Fields, Vanessa, EMNRD

From: Fields, Vanessa, EMNRD
Sent: Wednesday, February 27, 2019 11:22 AM
To: Joel Lowry; EMNRD-OCD-District1spills
Cc: Ericson, Dean
Subject: RE: 1RP-4984 - Pipeline No. 2B2-19-2 - Site Assessment Report and Proposed Remediation Plan

Good morning Joel.

The OCD has approved the remediation Plan with the following condition of Approvals.

Due to groundwater below < 50 feet, closure samples will need to comply with Table 1.

≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

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: Joel Lowry <joel@lowryenvironmental.com>
Sent: Wednesday, February 27, 2019 6:39 AM
To: EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>
Cc: Ericson, Dean <Dean.Ericson@energyTransfer.com>
Subject: [EXT] FW: 1RP-4984 - Pipeline No. 2B2-19-2 - Site Assessment Report and Proposed Remediation Plan

Please find attached a Site Assessment Report and Proposed Remediation Plan that has been prepared for ETC's Pipeline No. 2B2-19-2 release site. It was submitted several months ago. From what I remember it was fairly conventional.

Respectfully,

Joel Lowry
Environmental Professional
LOWRY environmental
PO Box 896
Lovington, NM 88260
Direct 432-466-4450

From: Joel Lowry
Sent: Monday, November 12, 2018 3:58 PM
To: 'christina.hernandez@state.nm.us' <christina.hernandez@state.nm.us>; 'olivia.yu@state.nm.us' <olivia.yu@state.nm.us>
Cc: 'Ericson, Dean' <Dean.Ericson@energyTransfer.com>
Subject: 1RP-4984 - Pipeline No. 2B2-19-2 - Site Assessment Report and Proposed Remediation Plan

Ms. Yu and Ms. Hernandez,

Please find attached the *Site Assessment Report and Proposed Remediation Plan* that has been prepared for ETC's Pipeline No. 2B2-19-2 Release Site. The Release Site is located in Unit Letter "L", Section 15, Township 25 South, Range 37 East on land owned by Lea County. If you have any questions or need any additional information, please feel free to contact me by phone or email. Thanks!

Respectfully,

Joel Lowry
Environmental Professional
LOWRY environmental
PO Box 896
Lovington, NM 88260
Direct 432-466-4450

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	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

Release Notification

Responsible Party

Responsibly Party	ETC Texas Pipeline, Ltd.	OGRID	371183
Contact Name	Dean Ericson	Contact Telephone	817-302-9758
Contact Email	dean.ericson@energytransfer.com	Incident # *(assigned by OCD)*	1RP-4984
Contact Mailing Address	600 N. Marienfeld. St., Suite 700, Midland, TX 79701		

Location of Release Source

Latitude 32.12813 Longitude -103.15752

(Nad 83 in decimal degrees to 5 decimal places)

Site Name	Pipeline No. 2B2-19-2	Site Type	Pipeline
Date Release Discovered	02/28/18	API# *(if applicable)*	NA

Unit Letter	Section	Township	Range	County
"L"	15	25	37	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☑ Private *(Name.* Lea County)

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) <5 bbls	Volume Recovered (bbls) None
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No ☑ N/A
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☑ Natural Gas	Volume Released (Mcf) 736.25	Volume Recovered (Mcf) Non
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

The release was attributed to the failure of a segment of buried natural gas pipeline as a result of corrosion.

State of New Mexico
Oil Conservation Division

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

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? Unauthorized release of a volume of gases exceeding 500 McF.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means? (phone, email, etc)? Carolyn Blackaller, Olivia Yu, 3/1/2018 @ 12:35, Not Available	

Initial Response

The responsible party must undertake the following actions immediatedly 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.
- ☑ Release 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 suffessfully 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: Dean Ericson Title: Sr. Environmental Specialist

Signature: Dean D. Ericson Date: 11/12/2018

email: dean.ercison@energytransfer.com Telephone: 817-302-9758

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>50'	(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
- ☑ Determination of water sources and significant watercourses within 1/2-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. Than 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 modifies by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

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: Dean Ericson Title: Sr. Environmental Specialist

Signature: Date:

email: dean.ercison@energytransfer.com Telephone: 817-302-9758

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

Remediation Plan

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

- ☑ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points **(GPS N/A)**
- ☑ 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: Dean Ericson Title: Sr. Environmental Specialist

Signature: Dean R. Ericson Date: 11/12/2018

email: dean.ercison@energytransfer.com Telephone: 817-302-9758

OCD Only

Received by: Vanessa Fields Date: 2/27/2019

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

Signature: Vanessa Fields Date: 2/27/2019

LOWRY environmental

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

November 12, 2018

Olivia Yu & Christina Hernandez
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division, District 1
1625 French Drive
Hobbs, NM 88240

Re: **Site Assessment Report and Proposed Remediation Plan**
Site Name: Pipeline No. 2B2-19-2
GPS: Latitude: 32.12813 Longitude: -103.15752
Legals: UL "L", Sec. 15, T25S, R37E
Lea County, New Mexico
NMOCD Ref. No. 1RP-4984

Lowry Environmental & Associates, LLC (LEA), on behalf of ETC Texas Pipeline, Ltd., has prepared this Site Assessment Report and Proposed Remediation Plan for the Release Site known as the Pipeline No. 2B2-19-2. Details of the release are summarized on the table below:

Nature and Volume of Release			
Date Release Discovered	2/28/2018	**Source of Release**	Pipeline
Type of Release	Natural Gas w/ Liquids	**Volume Released**	736.250 McF
		Volume Recovered	None
Cause of Release The release was attributed to the failure of a segment of buried natural gas pipeline as a result of corrosion.			
Affected Area The release affected an area within a pipeline right-of-way measuring approximately 100 sq. ft.			
Was this a major release? Yes	**If YES, for what reasons (s) is this considered a major release?** Unauthorized release of a volume of gas exceeding 500 McF.		
If Yes, was immediate notice given to the OCD? By whom? To whom? When and by what means? Carolyn Blackaller, Olivia Yu, 3/1/2018 @ 12:35, Not Available			

A copy of the Release Notification (NMOCD Form C-141) is provided as Attachment #8.

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

Site Assessment/Characterization	
What is the shallowest depth to groundwater beneath the area affected by the release?	>50'
Did this release impact groundwater or surface water?	No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	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)?	No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	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?	No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	No
Are the lateral extents of the release within 300 feet of a wetland?	No
Are the lateral extents of the release overlying a subsurface mine?	No
Are the lateral extents of the release overlying an unstable area such as karst geology?	No
Are the lateral extents of the release within a 100-year floodplain?	No
Did the release impact areas **not** on an exploration, development, production or storage site?	Yes

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey was conducted in an effort to determine the average depth to groundwater within a 1 Mile radius of the Site and identify any registered water wells within a 1/2 Mile radius of the Site. If none where identified, or the results were inconclusive, the approximate depth to groundwater was extrapolated from available data including the average of the nearest USGS wells and/or a Depth to Groundwater Map utilized by the NMOCD.

Based on the volume and nature of the release, inferred depth to groundwater and NMOCD Siting Criteria, the NMOCD Closure Criteria for the Site is as follows:

Closure Criteria for Soil Impacted by a Release	
Benzene	**10 mg/kg**
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)	**50 mg/kg**
Total Petroleum Hydrocarbons	**2500 mg/kg**
Combined GRO and DRO	**1000 mg/kg**
Chloride	**10000 mg/kg**

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1 & 2. Depth to groundwater information is provided as Attachment #4. A Photographic Log is provided as Attachment #7.

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

INITIAL SITE ASSESSMENT

On **March 22, 2018**, and initial site assessment was conducted. During the initial site assessment, seven (7) test trenches (V1, H1, H2, H3, H4, H2.1 and H2.2) were advanced in an effort to determine the extent of impacted soil affected above the NMOCD Closure Criteria. Test trench V1 was advanced within the center of the affected area, adjacent to the release point. During the advancement of the test trench, three (3) soil samples (V1 3', V1 6' and V1 9') were collected and submitted to an NMOCD-approved laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples.

Test trenches H1, H2, H3, H4, H2.1 and H2.2 were advanced at the inferred edges of the impacted area in an effort to determine the horizontal extent of soil impacted above the NMOCD Closure Criteria. During the advancement of the test trenches, thirteen (13) soil samples were collected and submitted to the laboratory for analysis of BTEX, TPH and chloride. Laboratory analytical results indicated BTEX, TPH and chloride concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples.

On November 8, 2018, LEA revisited the Site. During the site visit, a hand-auger was utilized to collect two (2) soil samples (H1.1 0.5' and H1.1 1.5') south of the area characterized by test trench H1. The collected soil samples were submitted to an NMOCD-approved laboratory for analysis of TPH. Laboratory analytical results indicated TPH concentrations were below the NMOCD Closure Criteria in each of the submitted soil samples.

A table summarizing laboratory analytical results from soil samples collected during the initial site assessment is provided on the following page:

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

Concentrations of BTEX, TPH and/or Chloride in Soil - Initial Assessment(s)

Sample ID	Date	Depth	Soil Status	SW 846 8021B		SW 846 8015M Ext.					E300/4500Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C_6-C_{10} (mg/kg)	DRO C_{10}-C_{28} (mg/kg)	GRO + DRO C_6-C_{28} (mg/kg)	ORO C_{28}-C_{36} (mg/kg)	TPH C_6-C_{36} (mg/kg)	Chloride (mg/kg)
V1 3'	3/22/16	3'	In-Situ	<0.050	<0.300	<10.0	189	189	26.9	215.9	6,720
V1 6'	3/22/16	6'	In-Situ	<0.050	0.363	<10.0	86.6	86.6	<10.0	86.6	1,760
V1 9'	3/22/16	9'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
H1 3'	3/22/16	3'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
H1 6'	3/22/16	6'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
H2 3'	3/22/16	3'	In-Situ	0.177	31.8	173	423	596	25.6	622	3,680
H2 6'	3/22/16	6'	In-Situ	<0.050	<0.300	<10.0	38.7	38.7	<10.0	38.7	48.0
H2 7'	3/22/16	7'	In-Situ	<0.050	5.59	46.2	168	214.2	17.2	231.4	1,090
H3 3'	3/22/16	3'	In-Situ	<0.050	<0.300	<10.0	32.4	32.4	<10.0	32.4	16.0
H3 4'	3/22/16	4'	In-Situ	<0.050	17.6	102	351	453	54.5	507.5	208
H4 3'	3/22/16	3'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
H4 6'	3/22/16	6'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
H2.1 3'	3/22/16	3'	In-Situ	<0.050	2.23	24.5	172	196.5	22.5	219.0	112
H2.1 6'	3/22/16	6'	In-Situ	<0.050	9.55	86.7	463	549.7	78.7	628.4	192
H2.2 3'	3/22/16	3'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
H2.2 6'	3/22/16	6'	In-Situ	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
H1.1 0.5'	11/8/18	0.5'	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
H1.1 1.5'	11/8/18	1.5'	In-Situ	-	-	<10.0	<10.0	<10.0	<10.0	<10.0	-
Closure Criteria				**10**	**50**	**-**	**-**	**1,000**	**-**	**2,500**	**10,000**

A "Site & Sample Location Map" is provided as Attachment #3. Field Data, if applicable, is provided as Attachment #9. Soil profile observations are provided on Attachment #5. Laboratory analytical reports are provided as Attachment #6.

