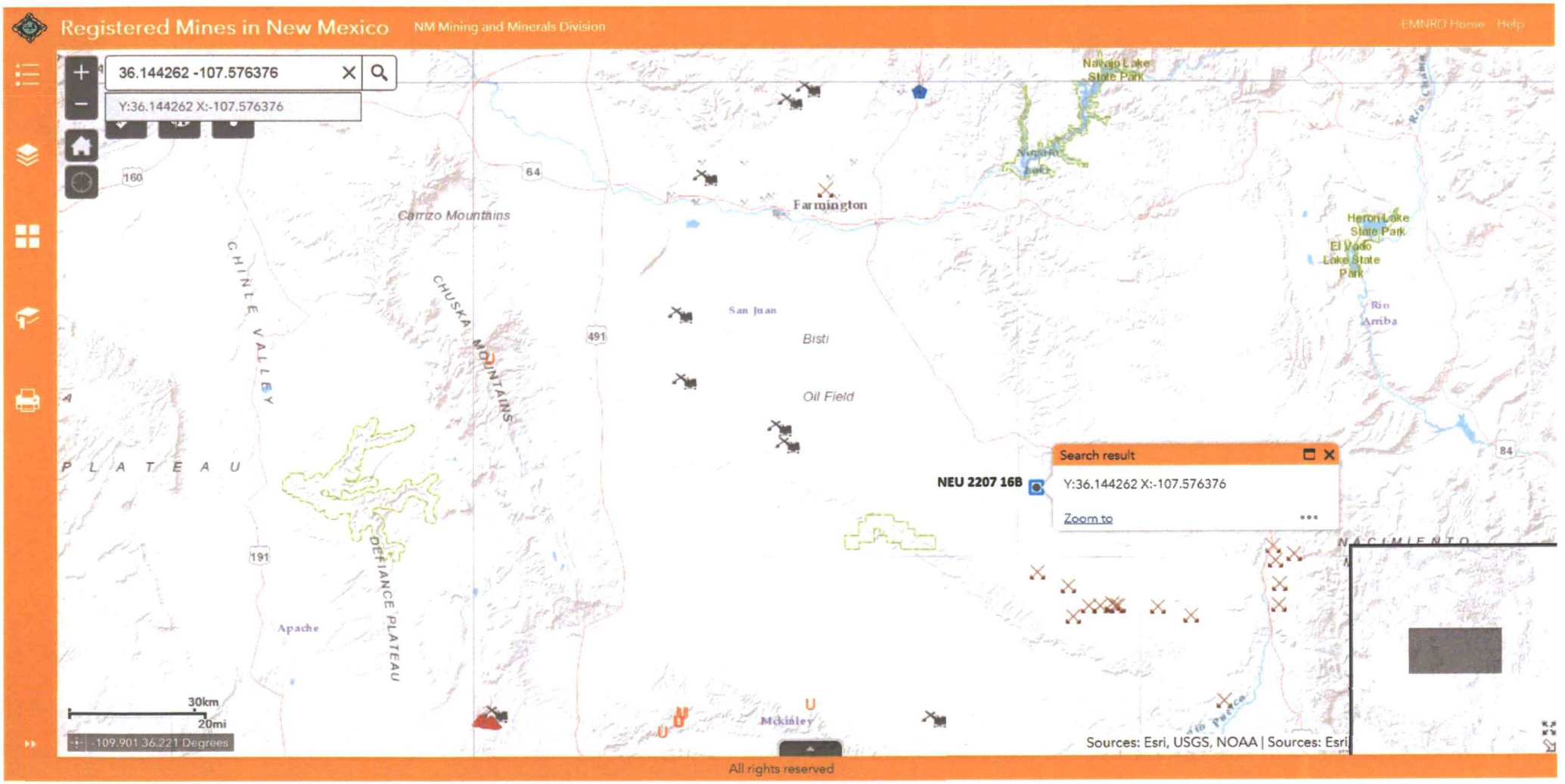
Probe type: Powell Sander

Casing Installation Method: Push

Required Test Depths: 50', 55', & 105' unless otherwise requested

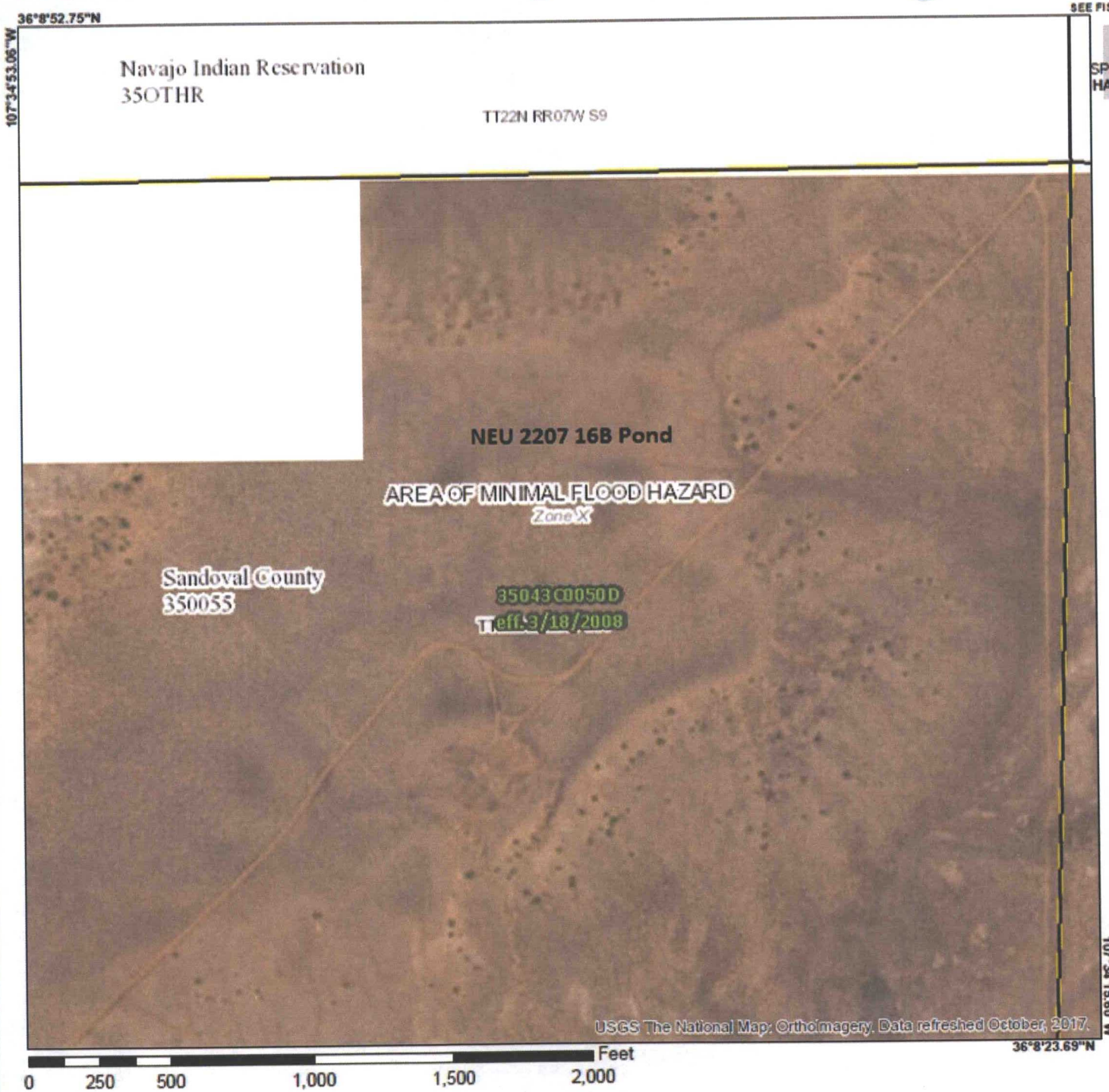
Date	Time	Depth	Comments
10-12-16	10 am	30'	drilled 30'
	11 am	30'	tested NO water
	11:30	55'	drilled to 55'
	12:30	55'	tested No water
	1:45	105'	drilled to 105'
	2:45	105'	tested NO water set 60' casing
10-13-16	8:30 am	105'	No water
	11:45	340'	finished anode bed


N Escavada Unit 328H
N Escavada Unit 329H
Cathodic Well: Water over 340'
Elevation: 6953 FT.
N Escavada Unit 330H
N Escavada Unit 316H
N Escavada Unit 315H
N Escavada Unit 331H
N Escavada Unit 317H
N Escavada Unit 318H
NE Corner (NEW POND)
NW Corner (NEW POND)
Elevtaion: 6917 FT.
N Escavada Pond
