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

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)* NCS1901528176
Contact mailing address: **200 Energy Court**	**Farmington, New Mexico 87401**

Location of Release Source

Latitude **36. 1643583** Longitude **-107. 395938**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: **Logos 002**	Site Type: **Wellsite**
Date Release Discovered: **12/31/2018**	API# *(if applicable)* **30-043-21120**

Unit Letter	Section	Township	Range	County
I	**6**	**22N**	**5W**	**Sandoval**

NMOCD
MAR 04 2019
DISTRICT III

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) **18 bbls**	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	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 12/31/18, a leak was discovered at the Logos 2. The leak was calculated at 18 bbls of oil, which remained right around the wellhead. Clean up activities have taken place and conformation sampling took place on Thursday January 10th, 2019.

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Wednesday, March 13, 2019 10:10 AM
To: 'Chad Snell'; Fields, Vanessa, EMNRD; James McDaniel
Cc: Kenny Dearen; John Dockter; Antonio Lucero; Powell, Brandon, EMNRD
Subject: RE: Confirmation Sampling - January 7, 2019

Chad,

OCD has received the final C-141 for the release on the Logos #2. The OCD has denied the C-141 because the sampling does not meet the requires of 19.15.29.12 NMAC.

As discussed onsite on 1/10/19 at the Chaco 175H Enduring needed to follow the 200sqft sampling procedure because I was not going to attend the release as I had another inspection to perform.

The area needs to be resampled per 19.15.29.12 NMAC and the closure document need to be updated and resubmitted.

Thank you,

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, January 8, 2019 6:52 AM
To: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; James McDaniel <JMcDaniel@enduringresources.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: [EXT] RE: Confirmation Sampling - January 7, 2019

Good morning,

Conformation sampling will begin Thursday January 10th, 2019. We will start at the NEU 2207 16B at 9:00am followed by the NE Chaco 173H and finishing up at the Logos 2. If you have any questions please let me know.

Thanks.

From: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Sent: Monday, January 07, 2019 7:30 AM
To: James McDaniel <JMcDaniel@enduringresources.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD

<Brandon.Powell@state.nm.us>
Subject: RE: Confirmation Sampling - January 7, 2019

Good morning James,

As discussed this morning sampling will be moved to Thursday January 10, 2019 due to road conditions. Sampling can occur at both locations during this time.

Please let Cory know what time sampling will occur.

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

From: James McDaniel <JMcDaniel@enduringresources.com>
Sent: Friday, January 4, 2019 2:44 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: [EXT] RE: Confirmation Sampling - January 7, 2019

Cory,
The inspections from Dec 4 to current will be brought to the pond, and the equipment to check the leak detection will be brought as well. The sampling for the NE Chaco 173H will need to be postponed, as we were not able to get into the site as we had hoped for the cleanup today due to cold temperatures. Thanks much!

James McDaniel
HSE Supervisor
Enduring Resources
CSP #30009
CHMM #15676
Office: 505-636-9731
Cell: 505-444-3004
jmcdaniel@enduringresources.com

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Friday, January 04, 2019 2:24 PM
To: James McDaniel <JMcDaniel@enduringresources.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: Confirmation Sampling - January 7, 2019

James,

The times work, Please make sure on Monday that Enduring has the equipment to inspect the leak detection system at the 16B Pond Please also bring a copy of the log of the inspections of the leak detection starting from the week of December 4 2018.

The area is expecting a winter storm Sunday so please let me know ASAP Monday morning if sampling needs to be postponed. I haven't seen the release sites but if they are covered in snow Enduring may be required to return to the site at a later date to collect any possible grab samples of wet or stained areas prior to closure.

If you have any questions please give me a call.

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: James McDaniel <JMcDaniel@enduringresources.com>
Sent: Thursday, January 3, 2019 9:35 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>
Subject: [EXT] Confirmation Sampling - January 7, 2019

As discussed with Vanessa on December 31, 2018, the confirmation sampling for the water release at the NEU 2207 16B that occurred on 12/26/2018 will be rescheduled for 9 AM on 1/7/2018. Additionally, Enduring had two additional minor releases that occurred on 12/31/2018 at the Logos 2 and the NE Chaco 173H. Cleanup activities have taken place on the Logos 2 for a 16 bbl oil spill around the wellhead, and a 15 bbl water spill will be cleaned up at the NE Chaco 173H on 1/4/2019. Confirmation sampling for these releases will also occur on 1/7/2018. Confirmation Sampling will occur at the Logos 2, following the sampling at the NEU 2207 16B, at approximately 11 AM, and confirmation sampling will occur on the NE Chaco 173H Battery at 1:00 PM, immediately following the confirmation sampling at the Logos 2. Thank you for your time in regards to these incidents.