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

PROPOSED REMEDIATION PLAN

Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment, ETC Texas Pipeline, Ltd. proposes the following remediation activities designed to advance the Site toward an approved closure:

•Utilizing mechanical equipment, excavate impacted soil within the release margins affected above the NMOCD Closure Criteria.
•The floor of the excavated area will be advanced to a depth of approximately 3 ft. bgs, or until laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria.
•Excavation sidewalls will be advanced horizontally until laboratory analytical results from confirmation soil samples indicate BTEX, TPH and chloride concentrations are below the NMOCD Closure Criteria.
• Excavated soil will be temporarily stockpiled on-site, pending transportation under manifest to an NMOCD-approved disposal facility.
• Upon receiving favorable laboratory analytical results from confirmation soil samples (below the NMOCD Closure Criteria) excavated areas will be backfilled with locally sourced, non-impacted "like" material. Excavation backfill will be placed at or near original relative positions. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable.

SAMPLING PLAN

Upon completion of excavation activities, representative five-point composite excavation confirmation soil samples will be collected from the excavation sidewalls in each cardinal direction, representing no more than **50 linear ft**. A minimum of **one (1**) representative five-point composite excavation confirmation soil sample will be collected from the base of the excavated area representing every **250 square feet**. Additional, "discrete" confirmation soil samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

Remediation activities are expected to be completed **within 90 days** of receiving necessary approval(s) of this Site Assessment Summary and Proposed Remediation Plan. Based on laboratory analytical results, site characteristics and field observations made during the initial site assessment it is estimated that approximately **100 cubic yards** of soil has been affected above the NMOCD Closure Criteria.

Incident ID	nOY1806442189
District RP	1RP-4984
Facility ID	fOY1806442080
Application ID	pOY1806442421

RESTORATION, RECLAMATION AND RE-VEGETATION PLAN

Areas affected by remediation and closure activities will be substantially restored to the condition that existed prior to the release, to the extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area will be contoured and/or compacted to achieve erosion control, stability and preservation of surface water flow to the extent practicable. Affected areas not on production pads and/or lease roads will be reseeded with an agency and/or landowner-approved seed mixture during the first favorable growing season following closure of the site.

If you have any questions, or need any additional information, please feel free to contact Dean Ericson or the undersigned by phone or email.

Respectfully,

Joel W. Lowry
Environmental Professional
Lowry Environmental & Associates, LLC

Attachments:
Attachment #1- Figure 1 - Topographic Map
Attachment #2- Figure 2 - Aerial Map
Attachment #3- Figure 3 - Site & Sample Location Map
Attachment #4- Depth to Groundwater Information
Attachment #5- Soil Profile
Attachment #6- Laboratory Analytical Reports
Attachment #7- Photographic Log
Attachment #8- Release Notification (FORM C-141)
Attachment #9- Field Data

LIMITATIONS

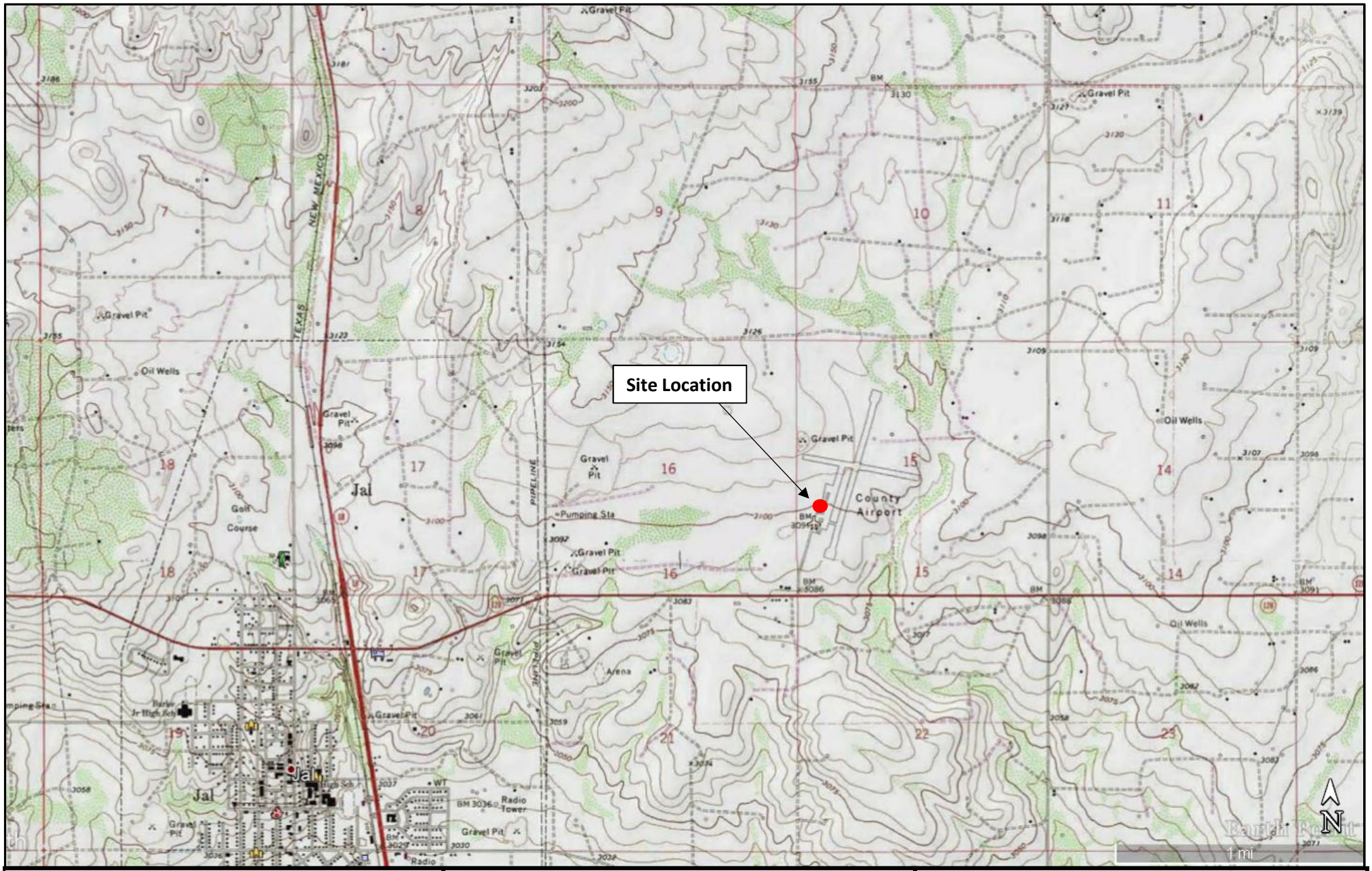
This document has been prepared on behalf of ETC Texas Pipeline, Ltd.. Use of information contained in this report, including exhibits and attachments, by any other party without the consent of LEA and/or ETC Texas Pipeline, Ltd. is prohibited.

This document has been prepared in a professional manner, using the degree of skill and care exercised by similar environmental professionals. LEA notes that the facts and conditions referenced in this document may change over time and that the conclusions and recommendations are only applicable to the facts and conditions as described at the time this document was prepared.

LEA has prepared this report to the best of its ability. No other warranty, expressed or implied, is made or intended.

ATTACHMENT #1

Figure 1 - Topographic Map



LEGEND:

- Site Location

Figure 1
Topographic Map
ETC Texas Pipeline, Ltd.
Pipeline No. 2B2-19-2
GPS: 32.12813, -103.15752
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018

ATTACHMENT #2

Figure 2 - Aerial Map

LEGEND:

- Site Location
- Fresh Water Well
- 100-Year Floodplain
- High/Critical Karst
- Non-Inustrial Building
- Subsurface Mine
- 1/2 Mile Radius

Figure 2

Aerial Map

ETC Texas Pipeline, Ltd.

Pipeline No. 2B2-19-2

GPS: 32.12813, -103.15752

Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018

ATTACHMENT #3

Figure 3 - Site & Sample Location Map

LEGEND:

- Sample Point
- Affected Area
- Test Trench
- Buried Pipeline
- Excavated Area

Figure 3

Site & Sample Location Map

ETC Texas Pipeline, Ltd.

Pipeline No. 2B2-19-2

GPS: 32.12813, -103.15752

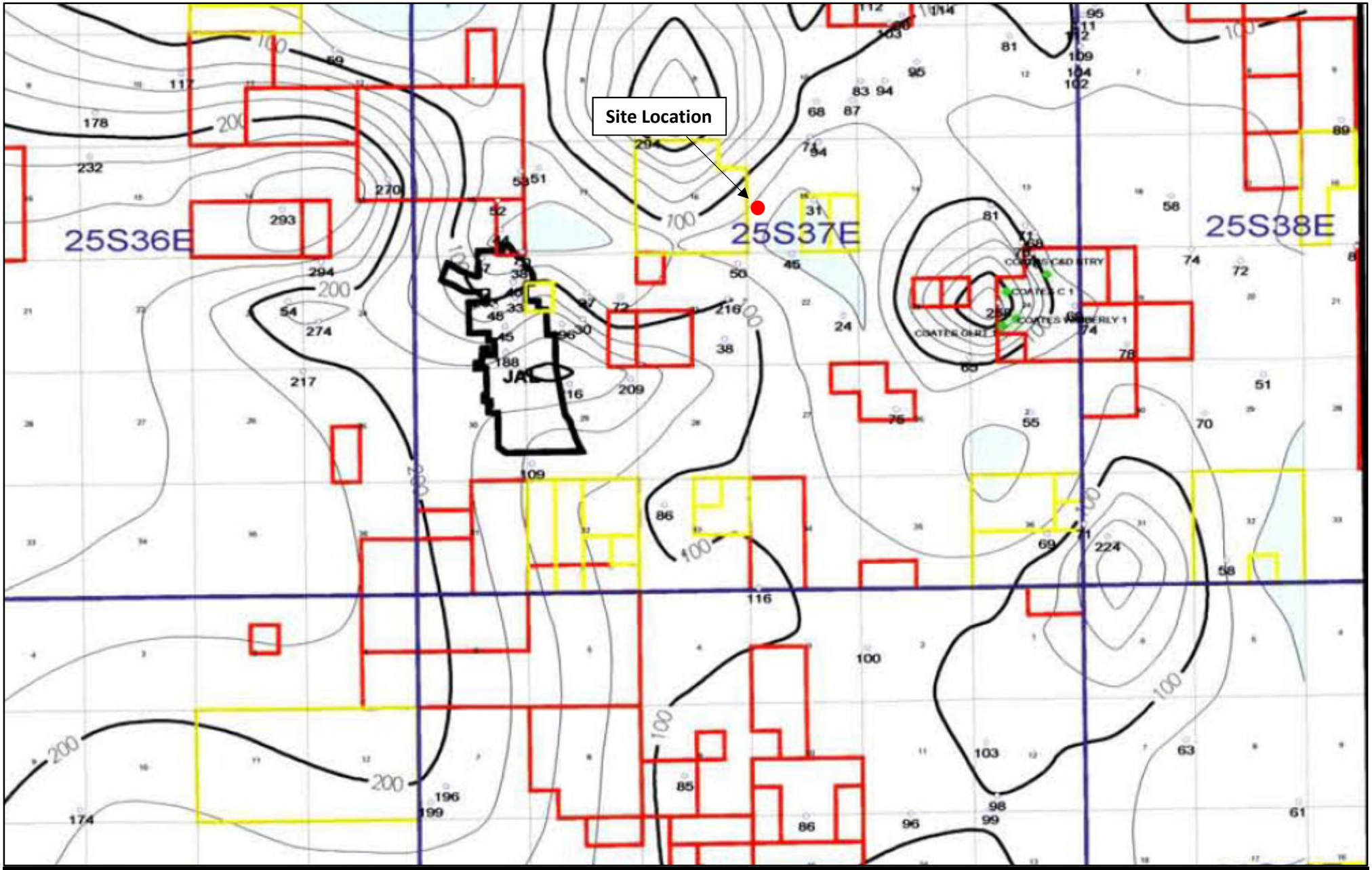
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/9/2018

ATTACHMENT #4

Depth to Groundwater Information



LEGEND:

- Site Location

Figure 4

Inferred Depth to Groundwater Trend Map

ETC Texas Pipeline, Ltd.