SE Corner (NEW POND)
orner (NEW POND)


Registered Mines in New Mexico
NM Mining and Minerals Division
EMNRD Home
Help
36.144262 -107.576376
Y:36.144262 X:-107.576376
Navajo Lake State Park
Navajo Lake
Farmington
Carrizo Mountains
Heron Lake State Park
El Vado Lake State Park
Rio Amba
CHINLE VALLEY
CHUSKA MOUNTAINS
San Juan
Bisti
Oil Field
PLATEAU
DEFIANCE PLATEAU
Apache
Mckinley
NACIMIENTO
160
64
491
84
191
Search result
NEU 2207 16B
Y:36.144262 X:-107.576376
Zoom to
30km
20mi
-109.901 36.221 Degrees
Sources: Esri, USGS, NOAA | Sources: Esri
All rights reserved

National Flood Hazard Layer FIRMette

FEMA



SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

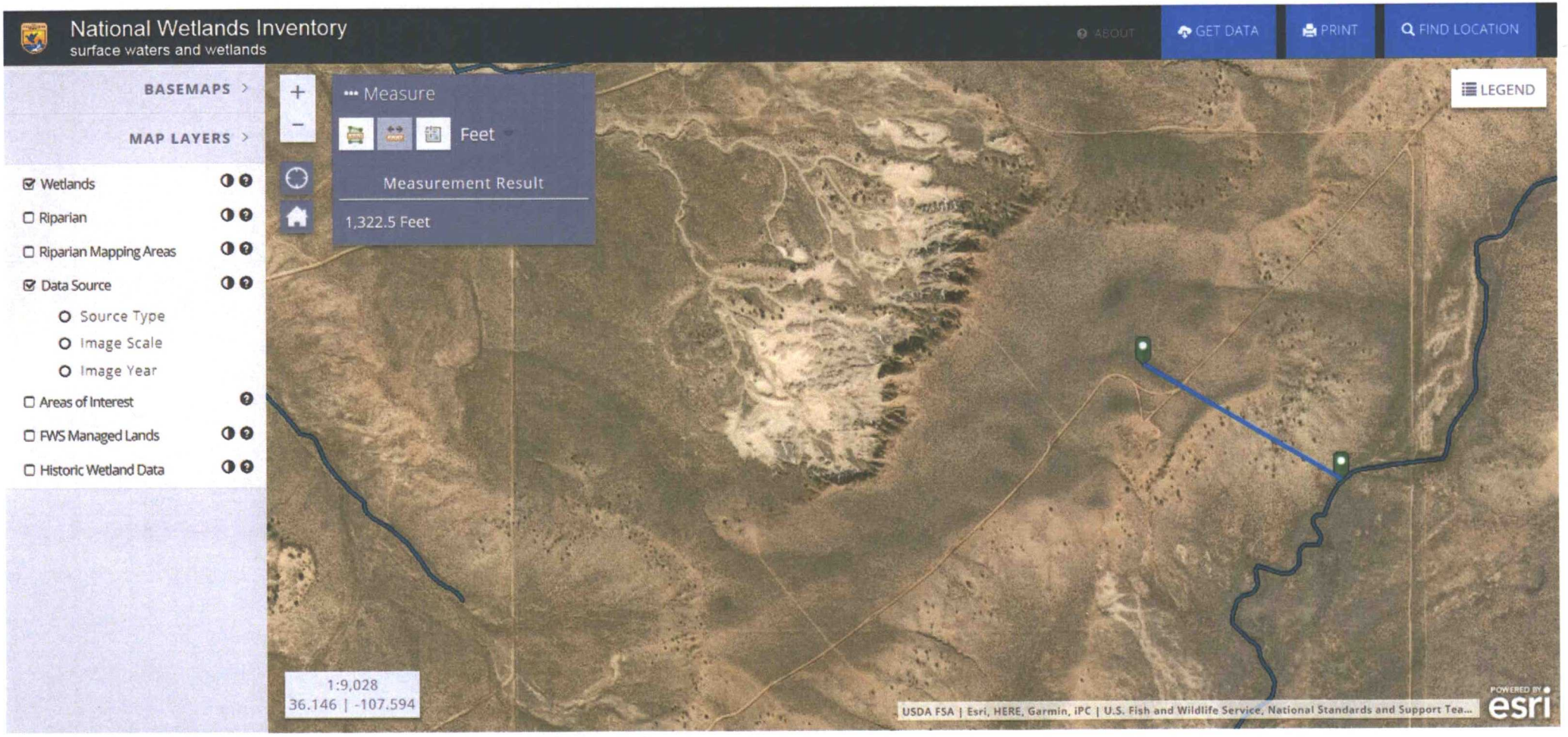
- 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