James McDaniel
HSE Supervisor
Enduring Resources
CSP #30009
CHMM #15676
Office: 505-636-9731

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?	130 (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: _____ Date: 3-1-2019

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

OCD Only

Received by: OCD Date: 3/4/19

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 **DENIED** Date: 3/13/19

Printed Name: _____ Title: _____

Does not meet the Sampling Requirements of 19.15.29.12 NMAC.

Logos 2 Remediation Narrative

12/31/2018

During daily routine duties a lease operator discovered a release. The release was caused by a 1/2inch ball valve on the gas dryer at the well head that broke due to freezing. The release was calculated by using a calculation tool that verified 18 bbls of oil had been released. The impacted area was measured out to a 22 Ft. x 13 Ft. area which majority of the oil stayed on the surface due to freezing conditions.

1/2/2019

Clean up activities began using a hydrovac truck that sucked up approximately 18 bbls of oil and 20 bbls of snow around the wellhead. Additionally another 6 inches of impacted soil was hydrovac around the wellhead.

1/3/2019

Enduring Resources, LLC personnel notified the NMOCD that confirmation sampling would take place on January 7th 2019.

1/7/2019

NMOCD notified Enduring Resources, LLC that they would have to postpone witness sampling to January 10th 2019 due to road conditions.

1/10/2019

Confirmation sampling activities began shortly after the NE Chaco Com 173H. A Composite sample was taken from the release area and sent in for analysis of TPH (GRO/DRO/ORO), BTEX, and Chlorides. The site was ranked by ground water test holes that were bored at a nearby location by MO-TE Drilling. Water was detected at 113 Ft. below surface. Elevation at this site is approximately 6895 Ft. The Elevation at the Logos 2 is approximately 6911Ft. demonstrating ground water is around 129 ft. below surface (see attached *Boring logs*). This being determined set closure standards to 1,000 ppm GRO+DRO, 2,500 ppm TPH (GRO/DRO/ORO), 50 ppm BTEX 10 ppm Benzene and 20,000 ppm Chlorides.

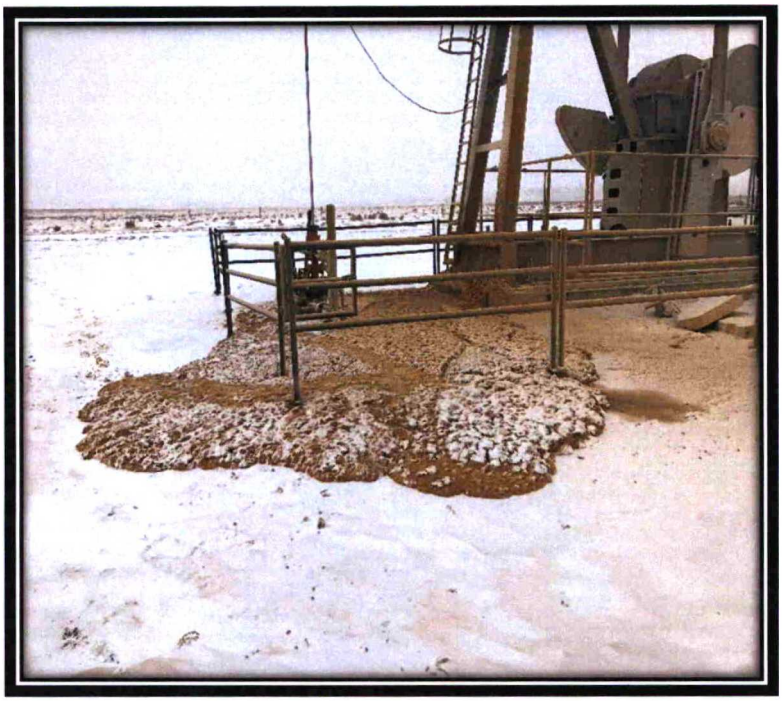
1/16/2019

Lab analysis returned results under regulatory standards for this site (see attached *Lab Analysis*). No further remediation is required at this time.