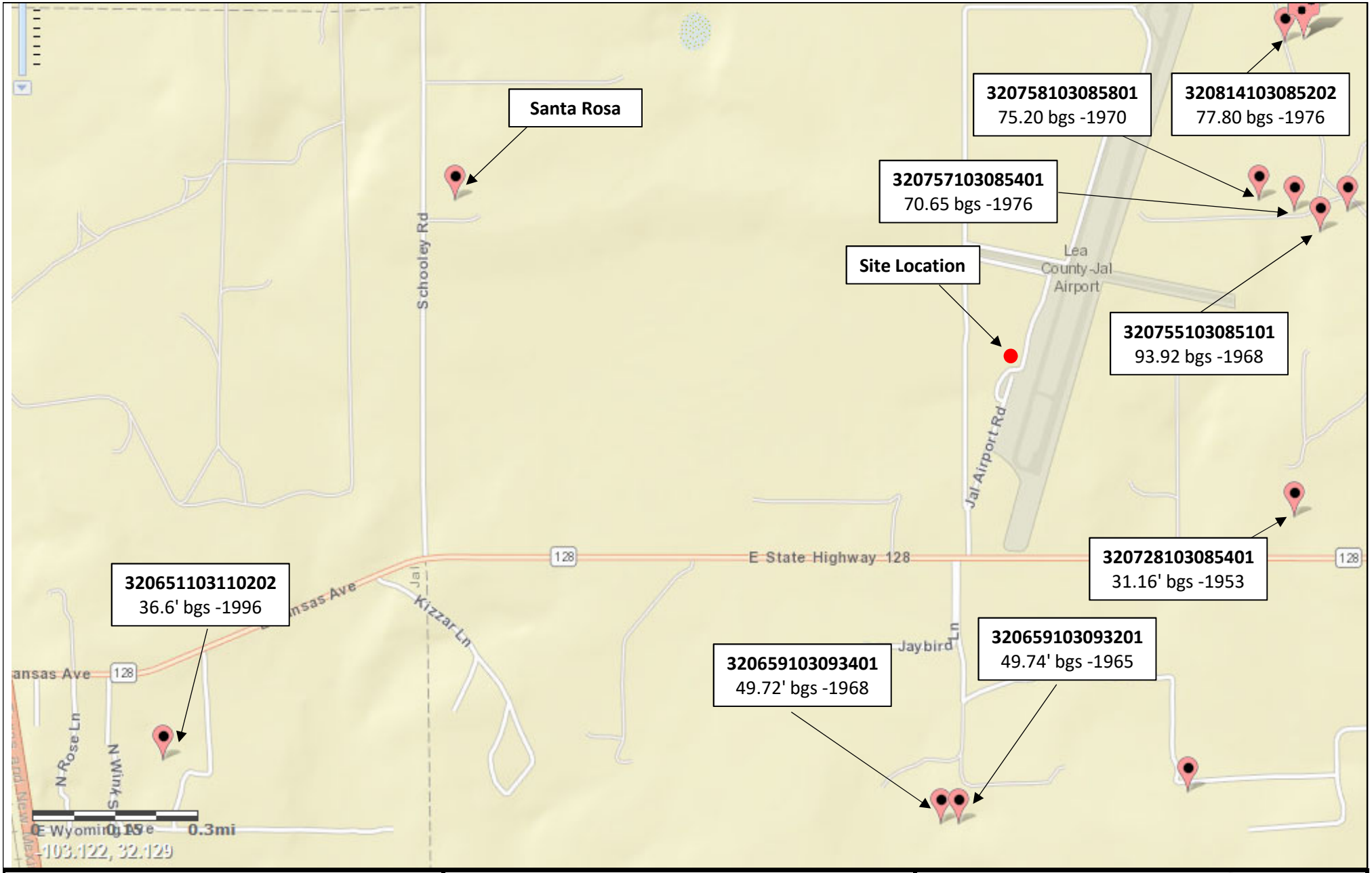
Pipeline No. 2B2-19-2

GPS: 32.12813, -103.15752

Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018



LEGEND:

- Site Location

Figure 5

USGS Well Proximity Map

ETC Texas Pipeline, Ltd.

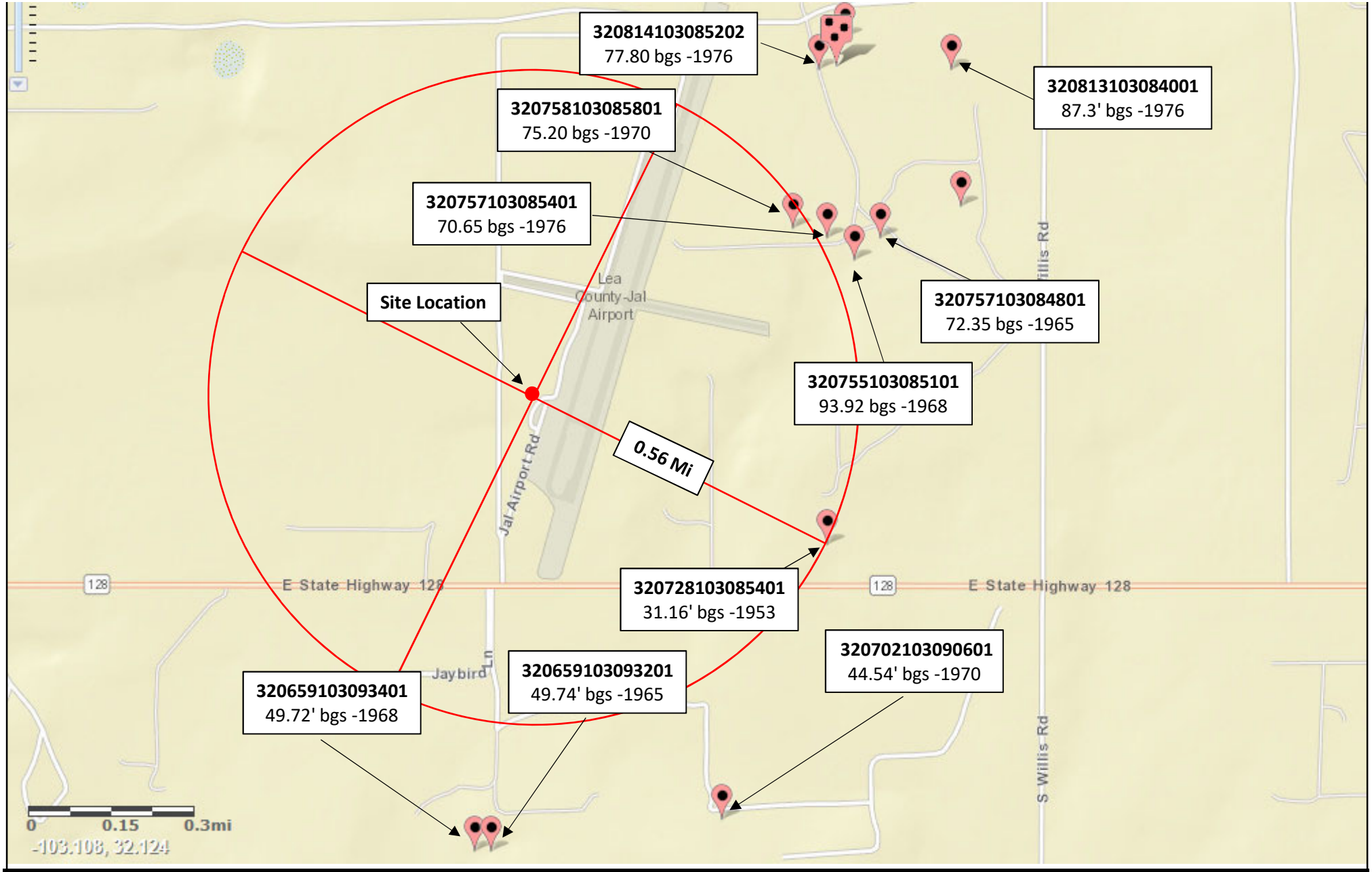
Pipeline No. 2B2-19-2

GPS: 32.12813, -103.15752

Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018



LEGEND:

- Site Location

Figure 5b
USGS Well Proximity Map
ETC Texas Pipeline, Ltd.
Pipeline No. 2B2-19-2
GPS: 32.12813, -103.15752
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018

LEGEND:

- Site Location

Figure 6

USGS Well Proximity Map
ETC Texas Pipeline, Ltd.
Pipeline No. 2B2-19-2
GPS: 32.12813, -103.15752
Lea County, New Mexico

LOWRY environmental

Drafted by: jwl Checked by: client Date: 11/7/2018

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00425 POD1		CP	LE	4	4	4	16	25S	37E	673541	3555653*	538	500	250	250
CP 00216 POD1		CP	LE	2	2	1	22	25S	37E	674353	3555464*	859	84		
CP 01059 POD3		CP	LE	2	3	2	15	25S	37E	674723	3556717	1095	70	70	0
CP 01059 POD2		CP	LE	2	3	2	15	25S	37E	674723	3556774	1127	60	60	0
CP 01059 POD1		CP	LE	2	3	2	15	25S	37E	674758	3556738	1136	60	60	0
CP 01080 POD2		CP	LE	4	1	2	15	25S	37E	674737	3556779	1141	65		
CP 01080 POD1		CP	LE	2	3	2	15	25S	37E	674816	3556749	1191	65		
CP 00219 POD1		CP	LE	3	3	4	10	25S	37E	674522	3557282*	1363	84		

Average Depth to Water: **110 feet**
Minimum Depth: **60 feet**
Maximum Depth: **250 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 673802 **Northing (Y):** 3556124 **Radius:** 1608

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00425 POD1		CP	LE	4	4	4	16	25S	37E	673541	3555653*	538	500	250	250

Average Depth to Water: **250 feet**

Minimum Depth: **250 feet**

Maximum Depth: **250 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 673802 **Northing (Y):** 3556124 **Radius:** 805

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00425 POD1	4	4	4	16	25S	37E	673541	3555653*

Driller License: 99 **Driller Company:** O.R. MUSSELWHITE WATER WELL SE

Driller Name: MUSSELWHITE, O.R.