N

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

accepted on 1/18/2019 at 3:21:15 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for


National Wetlands Inventory
surface waters and wetlands
ABOUT
GET DATA
PRINT
FIND LOCATION
BASEMAPS
MAP LAYERS
Wetlands
Riparian
Riparian Mapping Areas
Data Source
Source Type
Image Scale
Image Year
Areas of Interest
FWS Managed Lands
Historic Wetland Data
Measure
Feet
Measurement Result
1,322.5 Feet
LEGEND
1:9,028
36.146 | -107.594
USDA FSA | Esri, HERE, Garmin, iPC | U.S. Fish and Wildlife Service, National Standards and Support Tea...
POWERED BY esri

Chad Snell

From: Chad Snell
Sent: Friday, November 16, 2018 7:35 AM
To: 'Smith, Cory, EMNRD'; Fields, Vanessa, EMNRD
Cc: John Dockter; James McDaniel
Subject: RE: NEU2207-16B incedent#nCS1831938444

Cory,

Yes, lets schedule for Tuesday the 20th at 9:00am.

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, November 15, 2018 3:23 PM
To: Chad Snell <CSnell@enduringresources.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: John Dockter <JDockter@enduringresources.com>; James McDaniel <JMcDaniel@enduringresources.com>
Subject: RE: NEU2207-16B incedent#nCS1831938444

Chad,

Any chance we can do Tuesday the 20th? Our office is going to be short staffed and I wont be able to make sampling Wednesday.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Chad Snell <CSnell@enduringresources.com>
Sent: Thursday, November 15, 2018 3:20 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: John Dockter <JDockter@enduringresources.com>; James McDaniel <JMcDaniel@enduringresources.com>
Subject: [EXT] NEU2207-16B incedent#nCS1831938444

Cory/Vanessa,

Please accept the following email as the required notification for confirmation soil sampling at the NEU2207-16B Recycling facility incident# nCS1831938444. Sample activities will be performed at 9:00am Wednesday November 21th.

Thanks.

Chad Snell
HSE Tech
Enduring Resources
(505) 444-0586.

Chad Snell

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, January 14, 2019 1:55 PM
To: Chad Snell
Cc: James McDaniel; John Dockter
Subject: RE: NEU 2207 16B NCS1900850599

Follow Up Flag: Follow up
Flag Status: Flagged

Chad,

OCD approves Enduring's sampling, please include this approval in your final C-141.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Chad Snell <CSnell@enduringresources.com>
Sent: Monday, January 14, 2019 1:44 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: James McDaniel <JMcDaniel@enduringresources.com>; John Dockter <JDockter@enduringresources.com>
Subject: [EXT] NEU 2207 16B NCS1900850599

Cory,

As discussed this morning you were not able to witness a resample of one of the sample locations at the NEU 2207 16B pond that was sampled on Thursday January 10th 2019. The reason for a resample was one of the sections, "Section3" (next to laydown tanks) had broken during transport to the lab. The new sample was taken today Monday 1/14/2019. If you have any question please let me know.

Thank you.

Chad Snell
HSE Tech
Enduring Resources
(505) 444-0586.

ANALYTICAL REPORT

January 18, 2019

Enduring Resources

Sample Delivery Group:	L1060386
Samples Received:	01/11/2019
Project Number:	
Description:	NEU 2207 16B

Report To:

John Dockter
200 Energy Court
Farmington, NM 87401

Entire Report Reviewed By:

Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

OUTSIDE FENCE L1060386-01 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 09:50 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 10:59	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 17:30	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 12:37	KME

SECTION 1:A L1060386-02 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 09:42 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:07	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 17:54	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 13:53	KME

SECTION 1:B L1060386-03 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 09:28 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:16	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 18:19	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 13:37	KME

SECTION 1:C L1060386-04 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 09:55 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:25	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1224256	1	01/12/19 18:29	01/16/19 14:15	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 13:22	KME

SECTION 1:D L1060386-05 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 09:59 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:34	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 19:07	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 13:06	KME

SECTION 2:A L1060386-06 Solid

Collected by: John Dockter | Collected date/time: 01/10/19 10:07 | Received date/time: 01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223606	1	01/15/19 14:27	01/15/19 14:47	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:42	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 19:31	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 11:23	KME

SECTION 2:B L1060386-07 Solid

			Collected by	Collected date/time	Received date/time
			John Dockter	01/10/19 10:13	01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223608	1	01/15/19 14:09	01/15/19 14:22	KBC
Wet Chemistry by Method 9056A	WG1222536	1	01/17/19 14:15	01/18/19 11:51	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 19:55	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 12:52	KME

SECTION 2:C L1060386-08 Solid

			Collected by	Collected date/time	Received date/time
			John Dockter	01/10/19 10:21	01/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1223608	1	01/15/19 14:09	01/15/19 14:22	KBC
Wet Chemistry by Method 9056A	WG1224912	5	01/17/19 14:00	01/18/19 08:27	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	1	01/12/19 18:29	01/15/19 20:20	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 11:37	KME

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 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.