Enduring Resources, LLC
Photo Page
Logos 2
30-043-21120

Photos of Release

Enduring Resources, LLC
Photo Page
Logos 2
30-043-21120



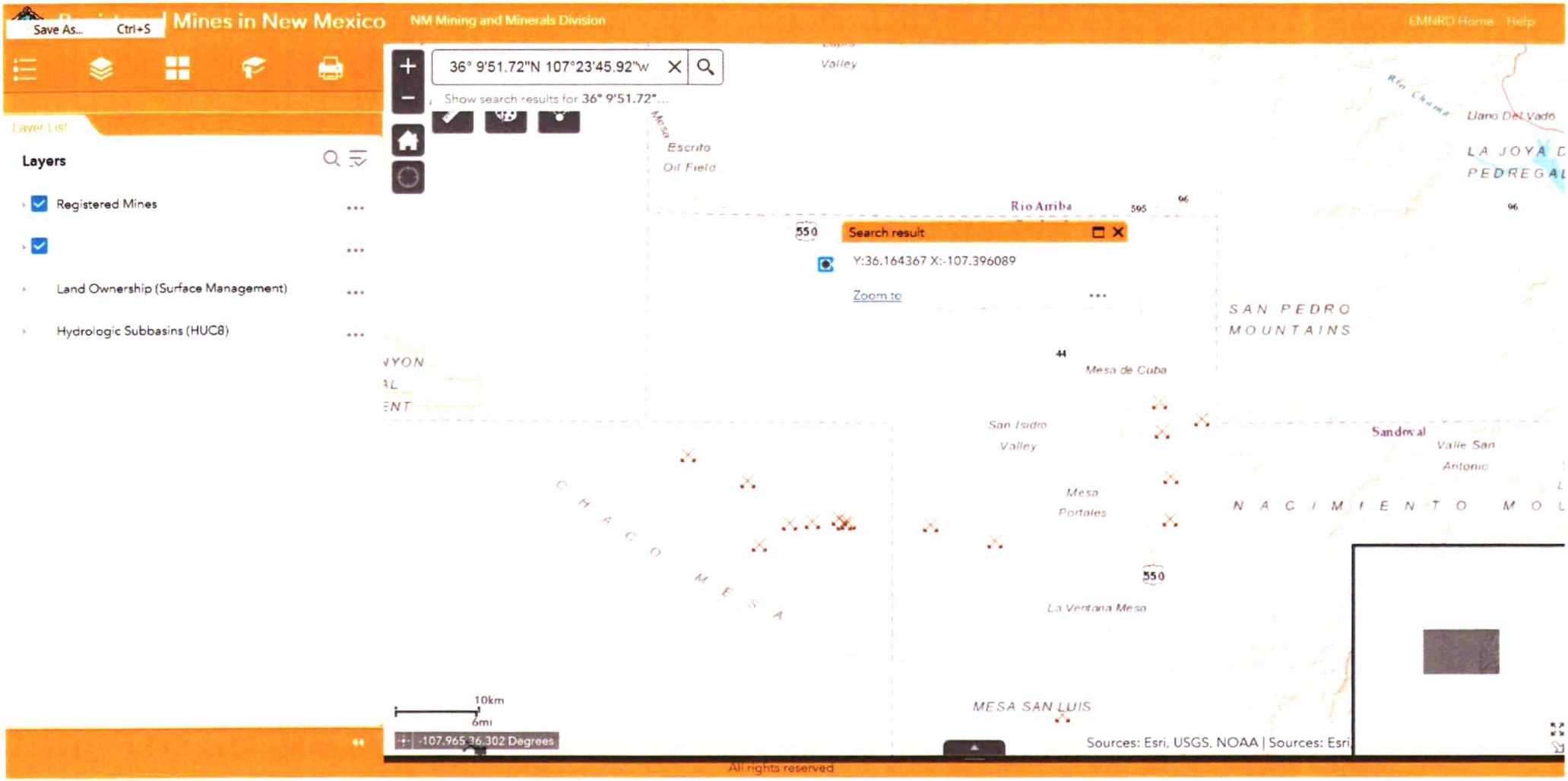
Photos of Sampling

Enduring Resources, LLC
Photo Page
Logos 2
30-043-21120

Logos 2

Sample Name	Description	Date	Time	DRO	GRO	DRO+ GRO	ORO	Total TPH	Benzene	Toluene	Ethylbenzene	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
Well Head area	Composite	1/10/2019	1:05 PM	358	179	**537**	160	**697.0**	0.122	0.601	0.416	3.11	4.891	382