Drill Start Date:	10/02/1967	**Drill Finish Date:**	10/12/1967	**Plug Date:**	
Log File Date:	10/16/1967	**PCW Rcv Date:**	01/27/1972	**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	1.25	**Estimated Yield:**	26 GPM
Casing Size:	5.50	**Depth Well:**	500 feet	**Depth Water:**	250 feet

Water Bearing Stratifications:	Top	Bottom	Description
	400	500	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	420	500

Meter Number:	8590	**Meter Make:**	MASTER
Meter Serial Number:	288582	**Meter Multiplier:**	1.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
04/01/2005	2005	325098	A	jw	This wel is no longer being us	0
07/11/2005	2005	325098	A	jw		0
10/11/2005	2005	325098	A	jw		0
12/31/2005	2005	325098	A	RPT	Well no longer being used.	0
04/01/2006	2006	325098	A	RPT	Well is no longer being used	0
07/01/2006	2006	325098	A	RPT		0
10/01/2006	2006	325098	A	RPT	well is no longer being used	0
10/01/2013	2013	325098	A	RPT		0
12/31/2013	2013	325098	A	RPT	Well not longer being used	0
03/31/2014	2014	325098	A	RPT	Well no longer being used	0
10/01/2014	2014	325098	A	RPT		0
01/01/2015	2014	325098	A	RPT		0
04/03/2015	2015	325098	A	RPT		0
07/01/2015	2015	325098	A	RPT		0
10/01/2015	2015	325098	A	RPT		0
01/01/2016	2015	325098	A	RPT		0
04/01/2016	2016	325098	A	RPT		0
10/03/2016	2016	325098	A	RPT		0
01/02/2017	2017	325098	A	RPT		0
04/01/2017	2017	325098	A	RPT	NO LONGER BEING USED	0

**YTD Meter Amounts:	Year	Amount
	2005	0
	2006	0
	2013	0
	2014	0
	2015	0
	2016	0
	2017	0

x

***UTM location was derived from PLSS - see Help**

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320758103102901

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320758103102901 25S.37E.09.333422

Available data for this site Groundwater: Field measurements | GO

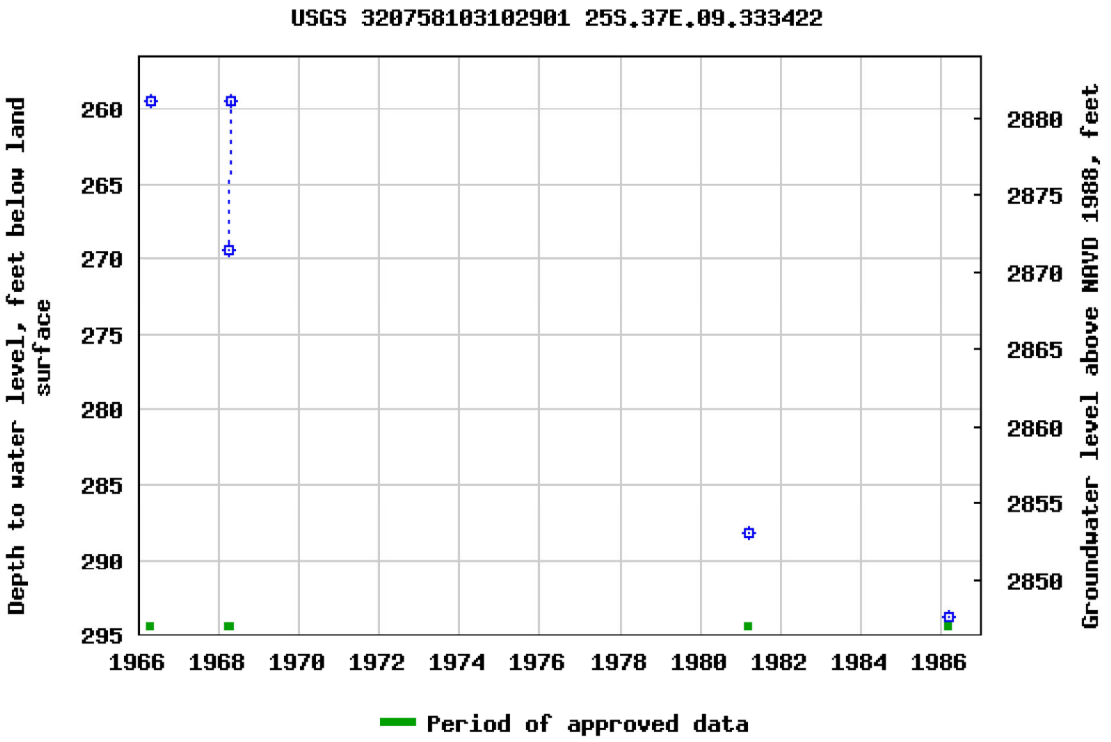
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'58", Longitude 103°10'29" NAD27
Land-surface elevation 3,141 feet above NAVD88
The depth of the well is 500 feet below land surface.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320651103110202

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320651103110202 25S.37E.20.231342A

Available data for this site Groundwater: Field measurements | GO

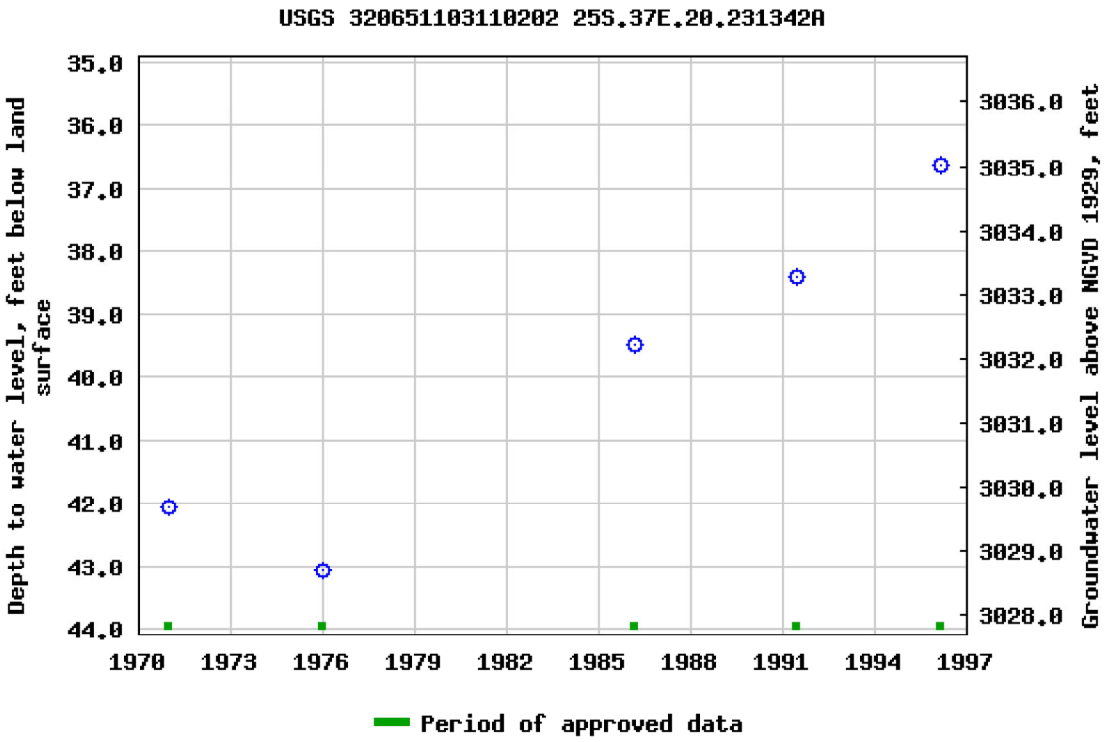
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'05", Longitude 103°11'02" NAD27
Land-surface elevation 3,071.70 feet above NGVD29
The depth of the well is 510 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 17:24:04 EST
1.06 0.95 nadww01

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320659103093201

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320659103093201 25S.37E.21.224213

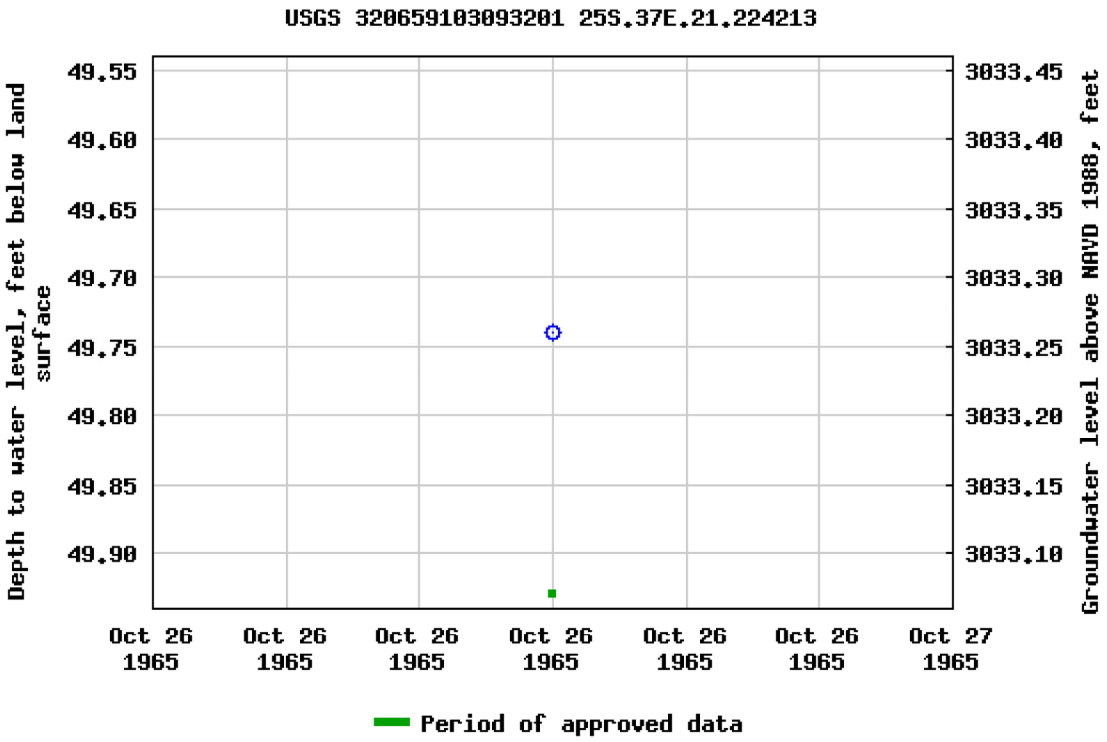
Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°06'59", Longitude 103°09'32" NAD27
Land-surface elevation 3,083 feet above NAVD88
The depth of the well is 100 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 17:25:33 EST

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320659103093401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320659103093401 25S.37E.21.222341