Daphne R Richards

Daphne Richards
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.0		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	292		12.8	1	01/18/2019 10:59	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000641	1	01/15/2019 17:30	WG1223441
Toluene	ND		0.00641	1	01/15/2019 17:30	WG1223441
Ethylbenzene	ND		0.000641	1	01/15/2019 17:30	WG1223441
Total Xylene	ND		0.00192	1	01/15/2019 17:30	WG1223441
TPH (GC/FID) Low Fraction	ND		0.128	1	01/15/2019 17:30	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*93.4*		*77.0-120*		*01/15/2019 17:30*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*102*		*72.0-128*		*01/15/2019 17:30*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	37.3		5.13	1	01/16/2019 12:37	WG1222953
C28-C40 Oil Range	7.13		5.13	1	01/16/2019 12:37	WG1222953
(S) o-Terphenyl	*73.2*		*18.0-148*		*01/16/2019 12:37*	WG1222953

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.7		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	395		12.4	1	01/18/2019 11:07	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000620	1	01/15/2019 17:54	WG1223441
Toluene	ND		0.00620	1	01/15/2019 17:54	WG1223441
Ethylbenzene	ND		0.000620	1	01/15/2019 17:54	WG1223441
Total Xylene	ND		0.00186	1	01/15/2019 17:54	WG1223441
TPH (GC/FID) Low Fraction	ND		0.124	1	01/15/2019 17:54	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*91.4*		*77.0-120*		*01/15/2019 17:54*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*99.9*		*72.0-128*		*01/15/2019 17:54*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	11.4		4.96	1	01/16/2019 13:53	WG1222953
C28-C40 Oil Range	16.1		4.96	1	01/16/2019 13:53	WG1222953
(S) o-Terphenyl	*73.8*		*18.0-148*		*01/16/2019 13:53*	WG1222953

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.4		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	125		12.4	1	01/18/2019 11:16	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000622	1	01/15/2019 18:19	WG1223441
Toluene	ND		0.00622	1	01/15/2019 18:19	WG1223441
Ethylbenzene	ND		0.000622	1	01/15/2019 18:19	WG1223441
Total Xylene	ND		0.00187	1	01/15/2019 18:19	WG1223441
TPH (GC/FID) Low Fraction	ND		0.124	1	01/15/2019 18:19	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*93.5*		*77.0-120*		*01/15/2019 18:19*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*101*		*72.0-128*		*01/15/2019 18:19*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	27.1		4.98	1	01/16/2019 13:37	WG1222953
C28-C40 Oil Range	23.5		4.98	1	01/16/2019 13:37	WG1222953
(S) o-Terphenyl	*75.2*		*18.0-148*		*01/16/2019 13:37*	WG1222953

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.7		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	563		12.7	1	01/18/2019 11:25	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000636	1	01/16/2019 14:15	WG1224256
Toluene	ND		0.00636	1	01/16/2019 14:15	WG1224256
Ethylbenzene	0.00440	V3	0.000636	1	01/16/2019 14:15	WG1224256
Total Xylene	0.0193	V3	0.00191	1	01/16/2019 14:15	WG1224256
TPH (GC/FID) Low Fraction	2.58	V3	0.127	1	01/16/2019 14:15	WG1224256
(S) a,a,a-Trifluorotoluene(FID)	*97.1*		*77.0-120*		*01/16/2019 14:15*	WG1224256
(S) a,a,a-Trifluorotoluene(PID)	*94.8*		*72.0-128*		*01/16/2019 14:15*	WG1224256

Sample Narrative:

L1060386-04 WG1224256: Previous run also had low IS/SURR recovery. Matrix effect.

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	156		5.09	1	01/16/2019 13:22	WG1222953
C28-C40 Oil Range	12.8		5.09	1	01/16/2019 13:22	WG1222953
(S) o-Terphenyl	*83.0*		*18.0-148*		*01/16/2019 13:22*	WG1222953

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.1		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	332		12.8	1	01/18/2019 11:34	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000640	1	01/15/2019 19:07	WG1223441
Toluene	ND		0.00640	1	01/15/2019 19:07	WG1223441
Ethylbenzene	ND		0.000640	1	01/15/2019 19:07	WG1223441
Total Xylene	ND	J6	0.00192	1	01/15/2019 19:07	WG1223441
TPH (GC/FID) Low Fraction	ND	J3	0.128	1	01/15/2019 19:07	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*91.5*		*77.0-120*		*01/15/2019 19:07*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*99.7*		*72.0-128*		*01/15/2019 19:07*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	20.2		5.12	1	01/16/2019 13:06	WG1222953
C28-C40 Oil Range	22.4		5.12	1	01/16/2019 13:06	WG1222953
(S) o-Terphenyl	*66.2*		*18.0-148*		*01/16/2019 13:06*	WG1222953

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.8		1	01/15/2019 14:47	WG1223606

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	661		12.4	1	01/18/2019 11:42	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.00516		0.000619	1	01/15/2019 19:31	WG1223441
Toluene	ND		0.00619	1	01/15/2019 19:31	WG1223441
Ethylbenzene	0.00391		0.000619	1	01/15/2019 19:31	WG1223441
Total Xylene	0.0150		0.00186	1	01/15/2019 19:31	WG1223441
TPH (GC/FID) Low Fraction	0.143		0.124	1	01/15/2019 19:31	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*93.2*		*77.0-120*		*01/15/2019 19:31*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*101*		*72.0-128*		*01/15/2019 19:31*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.95	1	01/16/2019 11:23	WG1222953
C28-C40 Oil Range	ND		4.95	1	01/16/2019 11:23	WG1222953
(S) o-Terphenyl	*58.5*		*18.0-148*		*01/16/2019 11:23*	WG1222953

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.1		1	01/15/2019 14:22	WG1223608

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	1110	J3	12.2	1	01/18/2019 11:51	WG1222536

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.000826		0.000609	1	01/15/2019 19:55	WG1223441
Toluene	ND		0.00609	1	01/15/2019 19:55	WG1223441
Ethylbenzene	ND		0.000609	1	01/15/2019 19:55	WG1223441
Total Xylene	0.00229	B	0.00183	1	01/15/2019 19:55	WG1223441
TPH (GC/FID) Low Fraction	ND		0.122	1	01/15/2019 19:55	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*92.6*		*77.0-120*		*01/15/2019 19:55*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*100*		*72.0-128*		*01/15/2019 19:55*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	25.0		4.87	1	01/16/2019 12:52	WG1222953
C28-C40 Oil Range	24.4		4.87	1	01/16/2019 12:52	WG1222953
(S) o-Terphenyl	*79.8*		*18.0-148*		*01/16/2019 12:52*	WG1222953