CLOSURE SAMPLES


Save As... Ctrl+S
Mines in New Mexico
NM Mining and Minerals Division
EMNRD Home Help
Layer List
Layers
Registered Mines
Land Ownership (Surface Management)
Hydrologic Subbasins (HUC8)
36° 9'51.72"N 107°23'45.92"W
Show search results for 36° 9'51.72"...
Search result
Y:36.164367 X:-107.396089
Zoom to
Escrito Oil Field
Rio Arriba
SAN PEDRO MOUNTAINS
Mesa de Cuba
San Isidro Valley
Mesa Portales
La Ventana Mesa
Sandoval
Valle San Antonio
NACIMIENTO MO
CHACON MESA
MESA SAN LUIS
Llano Del Vado
LA JOYA
PEDREGAL
10km
6mi
-107.965 36.302 Degrees
Sources: Esri, USGS, NOAA | Sources: Esri
All rights reserved


Logos 7
Logos 1
Test hole Water @ 113'
Elevation 6895 FT
gos 12
Elevation 6911 FT
Logos 2
© 2018 Google
Google Earth
777 ft
1997
Imagery Date: 10/13/2017 36°09'56.83" N 107°23'35.96" W elev 6904 ft eye alt 10508 ft

MO-TE DRILLING, INC.

DAY SAT

DRILLER Josh | LEFT TOWN | ARRIVED FIELD

HELPER Brando | LEFT FIELD | ARRIVED TOWN

HELPER | TOTAL FOOTAGE TODAY

RIG NO. 208 DATE 9-7-13 CLIENT Logos op LLC

BEGIN WORK ON HOLE NO Logos #7 Test Hole AT FEET

BEGIN WORK ON HOLE NO. 30-043-21155 AT FEET

TIME FROM	TIME TO	ACTIVITY
7:30	9:00	Move Rig Rig up
9:00	9:10	DRill 6¼" Hole 0-40' TOH
9:10	10:10	Stand by.
10:10	10:15	Check FOR WATER - NO WATER
10:15	10:31	TIH DRill 6¼" Hole 40-65' TOH
10:31	11:31	Stand by
11:31	11:36	Check FOR WATER - NO WATER
11:36	12:04	TIH DRill 6¼" Hole 65-115'
12:04	12:54	Clean hole TOH
12:54	1:54	Stand by
1:54	2:00	Check FOR WATER - WATER @ 113'

BIT RECORD

SIZE & MAKE	SERIAL NO.	FOOTAGE

CIRCULATION MATERIAL

CLEAN	UNIT	MATERIAL

NO. OF LOADS OF WATER SOURCE

MO-TE DRILLING, INC.

DAY SAT

DRILLER Josh | LEFT TOWN | ARRIVED FIELD

HELPER Brando | LEFT FIELD | ARRIVED TOWN

HELPER | TOTAL FOOTAGE TODAY

RIG NO. 208 DATE 9-7-13 CLIENT Logos op LLC

BEGIN WORK ON HOLE NO Logos #2 Test Hole AT FEET

BEGIN WORK ON HOLE NO. AT FEET

TIME FROM	TIME TO	ACTIVITY
0'	35'	Loose DRy SAND
35'	40'	Soft DRy SANDSTONE
40'	45'	Soft DRy SANDSTONE
45'	47'	SHALE (Grey)
47'	65'	Soft DRy SANDSTONE
65'	72'	Soft DRy SANDSTONE
72'	78'	DAMP SAND STONE
78'	115'	Shale (Grey) DRy