Available data for this site Groundwater: Field measurements | GO

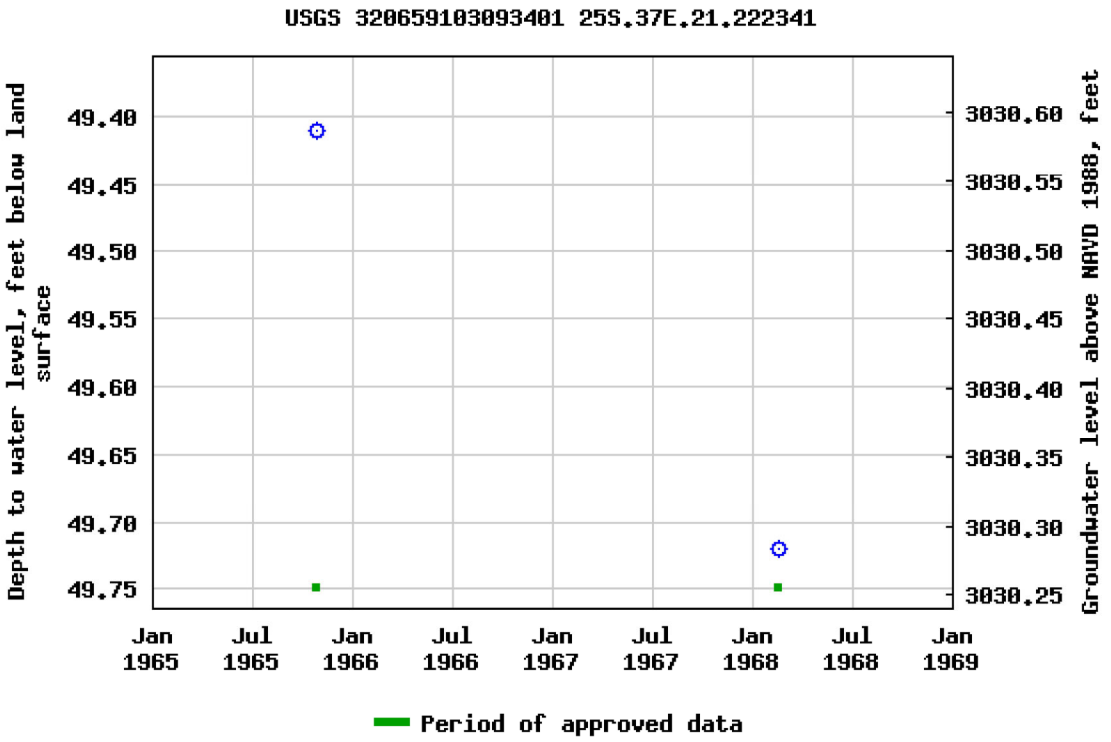
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°06'59", Longitude 103°09'34" NAD27
Land-surface elevation 3,080 feet above NAVD88
The depth of the well is 120 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320758103085801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320758103085801 25S.37E.10.433341

Available data for this site Groundwater: Field measurements | GO

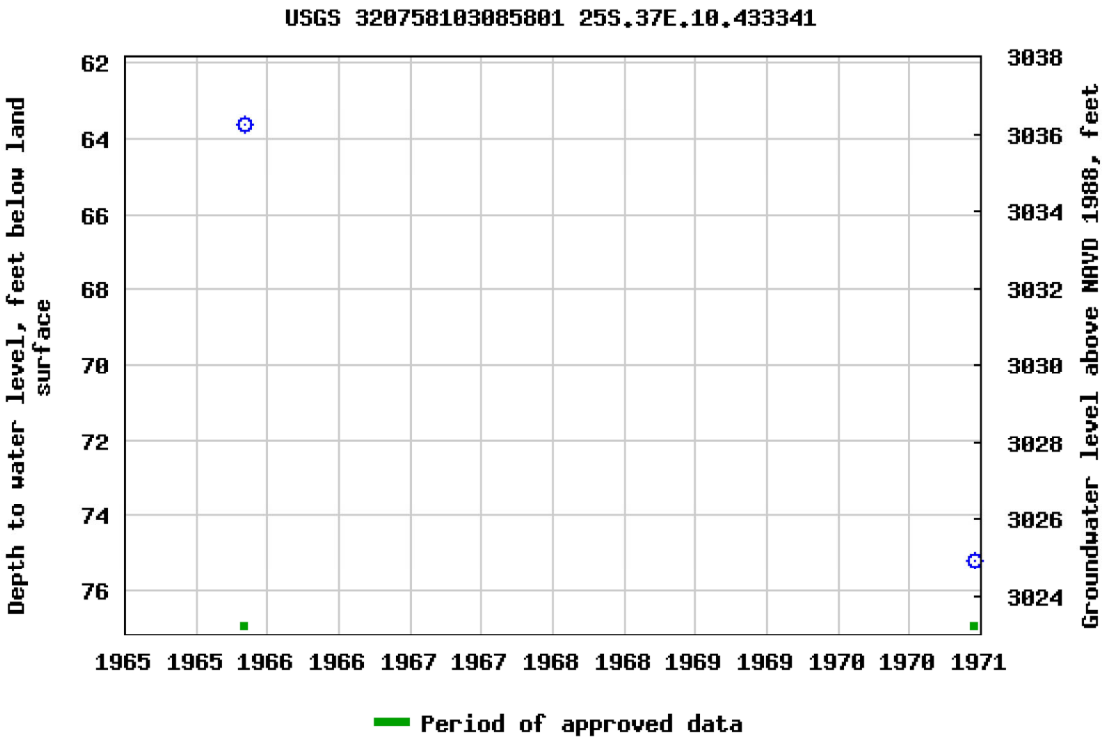
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'58", Longitude 103°08'58" NAD27
Land-surface elevation 3,100 feet above NAVD88
The depth of the well is 84 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-06 17:31:56 EST
1.1 0.96 nadww01

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320728103085401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320728103085401 25S.37E.15.41124

Available data for this site Groundwater: Field measurements | GO

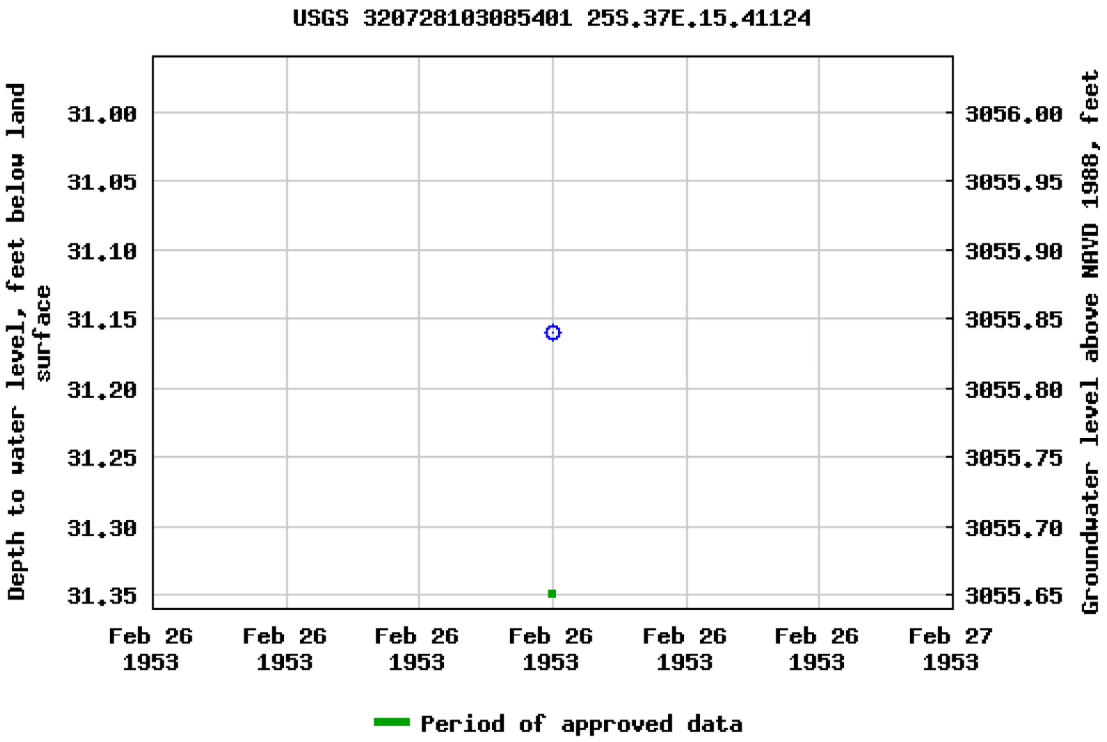
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'28", Longitude 103°08'54" NAD27
Land-surface elevation 3,087 feet above NAVD88
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team

Page Last Modified: 2018-11-06 17:30:28 EST
1.03 0.93 nadww01

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320814103085202

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320814103085202 25S.37E.10.41413A

Available data for this site Groundwater: Field measurements | GO

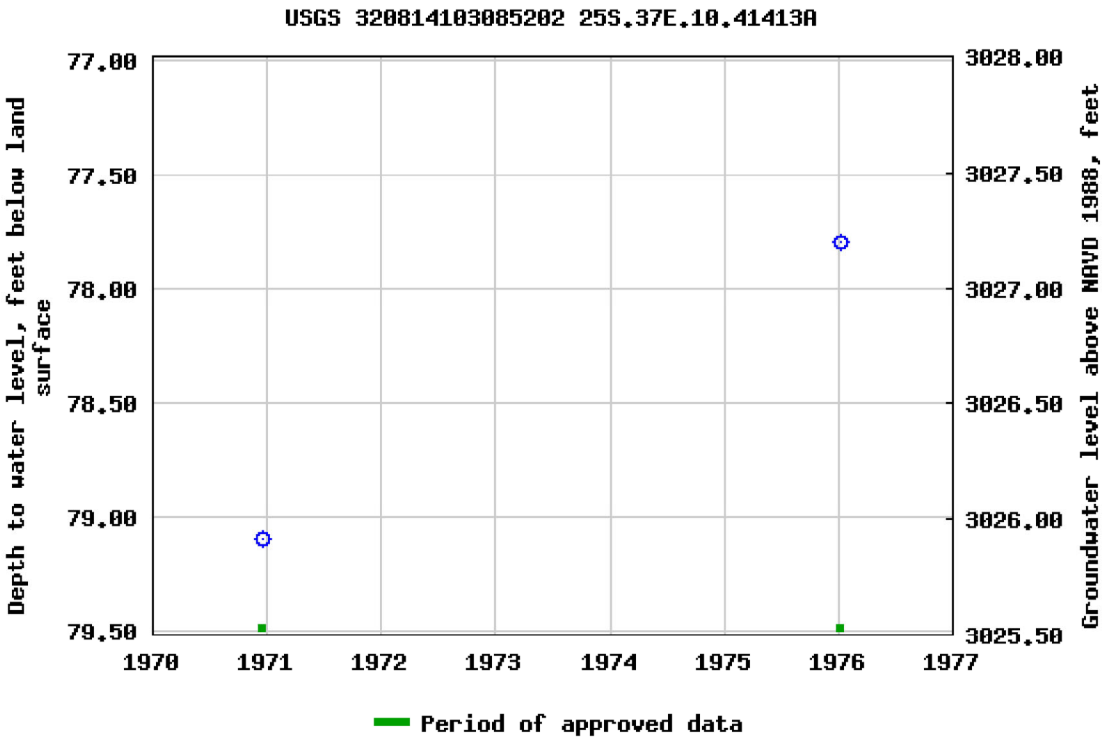
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°08'14", Longitude 103°08'52" NAD27
Land-surface elevation 3,105 feet above NAVD88
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320757103085401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320757103085401 25S.37E.10.43343