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.3		1	01/15/2019 14:22	WG1223608

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	1360		60.0	5	01/18/2019 08:27	WG1224912

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000600	1	01/15/2019 20:20	WG1223441
Toluene	ND		0.00600	1	01/15/2019 20:20	WG1223441
Ethylbenzene	ND		0.000600	1	01/15/2019 20:20	WG1223441
Total Xylene	ND		0.00180	1	01/15/2019 20:20	WG1223441
TPH (GC/FID) Low Fraction	ND		0.120	1	01/15/2019 20:20	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*92.8*		*77.0-120*		*01/15/2019 20:20*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*100*		*72.0-128*		*01/15/2019 20:20*	WG1223441

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	ND		4.80	1	01/16/2019 11:37	WG1222953
C28-C40 Oil Range	6.01		4.80	1	01/16/2019 11:37	WG1222953
(S) o-Terphenyl	*70.8*		*18.0-148*		*01/16/2019 11:37*	WG1222953

Method Blank (MB)

(MB) R3376227-1 01/15/19 14:47

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1060384-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1060384-03 01/15/19 14:47 • (DUP) R3376227-3 01/15/19 14:47

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.3	79.3	1	0.120		10

Laboratory Control Sample (LCS)

(LCS) R3376227-2 01/15/19 14:47

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3376221-1 01/15/19 14:22

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1060386-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1060386-08 01/15/19 14:22 • (DUP) R3376221-3 01/15/19 14:22

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	83.3	83.3	1	0.0510		10

Laboratory Control Sample (LCS)

(LCS) R3376221-2 01/15/19 14:22

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3376911-1 01/17/19 17:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	4.82	J	0.795	10.0

L1060249-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1060249-11 01/18/19 09:29 • (DUP) R3376911-7 01/18/19 09:37

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3530	3290	5	6.88		15

L1060386-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1060386-07 01/18/19 11:51 • (DUP) R3376911-8 01/18/19 12:00

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1110	924	1	17.9	J3	15

Laboratory Control Sample (LCS)

(LCS) R3376911-2 01/17/19 18:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	215	108	80.0-120	

L1060249-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060249-03 01/17/19 18:24 • (MS) R3376911-3 01/17/19 18:33 • (MSD) R3376911-4 01/17/19 18:42

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 %
Chloride	598	3230	3640	2330	68.6	0.000	1	80.0-120	E V	E J3 V	44.1	15

Method Blank (MB)

(MB) R3376949-1 01/18/19 07:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	5.24	J	0.795	10.0

L1061644-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1061644-01 01/18/19 10:06 • (DUP) R3376949-5 01/18/19 10:16

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1430	1380	5	3.88		15

L1061910-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1061910-05 01/18/19 10:45 • (DUP) R3376949-6 01/18/19 10:55

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	547	572	1	4.47		15

Laboratory Control Sample (LCS)

(LCS) R3376949-2 01/18/19 07:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	213	106	80.0-120	

L1061642-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1061642-01 01/18/19 09:06 • (MS) R3376949-3 01/18/19 09:16 • (MSD) R3376949-4 01/18/19 09:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	500	1970	2430	2290	93.0	65.8	1	80.0-120	E	E J6	5.75	15

Method Blank (MB)

(MB) R3375908-5 01/15/19 11:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000120	0.000500
Toluene	0.000313	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) α,α,α-Trifluorotoluene(FID)	*94.8*			*77.0-120*
(S) α,α,α-Trifluorotoluene(PID)	*104*			*72.0-128*

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

(LCS) R3375908-1 01/15/19 09:29 • (LCSD) R3375908-2 01/15/19 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0455	0.0457	91.1	91.5	76.0-121			0.436	20
Toluene	0.0500	0.0452	0.0452	90.5	90.3	80.0-120			0.136	20
Ethylbenzene	0.0500	0.0486	0.0486	97.2	97.2	80.0-124			0.0284	20
Total Xylene	0.150	0.142	0.142	94.8	94.7	37.0-160			0.0703	20
(S) α,α,α-Trifluorotoluene(FID)				*94.0*	*94.4*	*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)				*102*	*102*	*72.0-128*				

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

(LCS) R3375908-3 01/15/19 10:18 • (LCSD) R3375908-4 01/15/19 10:42

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	5.23	5.27	95.0	95.9	72.0-127			0.875	20
(S) α,α,α-Trifluorotoluene(FID)				*107*	*107*	*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)				*113*	*114*	*72.0-128*				

L1060386-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060386-05 01/15/19 19:07 • (MS) R3375908-6 01/15/19 21:08 • (MSD) R3375908-7 01/15/19 21:32

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0640	ND	0.0461	0.0459	71.3	71.0	1	10.0-155			0.465	32
Toluene	0.0640	ND	0.0429	0.0425	66.2	65.5	1	10.0-160			1.12	34
Ethylbenzene	0.0640	ND	0.0439	0.0434	68.6	67.9	1	10.0-160			1.11	32
Total Xylene	0.192	ND	0.127	0.128	65.4	65.9	1	10.0-160	J6	J6	0.804	32
(S) a,a,a-Trifluorotoluene(FID)					*91.6*	*93.8*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*99.4*	*101*		*72.0-128*				

L1060386-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060386-05 01/15/19 19:07 • (MS) R3375908-8 01/15/19 21:56 • (MSD) R3375908-9 01/15/19 22:21

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	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) Low Fraction	7.04	ND	3.88	1.85	54.3	25.5	1	10.0-151		J3	70.8	28
(S) a,a,a-Trifluorotoluene(FID)					*94.5*	*92.4*		*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)					*103*	*103*		*72.0-128*				

Method Blank (MB)