BIT RECORD

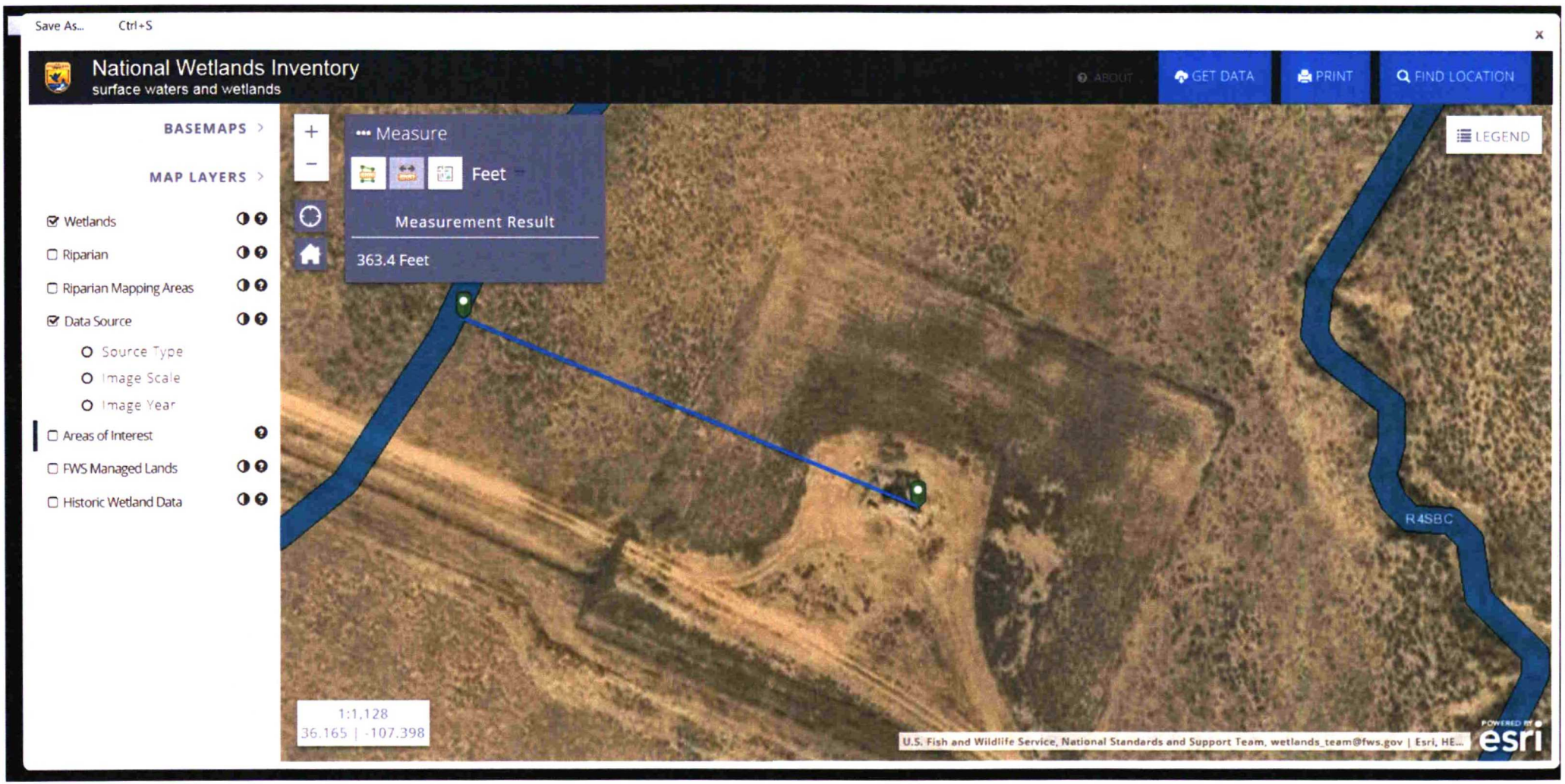
SIZE & MAKE	SERIAL NO.	FOOTAGE

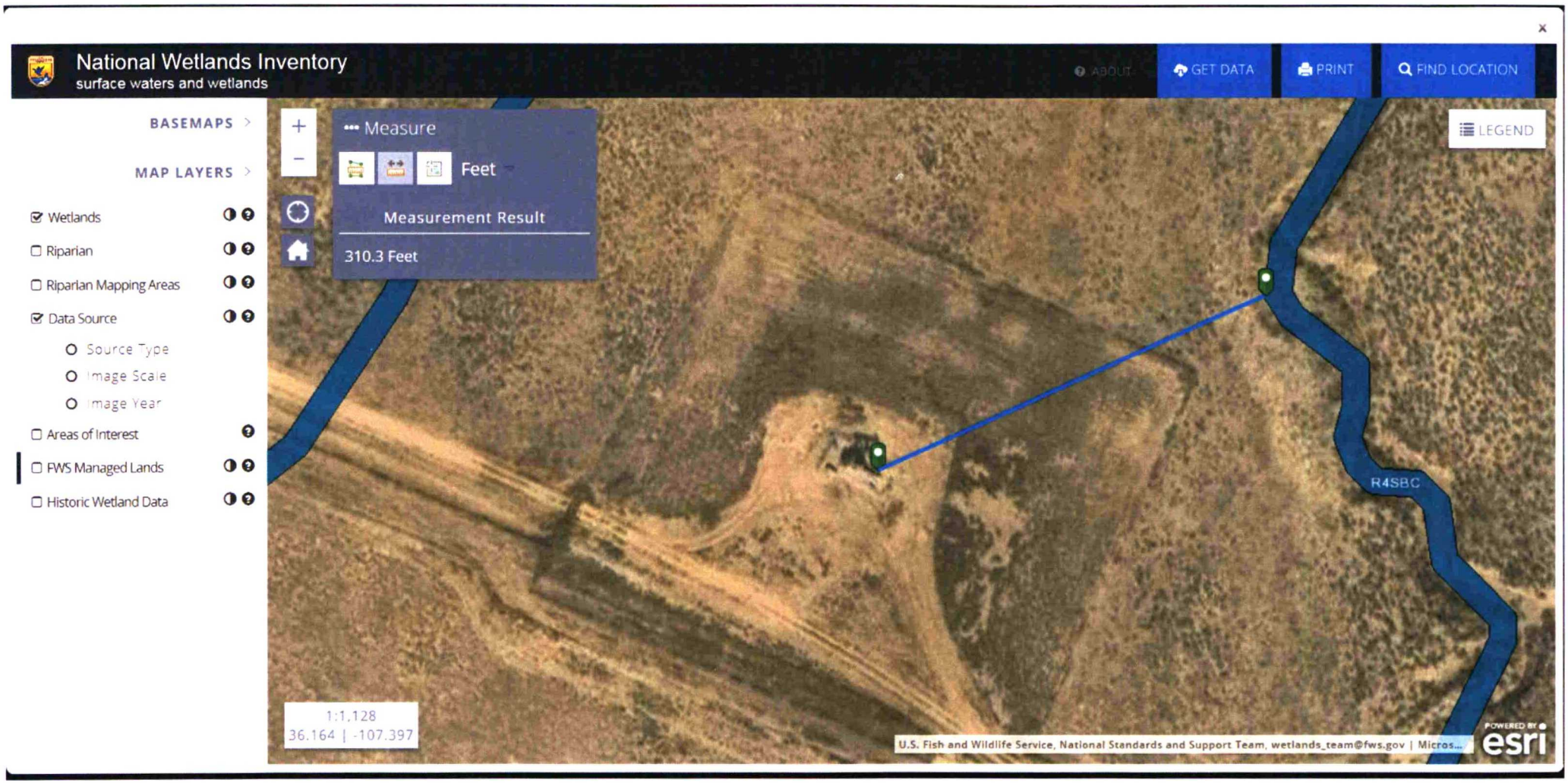
CIRCULATION MATERIAL

CLEAN	UNIT	MATERIAL

NO. OF LOADS OF WATER SOURCE


Logs 2
22 Ft. Long
13 Ft. Wide at widest point
62 ft
1997
Google Earth
Imagery Date: 10/13/2017 36°09'51.73" N 107°23'45.78" W elev 6911 ft eye alt 7185 ft


Save As... Ctrl+S
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
363.4 Feet
LEGEND
R4SBC
1:1,128
36.165 | -107.398
U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov | Esri, HE...
esri


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
310.3 Feet
LEGEND
R4SBC
1:1,128
36.164 | -107.397
U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov | Micros...
POWERED BY esri

National Flood Hazard Layer FIRMette

FEMA

Legend

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

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone*
- 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*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

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 accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/7/2019 at 11:06:04 AM 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 regulatory purposes.