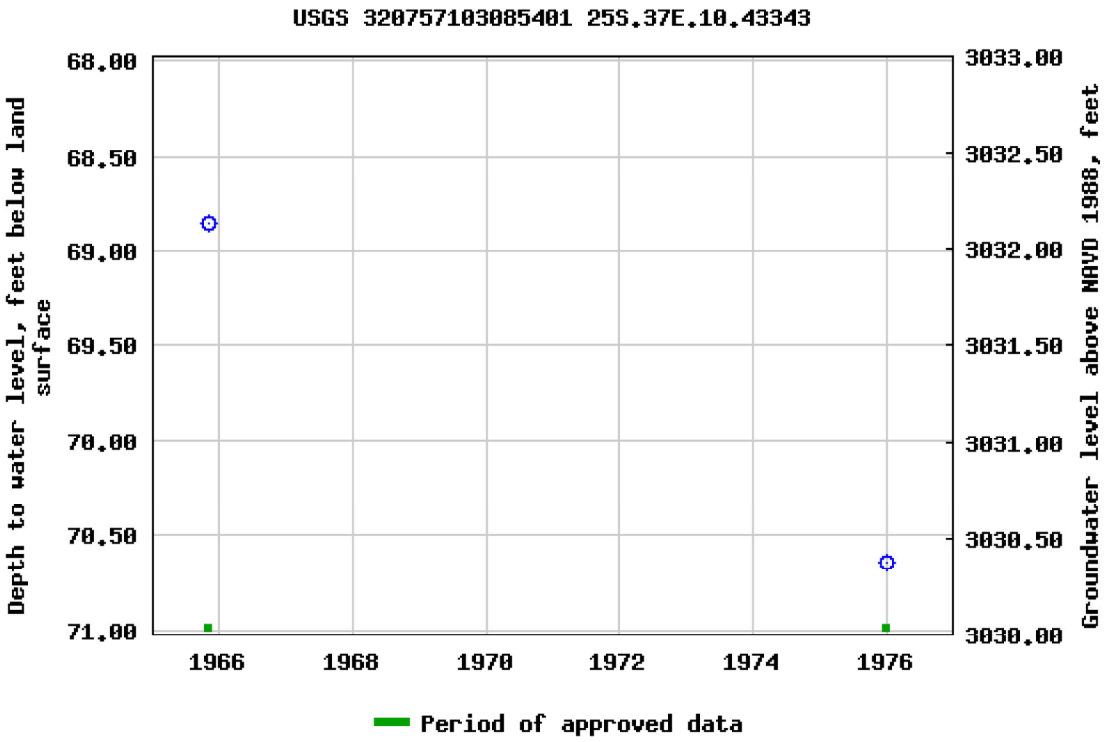
Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'57", Longitude 103°08'54" NAD27
Land-surface elevation 3,101 feet above NAVD88
The depth of the well is 105 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320757103084801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320757103084801 25S.37E.10.434433

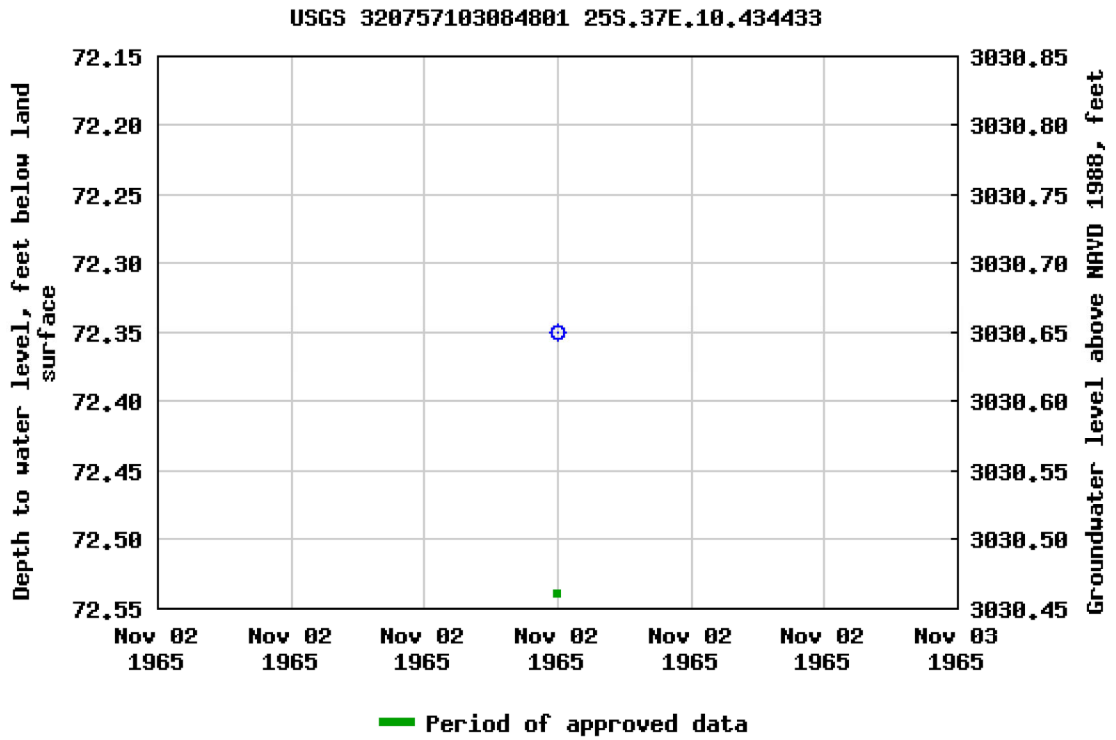
Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'57", Longitude 103°08'48" NAD27
Land-surface elevation 3,103 feet above NAVD88
The depth of the well is 106 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-07 12:21:14 EST
1.04 0.92 nadww01

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/6: The USGS continues to make progress on restoring all of its gages. Less than 1 percent of USGS streamgages are still not transmitting due to an issue with the satellite telemetry system that records and transmits data. Once all operational gages are brought back online, the USGS will focus on restoring other equipment that experienced the telemetry issues, including about 85 rapid deployment gages that are used periodically for emergency response. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320813103084001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

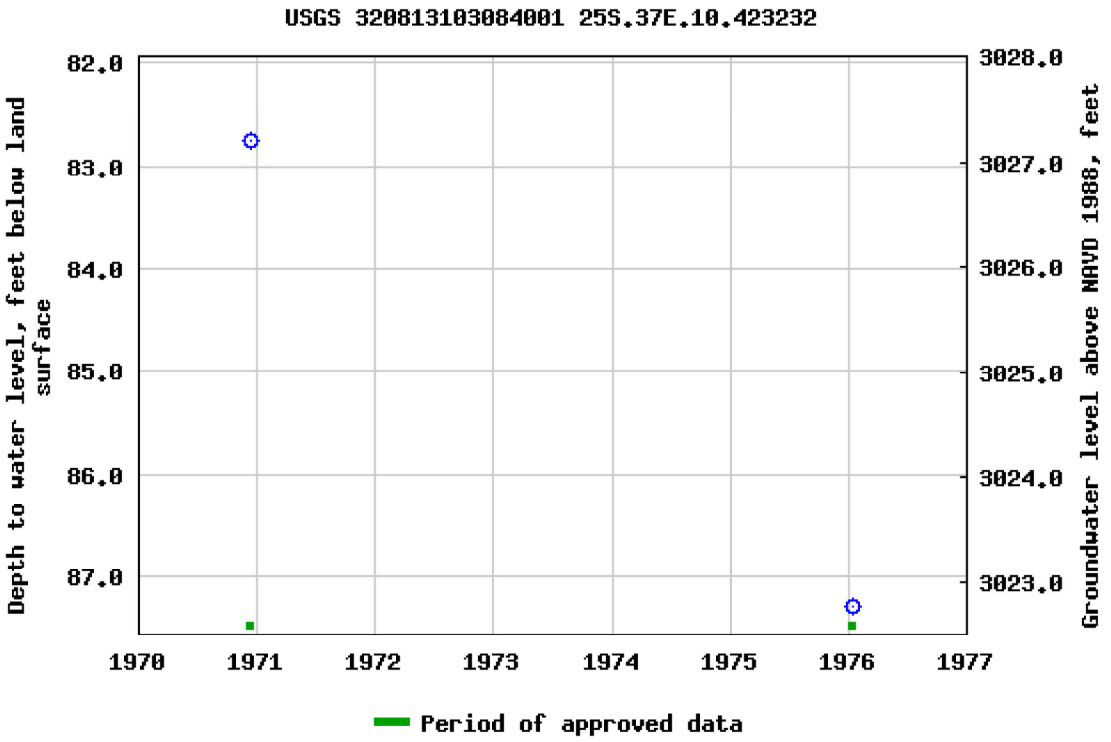
USGS 320813103084001 25S.37E.10.423232

Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°08'13", Longitude 103°08'40" NAD27
Land-surface elevation 3,110 feet above NAVD88
The depth of the well is 174 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility Plug-Ins FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2018-11-07 16:31:34 EST
1.07 0.92 nadww01

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/6: The USGS continues to make progress on restoring all of its gages. Less than 1 percent of USGS streamgages are still not transmitting due to an issue with the satellite telemetry system that records and transmits data. Once all operational gages are brought back online, the USGS will focus on restoring other equipment that experienced the telemetry issues, including about 85 rapid deployment gages that are used periodically for emergency response. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320755103085101

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

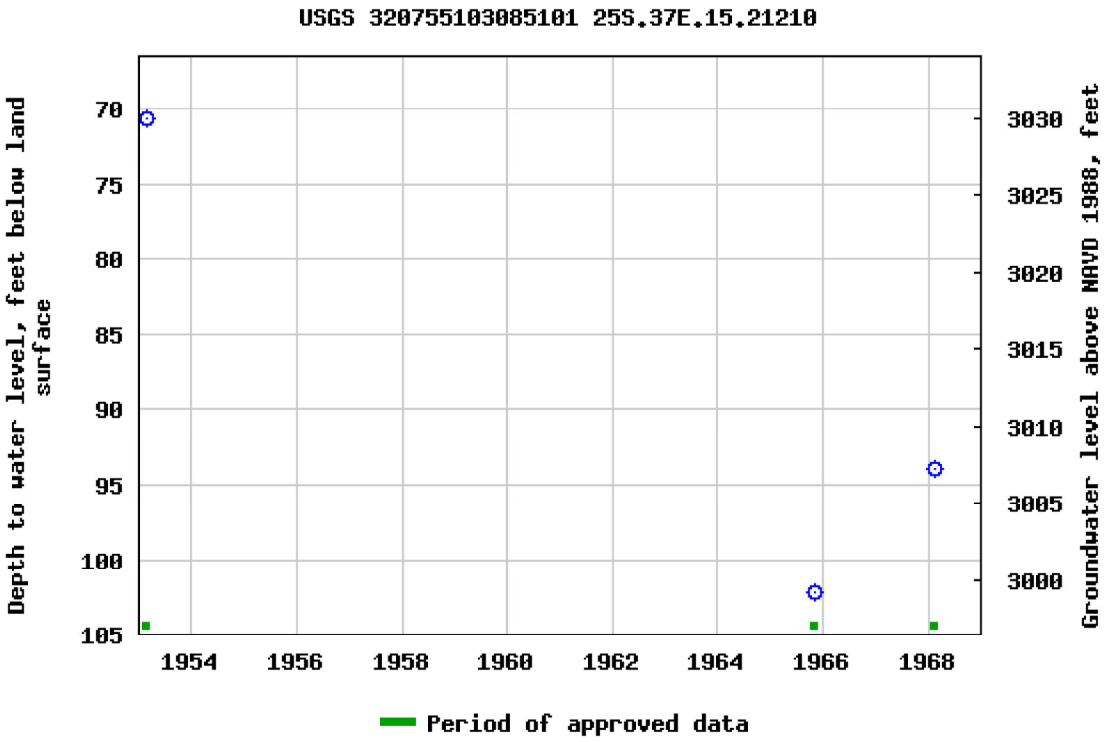
USGS 320755103085101 25S.37E.15.21210

Available data for this site Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'55", Longitude 103°08'51" NAD27
Land-surface elevation 3,101 feet above NAVD88
The depth of the well is 114 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

National Water Information System: Web Interface

Click to hideNews Bulletins

- Please see news on new formats
- **UPDATE, 11/2: The USGS continues to make progress on restoring all of its gages. As of 3 p.m. Friday, November 2, less than 3 percent of USGS streamgages are still not transmitting due to an issue with the telemetry system that records and transmits streamgage data. The USGS will continue to work through the weekend to bring the streamgages back online. Read more**
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

site_no list =

- 320702103090601

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320702103090601 25S.37E.22.122114