(MB) R3376643-3 01/16/19 13:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000220	J	0.000120	0.000500
Toluene	0.000226	J	0.000150	0.00500
Ethylbenzene	U		0.000110	0.000500
Total Xylene	U		0.000460	0.00150
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) α,α,α-Trifluorotoluene(FID)	*102*			*77.0-120*
(S) α,α,α-Trifluorotoluene(PID)	*101*			*72.0-128*

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

(LCS) R3376643-1 01/16/19 12:02 • (LCSD) R3376643-2 01/16/19 12:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	6.06	6.20	110	113	72.0-127			2.31	20
(S) α,α,α-Trifluorotoluene(FID)				*110*	*109*	*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)				*108*	*106*	*72.0-128*				

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

(LCS) R3376643-4 01/17/19 00:02 • (LCSD) R3376643-5 01/17/19 00:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0491	0.0529	98.1	106	76.0-121			7.51	20
Toluene	0.0500	0.0442	0.0473	88.4	94.6	80.0-120			6.77	20
Ethylbenzene	0.0500	0.0483	0.0520	96.5	104	80.0-124			7.44	20
Total Xylene	0.150	0.144	0.156	96.1	104	37.0-160			7.61	20
(S) α,α,α-Trifluorotoluene(FID)				*102*	*102*	*77.0-120*				
(S) α,α,α-Trifluorotoluene(PID)				*101*	*102*	*72.0-128*				

Method Blank (MB)

(MB) R3376289-1 01/16/19 10:46

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	*87.8*			*18.0-148*

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

(LCS) R3376289-2 01/16/19 10:58 • (LCSD) R3376289-3 01/16/19 11:11

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 %
Extractable Petroleum Hydrocarbon	50.0	34.8	35.1	69.6	70.2	50.0-150			0.858	20
C10-C28 Diesel Range	50.0	37.8	38.0	75.6	76.0	50.0-150			0.528	20
(S) o-Terphenyl				*74.5*	*74.5*	*18.0-148*				

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

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	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.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.
V3	The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National 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 Pace National.

Cp
Tc
Ss
Cn
Sr
Qc
Gl
Al
Sc

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 [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1,6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1,4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	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 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National 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. Pace National performs all testing at our central laboratory.

Enduring Resources

~~332 County Road 3100~~ 200 Energy Court
~~Aztec, NM 87410~~ Farmington, NM, 87401

Billing Information:
James McDaniel
~~332 County Road 3100~~ 200 Energy Court
~~Aztec, NM 87410~~ Farmington, NM 87401

Report to: John Dockter

Email To: jdockter@enduringresources.com

Project Description: NEU 2207 16B

City/State Collected:

Phone: 505-636-9731
Fax:

Client Project #

Lab Project #

Collected by (print): John Dockter

Site/Facility ID #

P.O. #

Collected by (signature): John Dockter

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8021 (BTEX)	8015 (GRO/DRO/MRO)	Chlorides	Remarks	Sample # (lab only)
outside fence	Comp	SS		1/10/19	9:50am	1	X	X	X		-01
Section 1: A	Comp	SS		1/10/19	9:42am	1	X	X	X		-02
Section 1: B	Comp	SS		1/10/19	9:28am	1	X	X	X		-03
Section 1: C	Comp	SS		1/10/19	9:55am	1	X	X	X		-04
Section 1: D	Comp	SS		1/10/19	9:59am	1	X	X	X		-05
Section 2: A	Comp	SS		1/10/19	10:07am	1	X	X	X		-06
Section 2: B	Comp	SS		1/10/19	10:13am	1	X	X	X		-07
Section 2: C	Comp	SS		1/10/19	10:21am	1	X	X	X		-08
Section 3	Comp	SS		1/10/19	10:28am	10	X	X	X	RAD SCREEN: <0.5 mR/hr	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other _____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
___ UPS ___ FedEx ___ Courier _____

Tracking # 4196 3260 1677

Trip Blank Received: Yes / (No)
HCL / MeoH
TBR

Temp: 1.4 / 1.2 °C Bottles Received: 8-4oz

If preservation required by Login: Date/Time

Hold:

Condition: (NCF) / OK

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
John Dockter	1/10/19	3:10pm	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Date: 1-11-19 Time: 0845

Sample Receipt Checklist
COC Seal Present/Intact: ✓RP ___Y ___N
COC Signed/Accurate: ✓Y ___N
Bottles arrive intact: ✓Y ___N
Correct bottles used: ✓Y ___N
Sufficient volume sent: ✓Y ___N
If Applicable
VOA Zero Headspace: ___Y ___N
Preservation Correct/Checked: ___Y ___N

Chain of Custody Page ___ of ___

ESC LABORATORIES
a subsidiary of Pace Analytical
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1060386
M098

Acctnum: ENDRESANM
Template:
Prelogin:
TSR: 288 - Daphne Richards
PB:
Shipped Via:

Troy Dunlap

Login #: L1060386	Client: ENDRESANM	Date: 1/11/19	Evaluated by: Troy Dunlap

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Temperature not in range		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	pH not in range.		Please specify TCLP requested.	X	Improper handling by carrier (FedEx / UPS / Couri
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
X	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Container for SECTION 3 received broken. Sample could not be salvaged. Sample is mixed with the cooler water.

Client informed by:		Call		Email	X	Voice Mail	X	Date:1/11/19	Time:1704
TSR Initials:DR	Client Contact: JD								

Login Instructions:

Notified client sample received broken and unable to analyze

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 22, 2019

Enduring Resources

Sample Delivery Group:	L1061171
Samples Received:	01/15/2019
Project Number:	
Description:	NEU 2207 16B

Report To: James McDaniel
200 Energy Court
Farmington, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

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 Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