Chad Snell

From: Chad Snell
Sent: Tuesday, January 08, 2019 6:52 AM
To: 'Fields, Vanessa, EMNRD'; James McDaniel; Smith, Cory, EMNRD
Cc: Kenny Dearen; John Dockter; Antonio Lucero; Powell, Brandon, EMNRD
Subject: RE: Confirmation Sampling - January 7, 2019

Good morning,

Conformation sampling will begin Thursday January 10th, 2019. We will start at the NEU 2207 16B at 9:00am followed by the NE Chaco 173H and finishing up at the Logos 2. If you have any questions please let me know.

Thanks.

From: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Sent: Monday, January 07, 2019 7:30 AM
To: James McDaniel <JMcDaniel@enduringresources.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: Confirmation Sampling - January 7, 2019

Good morning James,

As discussed this morning sampling will be moved to Thursday January 10, 2019 due to road conditions. Sampling can occur at both locations during this time.

Please let Cory know what time sampling will occur.

Thank you,

Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

From: James McDaniel <JMcDaniel@enduringresources.com>
Sent: Friday, January 4, 2019 2:44 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: [EXT] RE: Confirmation Sampling - January 7, 2019

Cory,
The inspections from Dec 4 to current will be brought to the pond, and the equipment to check the leak detection will be brought as well. The sampling for the NE Chaco 173H will need to be postponed, as we were not able to get into the site as we had hoped for the cleanup today due to cold temperatures. Thanks much!

James McDaniel
HSE Supervisor
Enduring Resources
CSP #30009
CHMM #15676
Office: 505-636-9731
Cell: 505-444-3004
jmcdaniel@enduringresources.com

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Friday, January 04, 2019 2:24 PM
To: James McDaniel <JMcDaniel@enduringresources.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: Confirmation Sampling - January 7, 2019

James,

The times work, Please make sure on Monday that Enduring has the equipment to inspect the leak detection system at the 16B Pond Please also bring a copy of the log of the inspections of the leak detection starting from the week of December 4 2018.

The area is expecting a winter storm Sunday so please let me know ASAP Monday morning if sampling needs to be postponed. I haven't seen the release sites but if they are covered in snow Enduring may be required to return to the site at a later date to collect any possible grab samples of wet or stained areas prior to closure.

If you have any questions please give me a call.

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: James McDaniel <JMcDaniel@enduringresources.com>
Sent: Thursday, January 3, 2019 9:35 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: Kenny Dearen <KDearen@enduringresources.com>; Chad Snell <CSnell@enduringresources.com>; John Dockter <JDockter@enduringresources.com>; Antonio Lucero <ALucero@enduringresources.com>
Subject: [EXT] Confirmation Sampling - January 7, 2019

As discussed with Vanessa on December 31, 2018, the confirmation sampling for the water release at the NEU 2207 16B that occurred on 12/26/2018 will be rescheduled for 9 AM on 1/7/2018. Additionally, Enduring had two additional minor releases that occurred on 12/31/2018 at the Logos 2 and the NE Chaco 173H. Cleanup activities have taken place on the Logos 2 for a 16 bbl oil spill around the wellhead, and a 15 bbl water spill will be cleaned up at the NE Chaco 173H on 1/4/2019. Confirmation sampling for these releases will also occur on 1/7/2018. Confirmation Sampling will occur at the Logos 2, following the sampling at the NEU 2207 16B, at approximately 11 AM, and confirmation sampling will occur on the NE Chaco 173H Battery at 1:00 PM, immediately following the confirmation sampling at the Logos 2. Thank you for your time in regards to these incidents.

James McDaniel
HSE Supervisor
Enduring Resources
CSP #30009
CHMM #15676
Office: 505-636-9731
Cell: 505-444-3004
jmcdaniel@enduringresources.com

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

January 16, 2019

Enduring Resources

Sample Delivery Group:	L1060392
Samples Received:	01/11/2019
Project Number:	
Description:	Logos 2

Report To: Chad Snell
200 Energy Court
Farmington, NM 87401

Entire Report Reviewed By: Daphne R Richards

Daphne Richards
Project Manager

TABLE OF CONTENTS

ONE LAB. NATIONWIDE.

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.