Available data for this site Groundwater: Field measurements | GO

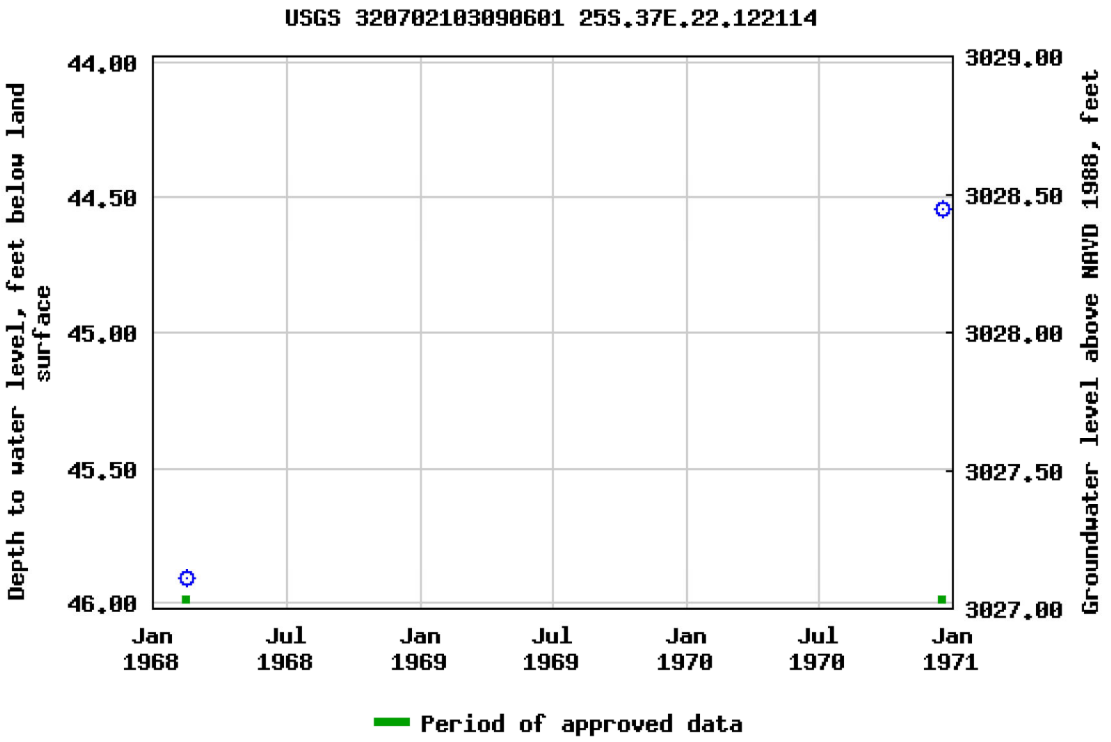
Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'02", Longitude 103°09'06" NAD27
Land-surface elevation 3,073 feet above NAVD88
The depth of the well is 84 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data

Graph of data

Reselect period



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

ATTACHMENT #5

Soil Profile

SOIL PROFILE

Site Name: Pipeline No. 2B2-19-2

Date: 11/8/2018

Description		Depth (ft. bgs)
0-6" Brown Topsoil		1
6-18" Fractured Rock		2
18" Brown Clay w/ Sand & Rock	TD	3
		4
		5
		6
		7
		8
		9
		0
		1
		2
		3
		4
		5
		6
		7
		8
		9
		0
		1
		2
		3
		4
		5
		6
		7
		8
		9
		0
		1
		2
		3
		4
		5
		6
		7
		8
		9
		0

ATTACHMENT #6

Laboratory Analytical Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 23, 2018

DEAN ERICSON

ENERGY TRANSFER

P. O. BOX 1226

JAL, NM 88252

RE: 2-2-19-2

Enclosed are the results of analyses for samples received by the laboratory on 03/22/18 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: V1 3' (H800829-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	**0.063**	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	**0.192**	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6720**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	**189**	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	**26.9**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *86.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *95.8 %* *37.6-147*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: V1 6' (H800829-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	**0.055**	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	**0.308**	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	**0.363**	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *107 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1760**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	**86.6**	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *81.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.0 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: V1 9' (H800829-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *74.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *71.2 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H1 3' (H800829-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *83.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *76.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H1 6' (H800829-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.5 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *86.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *81.3 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2 3' (H800829-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.177**	0.100	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	**3.84**	0.100	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	**6.27**	0.100	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	**21.6**	0.300	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	**31.8**	0.600	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *143 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3680**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**173**	10.0	03/23/2018	ND	181	90.7	200	5.62	
DRO >C10-C28*	**423**	10.0	03/23/2018	ND	197	98.4	200	5.65	
EXT DRO >C28-C36	**25.6**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *95.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *106 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2 6' (H800829-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**38.7**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *87.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *91.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2 7' (H800829-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	**0.589**	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	**1.07**	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	**3.93**	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	**5.59**	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1090**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**46.2**	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**168**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	**17.2**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *82.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *91.0 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H3 3' (H800829-09)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	<0.050	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *72-148*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**32.4**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *79.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *81.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H3 4' (H800829-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.68	84.1	2.00	6.19	
Toluene*	**1.54**	0.050	03/23/2018	ND	1.92	96.2	2.00	2.63	
Ethylbenzene*	**3.36**	0.050	03/23/2018	ND	2.01	100	2.00	1.39	
Total Xylenes*	**12.7**	0.150	03/23/2018	ND	6.19	103	6.00	2.10	
Total BTEX	**17.6**	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *137 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**208**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**102**	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**351**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	**54.5**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *84.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.5 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H4 3' (H800829-11)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	<0.050	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *79.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *79.5 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H4 6' (H800829-12)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	<0.050	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *85.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *86.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2.1 3' (H800829-13)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	**0.209**	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	**0.452**	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	**1.56**	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	**2.23**	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *124 %* *72-148*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**24.5**	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**172**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	**22.5**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *85.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *94.7 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2.1 6' (H800829-14)

BTEX 8021B mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	**0.508**	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	**2.02**	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	**7.02**	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	**9.55**	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *72-148*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**86.7**	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	**463**	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	**78.7**	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *89.4 %* *41-142*

Surrogate: 1-Chlorooctadecane *105 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2.2 3' (H800829-15)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	<0.050	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *110 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *85.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.1 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	03/22/2018	Sampling Date:	03/22/2018
Reported:	03/23/2018	Sampling Type:	Soil
Project Name:	2-2-19-2	Sampling Condition:	Cool & Intact
Project Number:	32.12813 (AIRPORT)	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: H2.2 6' (H800829-16)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	03/23/2018	ND	1.87	93.4	2.00	15.0	
Toluene*	<0.050	0.050	03/23/2018	ND	2.12	106	2.00	15.6	
Ethylbenzene*	<0.050	0.050	03/23/2018	ND	2.19	110	2.00	14.8	
Total Xylenes*	<0.150	0.150	03/23/2018	ND	6.50	108	6.00	16.1	
Total BTEX	<0.300	0.300	03/23/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	03/23/2018	ND	432	108	400	7.14	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	03/23/2018	ND	179	89.5	200	7.42	
DRO >C10-C28*	<10.0	10.0	03/23/2018	ND	196	97.9	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	03/23/2018	ND					

Surrogate: 1-Chlorooctane *86.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.6 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: ETC	BILL TO
Project Manager: Drew Ericson	P.O. #:
Address:	Company:
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name: 2-2-19-2	State: Zip:
Project Location: 32.12813 (Air Port)	Phone #:
Sampler Name: Tyler R. Brown	Fax #:

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	BTEX	TPH Ext	CL	
H8008228																			
1	V1 3'												3/22/18	9:01 AM					
2	V1 6'													9:10 AM					
3	V1 9'													9:16 AM					
4	H1 3'													9:21 AM					
5	H1 6'													9:31 AM					
6	H2 3'													9:46 AM					
7	H2 6'													9:55 AM					
8	H2 9' T'													10:06 AM					
9	H3 3'													10:20 AM					
10	H3 4'													10:31 AM					

Relinquished By:	Date: 3/22/18	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 2:25		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By: #75	Date:	Received By:	REMARKS: Wm Rush!!
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 2.8°C / 2.75°C	Sample Condition Cool: ☐ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326 Corrected 1.05°C

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: ETC	BILL TO
Project Manager: Dean Ericson	P.O. #:
Address:	Company:
City: State: Zip:	Attn:
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name: 2-B-2-19-2	State: Zip:
Project Location: 32.12813 (Air Port)	Phone #:
Sampler Name: Tyler Brown	Fax #:

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	BTex	TPH EXT	CL		
H800828 9																			
11	H4 3'												3/22/18	11:01 AM					
12	H4 6'													11:16 AM					
13	H2.1 3'													11:21 AM					
14	H2.1 6'													11:29 AM					
15	H2.2 3'													11:37 AM					
16	H2.2 6'													11:51 AM					

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 3/22/18	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 2:25		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: WM Rush
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 2.8°C / 2.7°C

Sample Condition: Cool: ☑ Yes ☐ No; Intact: ☑ Yes ☐ No

CHECKED BY: (Initials)

Corrected 3.0°C

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

November 09, 2018

DEAN ERICSON

ENERGY TRANSFER

P. O. BOX 1226

JAL, NM 88252

RE: PIPELINE # 2B2-19-2

Enclosed are the results of analyses for samples received by the laboratory on 11/08/18 14:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENERGY TRANSFER
DEAN ERICSON
P. O. BOX 1226
JAL NM, 88252
Fax To:

Received:	11/08/2018	Sampling Date:	11/08/2018
Reported:	11/09/2018	Sampling Type:	Soil
Project Name:	PIPELINE # 2B2-19-2	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	EUNCIE, NM		

Sample ID: H1.1 0.5' (H803239-01)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane	*92.1 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*83.6 %*	*37.6-147*

Sample ID: H1.1 1.5' (H803239-02)

TPH 8015M **mg/kg** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/09/2018	ND	208	104	200	7.06	
DRO >C10-C28*	<10.0	10.0	11/09/2018	ND	209	105	200	2.36	
EXT DRO >C28-C36	<10.0	10.0	11/09/2018	ND					

Surrogate: 1-Chlorooctane	*92.6 %*	*41-142*
Surrogate: 1-Chlorooctadecane	*81.7 %*	*37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	**BILL TO**
Project Manager: Joel Lowry	P.O. #:
Address:	Company: ETL
City: State: Zip:	Attn: C/O Dean Ericson
Phone #: Fax #:	Address:
Project #: Project Owner:	City:
Project Name: Pipeline No 2B2-19-2	State: Zip:
Project Location: Eunice, NM	Phone #:
Sampler Name: Joel Lowry	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH 8015 MOD Ext
H803239-1	HL.1 0.5'														
2	HL.1 1.5'		1			X							11/8/18	12:10	X
			1			X							11/8/18	12:15	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 11/8/18	Received By: Jodi Henson	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 2:30		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: joel@lowryenvironmental.com dean ericson Rush!
	Time:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 3.2° #97	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	

+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

ATTACHMENT #7

Photographic Log

PHOTOGRAPHIC LOG

Figure 1 View of surface staining from the initial release, facing North.

Figure 2 View of surface staining from the initial release, facing Northwest.

PHOTOGRAPHIC LOG

Figure 3 View of the affected area, facing Northwest.