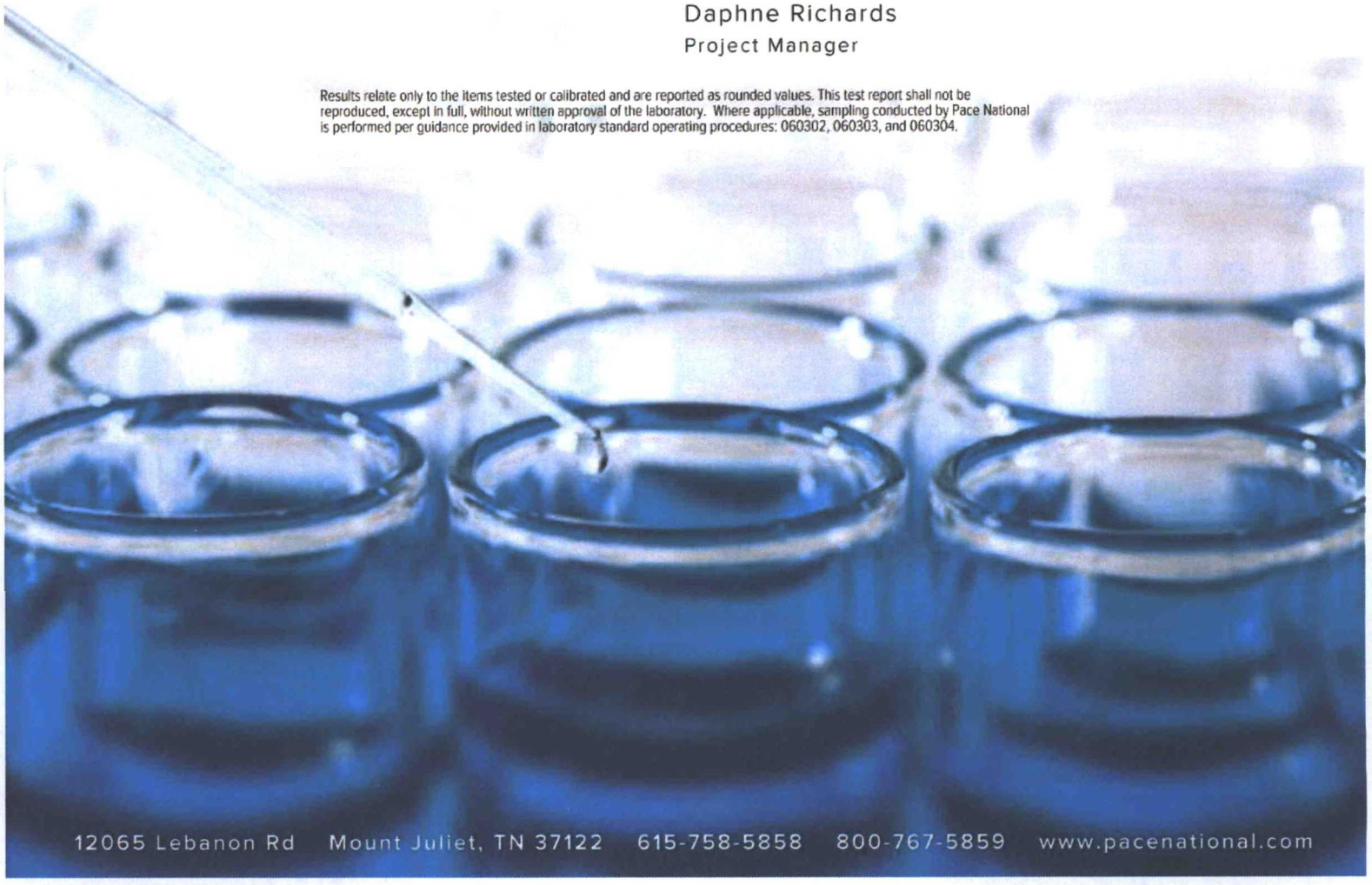


TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

SECTION 3 L1061171-01 Solid

			Collected by	Collected date/time	Received date/time
			Chad Snell	01/14/19 09:30	01/15/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1224629	1	01/17/19 13:24	01/17/19 13:45	KDW
Wet Chemistry by Method 9056A	WG1224912	1	01/17/19 14:00	01/18/19 08:56	ELN
Volatile Organic Compounds (GC) by Method 8015/8021	WG1224698	1	01/16/19 16:54	01/17/19 18:06	ACG
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1225329	1	01/17/19 21:30	01/18/19 13:31	AAT

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 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.

Daphne R Richards

Daphne Richards
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.7		1	01/17/2019 13:45	WG1224629

Wet Chemistry by Method 9056A

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Chloride	997		12.9	1	01/18/2019 08:56	WG1224912

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	ND		0.000643	1	01/17/2019 18:06	WG1224698
Toluene	ND		0.00643	1	01/17/2019 18:06	WG1224698
Ethylbenzene	ND		0.000643	1	01/17/2019 18:06	WG1224698
Total Xylene	0.00298		0.00193	1	01/17/2019 18:06	WG1224698
TPH (GC/FID) Low Fraction	ND		0.129	1	01/17/2019 18:06	WG1224698
(S) α,α,α-Trifluorotoluene(FID)	*91.8*		*77.0-120*		*01/17/2019 18:06*	WG1224698
(S) α,α,α-Trifluorotoluene(PID)	*99.0*		*72.0-128*		*01/17/2019 18:06*	WG1224698

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
C10-C28 Diesel Range	28.4		5.15	1	01/18/2019 13:31	WG1225329
C28-C40 Oil Range	11.7		5.15	1	01/18/2019 13:31	WG1225329
(S) o-Terphenyl	*83.7*		*18.0-148*		*01/18/2019 13:31*	WG1225329

Method Blank (MB)

(MB) R3376822-1 01/17/19 13:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00100			

L1061142-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1061142-02 01/17/19 13:45 • (DUP) R3376822-3 01/17/19 13:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	71.9	72.2	1	0.294		10

Laboratory Control Sample (LCS)

(LCS) R3376822-2 01/17/19 13:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3376949-1 01/18/19 07:46

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	5.24	J	0.795	10.0

L1061644-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1061644-01 01/18/19 10:06 • (DUP) R3376949-5 01/18/19 10:16

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1430	1380	5	3.88		15

L1061910-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1061910-05 01/18/19 10:45 • (DUP) R3376949-6 01/18/19 10:55

Analyte	Original Result (dry) mg/kg	DUP Result (dry) mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	547	572	1	4.47		15

Laboratory Control Sample (LCS)

(LCS) R3376949-2 01/18/19 07:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	213	106	80.0-120	

L1061642-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1061642-01 01/18/19 09:06 • (MS) R3376949-3 01/18/19 09:16 • (MSD) R3376949-4 01/18/19 09:46