WELL HEAD AREA L1060392-01 Solid

			Collected by	Collected date/time	Received date/time
			Chad Snell	01/10/19 13:05	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	WG1222712	1	01/14/19 10:38	01/14/19 13:31	NJM
Volatile Organic Compounds (GC) by Method 8015/8021	WG1223441	100	01/12/19 20:18	01/15/19 20:44	DWR
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	1	01/16/19 06:02	01/16/19 14:09	KME
Semi-Volatile Organic Compounds (GC) by Method 8015	WG1222953	5	01/16/19 06:02	01/16/19 15:12	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	83.2		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	382		12.0	1	01/14/2019 13:31	WG1222712

Volatile Organic Compounds (GC) by Method 8015/8021

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Benzene	0.122		0.0601	100	01/15/2019 20:44	WG1223441
Toluene	ND		0.601	100	01/15/2019 20:44	WG1223441
Ethylbenzene	0.416		0.0601	100	01/15/2019 20:44	WG1223441
Total Xylene	3.11		0.180	100	01/15/2019 20:44	WG1223441
TPH (GC/FID) Low Fraction	179		12.0	100	01/15/2019 20:44	WG1223441
(S) a,a,a-Trifluorotoluene(FID)	*94.2*		*77.0-120*		*01/15/2019 20:44*	WG1223441
(S) a,a,a-Trifluorotoluene(PID)	*103*		*72.0-128*		*01/15/2019 20:44*	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	358		24.1	5	01/16/2019 15:12	WG1222953
C28-C40 Oil Range	160		4.81	1	01/16/2019 14:09	WG1222953
(S) o-Terphenyl	*115*		*18.0-148*		*01/16/2019 15:12*	WG1222953
(S) o-Terphenyl	*121*		*18.0-148*		*01/16/2019 14:09*	WG1222953

Method Blank (MB)

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

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	%		%	%
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

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

Laboratory Control Sample (LCS)

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

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

Method Blank (MB)

(MB) R3375636-1 01/14/19 12:47

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Chloride	1.44	J	0.795	10.0

L1059362-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1059362-01 01/14/19 13:13 • (DUP) R3375636-3 01/14/19 13:22

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	82.7	94.6	1	13.5		15

L1060433-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1060433-15 01/15/19 16:26 • (DUP) R3376112-6 01/15/19 16:34

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	44.2	41.4	1	6.56		15

Laboratory Control Sample (LCS)

(LCS) R3375636-2 01/14/19 12:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	196	98.2	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3376112-3 01/15/19 13:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	200	208	104	80.0-120	

L1060433-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1060433-08 01/15/19 14:49 • (MS) R3376112-4 01/15/19 14:58 • (MSD) R3376112-7 01/15/19 16:43

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	ND	535	470	106	93.0	1	80.0-120			12.9	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) 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) 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) a,a,a-Trifluorotoluene(FID)				*94.0*	*94.4*	*77.0-120*				
(S) a,a,a-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) a,a,a-Trifluorotoluene(FID)				*107*	*107*	*77.0-120*				
(S) a,a,a-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	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Benzene	0.0500	ND	0.0360	0.0359	71.3	71.0	1	10.0-155			0.465	32
Toluene	0.0500	ND	0.0335	0.0332	66.2	65.5	1	10.0-160			1.12	34
Ethylbenzene	0.0500	ND	0.0343	0.0339	68.6	67.9	1	10.0-160			1.11	32
Total Xylene	0.150	ND	0.0991	0.0999	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	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPH (GC/FID) Low Fraction	5.50	ND	3.03	1.45	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) 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*				

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
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.

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

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

Report to: Chad Snell
Email To: CSnell@EnduringResources.com

Project Description: Logos 2
City/State Collected:
Phone: 505-636-9731
Fax:
Client Project #
Lab Project #
Collected by (print): Chad Snell
Site/Facility ID #
P.O. #
Collected by (signature):
Immediately Packed on Ice N ___ Y ✓
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

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
a subsidiary of ALS Group
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
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L# L1060392
M097
Acctnum: ENDRESANM
Template:
Prelogin:
TSR: 288 - Daphne Richards
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative: 8021 (BTEX)	8015 (GRO / DRO / MRO)	Chlorides	Remarks	Sample # (lab only)
Well Head area	Comp	SS		1-10-20	1:05 pm	2		✓	✓	✓		-01

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

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR
	1-10-19	3:10 pm		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.4-2=1.2 °C Bottles Received: 1-402
				If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 1-11-19 Time: 0845
				Hold: Condition: NCF / (OK)