Figure 4 View of the affected area, facing West.

ATTACHMENT #8

Release Notification (FORM C-141)

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

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

NOBBS OCD
MAR 05 2018
RECEIVED

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

Initial only

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Energy Transfer Company	Contact: Carolyn J. Blackaller
Address: 600 N. Marienfeld Street, Suite 700	Telephone No.: (817) 302-9766
Facility Name: Pipeline No. 2B2-19-2	Facility Type: Pipeline

Surface Owner	Mineral Owner	API No.
Fee	Federal	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	15	25S	37E					

Latitude 32.12813 Longitude 103.15752 NAD83

NATURE OF RELEASE

Type of Release: Natural Gas	Volume of Release: 736.250 Mcf	Volume Recovered: 0
Source of Release: Corrosion of pipeline	Date and Hour of Occurrence: 2/28/2018 17:00	Date and Hour of Discovery: 2/28/2018 15:07
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu, Environmental Specialist, NMOCD District 1	
By Whom? Carolyn J. Blackaller, Sr. Environmental Specialist	Date and Hour: 3/1/2018 at 12:35pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable.	

If a Watercourse was Impacted, Describe Fully.*
Not Applicable.

RECEIVED
By Olivia Yu at 11:17 am, Mar 05, 2018

Describe Cause of Problem and Remedial Action Taken.*
The gas release/leak was caused by a 5-inch hole in the pipeline, which was due to corrosion of the pipe. A clamp was installed on the pipe in order to stop the leak. No further remedial action is necessary.

Describe Area Affected and Cleanup Action Taken.*
Not Applicable.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Carolyn J Blackaller	OIL CONSERVATION DIVISION
Printed Name: Carolyn J. Blackaller	Approved by Environmental Specialist: JJ
Title: Sr. Environmental Specialist	Approval Date: 3/5/2018 Expiration Date:
E-mail Address: carolyn.blackaller@energytransfer.com	Conditions of Approval: see attached directive Attached ☑
Date: 3/1/2018 Phone: (817) 302-9766	

* Attach Additional Sheets If Necessary

1RP-4984
nOY1806442187
fOY1806442080
pOY1806442421

ENERGY TRANSFER

March 1, 2018

State of New Mexico Oil Conservation Division, District I
1625 N. French Dr.
Hobbs, NM 88240

RECEIVED
MAR 05 2018
HOBBS OCD

RE: **Form C-141 - Release Notification and Corrective Action**
Energy Transfer Company
Pipeline No. 2B2-19-2

To Whom It May Concern,

In accordance with 19.15.29 NMAC, please find enclosed Form C-141 – Release Notification and Corrective Action for the Energy Transfer Company Pipeline No. 2B2-19-2 gas leak that occurred on 2/28/2018. Should you have any questions or require additional information, please do not hesitate to contact me at (817) 302-9766 or at carolyn.blackaller@energytransfer.com

Sincerely,

Carolyn J. Blackaller

Carolyn J. Blackaller
Sr. Environmental Specialist

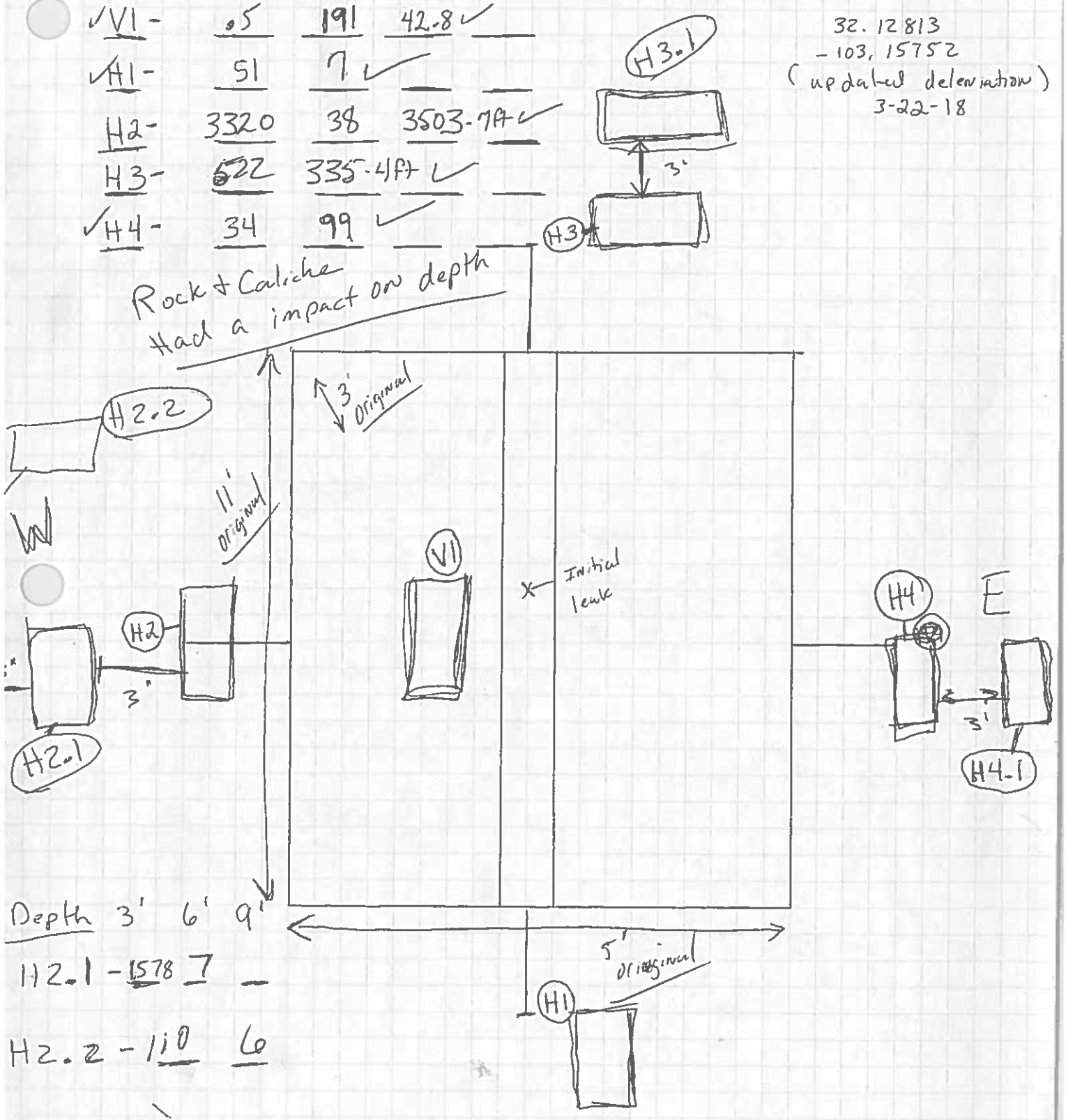
ATTACHMENT #9

Field Data

Depth -	3'	6'	9'	_'	N
✓V1 -	.5	191	42.8 ✓		
✓H1 -	51	7 ✓			
H2 -	3320	38	3503-7ft ✓		
H3 -	622	335-4ft ✓			
✓H4 -	34	99 ✓			

2-B-2-19-2

32.12813
-103, 15752
(updated deleviation)
3-22-18



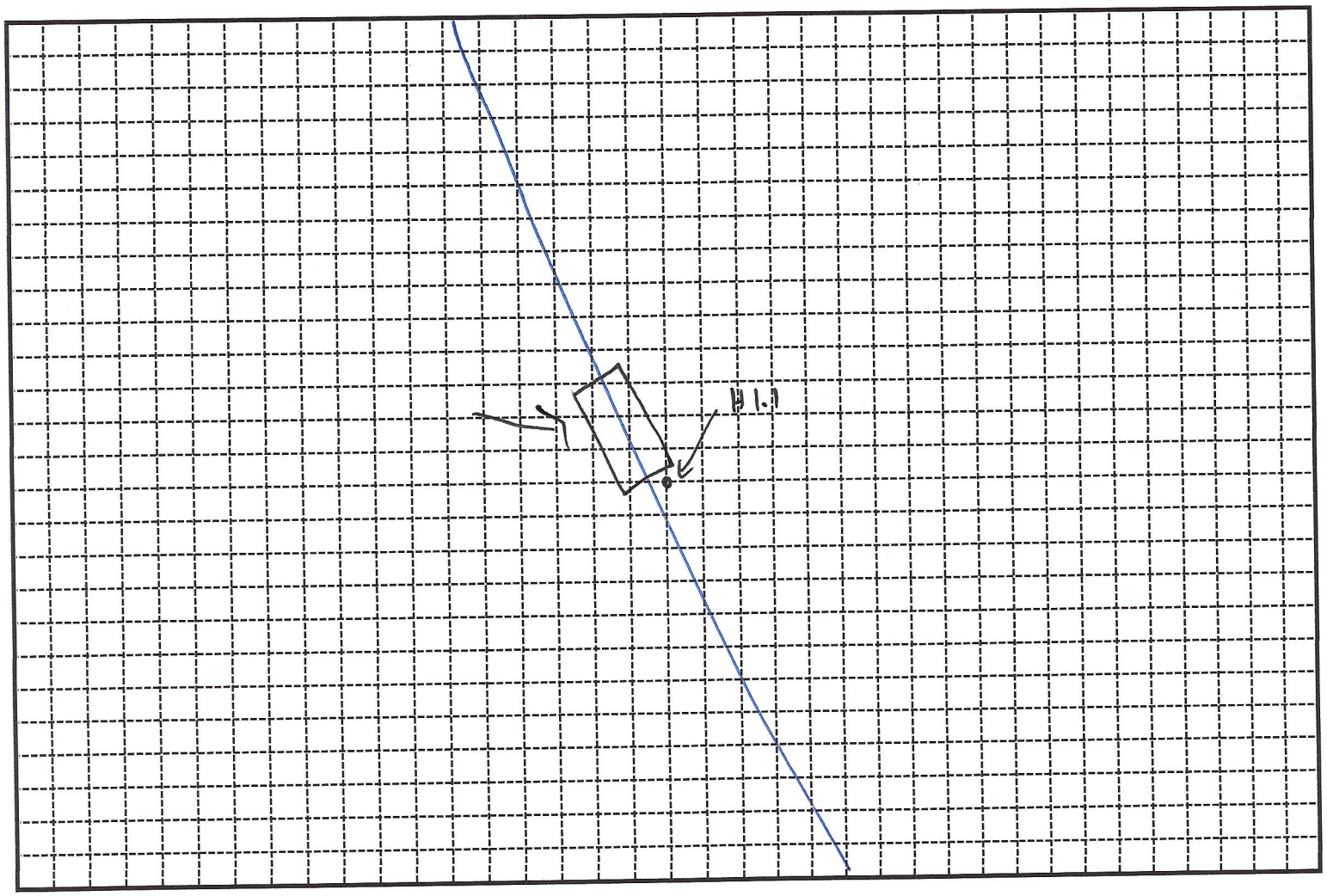
Depth	3'	6'	9'
H2.1 -	1578 ✓	_	
H2.2 -	110	6	

S

FIELD NOTES

Site Name: Pipeline No 2B2-19-2

Date: 11/8/2019



Excavation Still Open
< 20 yds on-site
No evidences of Impacts.

Field ID	Odor/PID	Chloride
H1.1 @ 0'	None	<120
H1.1 @ 6"	None	<120
H1.1 @ 1	None	<120
H1.1 @ 1.5'	None	<120

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride

Field ID	Odor/PID	Chloride