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 %
Chloride	579	2280	2820	2660	93.0	65.8	1	80.0-120	E	E J6	5.75	15

Method Blank (MB)

(MB) R3377469-5 01/17/19 11:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.000177	J	0.000120	0.000500
Toluene	0.000557	J	0.000150	0.00500
Ethylbenzene	0.000115	J	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)	*94.8*			*77.0-120*
(S) a,a,a-Trifluorotoluene(PID)	*104*			*72.0-128*

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

(LCS) R3377469-1 01/17/19 09:26 • (LCSD) R3377469-2 01/17/19 09:50

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	0.0473	0.0467	94.6	93.4	76.0-121			1.21	20
Toluene	0.0500	0.0463	0.0456	92.7	91.1	80.0-120			1.72	20
Ethylbenzene	0.0500	0.0493	0.0486	98.5	97.2	80.0-124			1.41	20
Total Xylene	0.150	0.146	0.144	97.5	96.0	37.0-160			1.52	20
(S) a,a,a-Trifluorotoluene(FID)				*94.7*	*94.4*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*103*	*102*	*72.0-128*				

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

(LCS) R3377469-3 01/17/19 10:15 • (LCSD) R3377469-4 01/17/19 10:39

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	5.38	5.32	97.9	96.7	72.0-127			1.22	20
(S) a,a,a-Trifluorotoluene(FID)				*105*	*105*	*77.0-120*				
(S) a,a,a-Trifluorotoluene(PID)				*112*	*112*	*72.0-128*				

Method Blank (MB)

(MB) R3376998-1 01/18/19 12:45

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	*88.4*			*18.0-148*

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

(LCS) R3376998-2 01/18/19 13:01 • (LCSD) R3376998-3 01/18/19 13:16

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	42.6	42.6	85.2	85.2	50.0-150			0.000	20
(S) o-Terphenyl				*101*	*104*	*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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	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.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.

Pace National 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 Pace National.

Cp | Tc | Ss | Cn | Sr | Qc | Gl | Al | Sc

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 [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1,6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1,4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	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

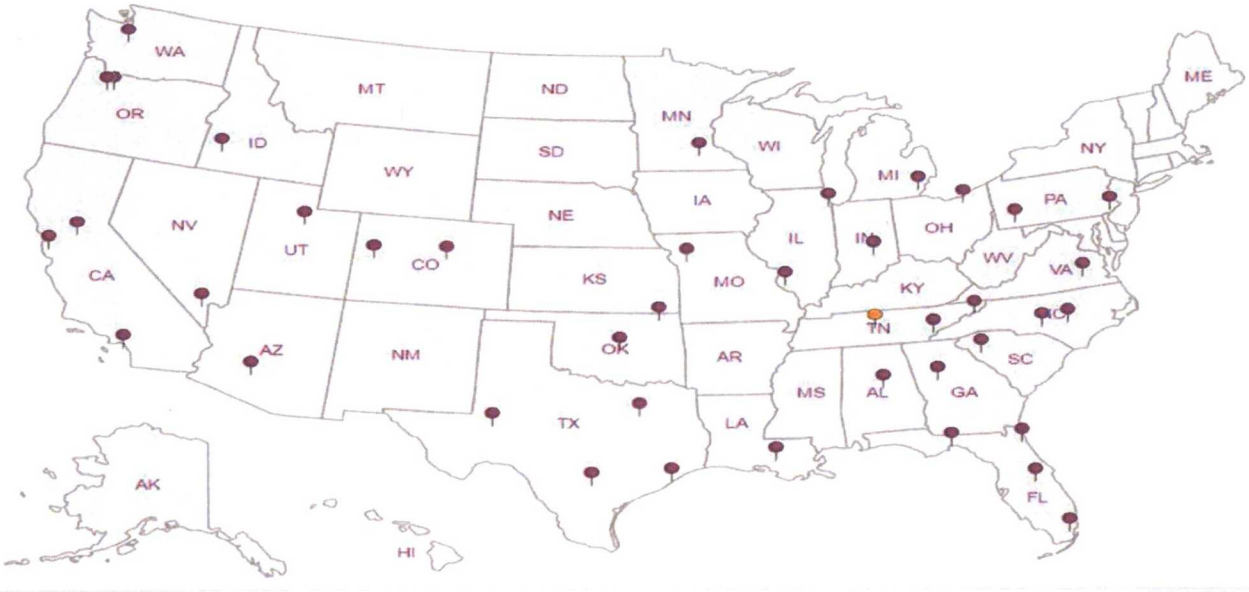
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National 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. Pace National performs all testing at our central laboratory.



Enduring Resources

~~332 County Road 3100~~ 200 Energy Court
~~Aztec, NM 87410~~ Farmington, NM 87401

Billing Information:
James McDaniel
~~332 County Road 3100~~
~~Aztec, NM 87410~~

Pres Chk

Report to: James McDaniel

Email To: JMcdaniel@EnduringResources.com

Project Description: NEU 2207 16B

City/State Collected:

Phone: 505-636-9731
Fax:

Client Project #

Lab Project #

Collected by (print): Chad Small

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

8021 (BTEX)
8015 (GRO/DRO)
Chlorides

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
a subsidiary of Pace Analytical

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Phone: 800-767-5859
Fax: 615-758-5859

L# L1061171
1045

Acctnum: ENDRESANM
Template:
Prelogin:
TSR: 288 - Daphne Richards
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	8021 (BTEX)	8015 (GRO/DRO)	Chlorides	Remarks	Sample # (lab only)
Section 3	Comp	SS		01-14-19	9:30am	1	✓	✓	✓		-01

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other _____

Remarks: RAD SCREEN: <0.5 mR/hr

pH _____ Temp _____
Flow _____ Other _____

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

Tracking # 4196 3260 1686 1666

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

	Date:	Time:	
Relinquished by: (Signature)	1-14-19	12:00pm	Received by: (Signature)
Relinquished by: (Signature)			Received by: (Signature)
Relinquished by: (Signature)			Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 0.3 °C 0.2 °C 0.1 °C Bottles Received: 1-4oz

Date: 01/15/19 Time: 08:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK