



11490 Westheimer Road, Suite 950, Houston, Texas 77077 • Phone 832-672-4700 • Fax 832-672-4609

Transmittal Letter

November 11, 2021

RE: Closure report not recorded in OCD Imaging
Incident ID: nCH1903355030
AEP #: 12082018-1530-dc
Location: Release along layflat west of Dagger State Unit 2H
Frac for AO 6 501/502

NMOCD:

During an internal audit of closure report status Advance Energy Partners (AEP) identified eight closure reports not recorded in OCD Imaging. AEP is resubmitting these closure reports via the online fee portal.

The remediation and closure report for Incident 12082018-1530-dc was completed on March 07, 2019. Since the completion of the remediation and closure report, AEP conducted a depth-to-water determination program discussed below.

Depth to Water Determination

In September/October 2021, Advance Energy initiated a depth-to-water boring program to determine whether depth-to-water is present in the upper 100-feet of the surface soil profile. Nine (9) boreholes were advanced between 103 to 106-feet below ground surface, rested for at least 72-hours, and gauged for the presence of groundwater. The nearest boring is located 0.41-feet south-southeast of the release. The boring is identified as MISC-402 (CP-1881). No groundwater was detected within the upper 100-feet. Plate 2 (revised) is an updated depth-to-water map. The driller log is attached.

As presented in the attached closure report, soil sample confirmation samples for the remediated area meets Closure Criteria per Table 1 of 19.15.29 and 19.15.29.13 NMAC for areas off-site. The Closure Criteria is reproduced below.

- Upper 4-feet
 - Chloride < 600 mg/kg
 - TPH (GRO + DRO + MRO) < 100 mg/kg
 - BTEX < 50 mg/kg
 - Benzene < 10 mg/kg
- Below 4-feet
 - Chloride < 20,000 mg/kg
 - TPH (GRO + DRO + MRO) < 2,500 mg/kg
 - TPH (GRO + DRO) < 1,000 mg/kg
 - BTEX < 50 mg/kg
 - Benzene < 10 mg/kg

AEP respectfully asks NMOCD for closure of the regulatory file. The C-141 Closure Form is attached.

Sincerely,



Andrew Parker
Environmental Scientist

Andrew Parker

From: Andrew Parker <andrew@rthicksconsult.com>
Sent: Friday, March 8, 2019 3:07 PM
To: bradford.billings@state.nm.us; ocd-district1spills@state.nm.us
Cc: 'David Harwell'; Mann, Ryan
Subject: 1RP-5313 Closure Report - Advance Energy Partners DSU #2H
Attachments: Closure Report 1RP-5313 Compiled.pdf

Mr. Billings:

Attached is the characterization, remediation, and closure report for 1RP-5313 DSU #2H produced water release. Please consider this submittal as the final closure report that meets the 90-day submittal period. The release occurred on December 8, 2018.

Please contact me with any questions.

Thank you,

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

Incident ID	nCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release? (Plates 2 and 3)	<u>368</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? (Plate 5)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)? (Plates 5)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? (Plate 6)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? (Plates 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? (Plates 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? (Plate 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland? (Plate 7)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine? (Plate 8)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology? (Plate 9)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain? (Plate 10)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 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. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

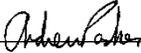
State of New Mexico
Oil Conservation Division

Page 4

Incident ID	nCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	

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

Printed Name: Andrew Parker Title: Env. Scientist

Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: _____ Date: _____

Incident ID	nCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	

Remediation Plan

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

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

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

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Andrew Parker Title: Env. Scientist

Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

OCD Only

Received by: _____ Date: _____

- Approved
 Approved with Attached Conditions of Approval
 Denied
 Deferral Approved

Signature: _____ Date: _____

Incident ID	nCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	

Closure

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

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

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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

Printed Name: Andrew Parker Title: Env. Scientist

Signature:  Date: 11/11/2021

email: aparker@advanceenergypartners.com Telephone: 970-570-9535

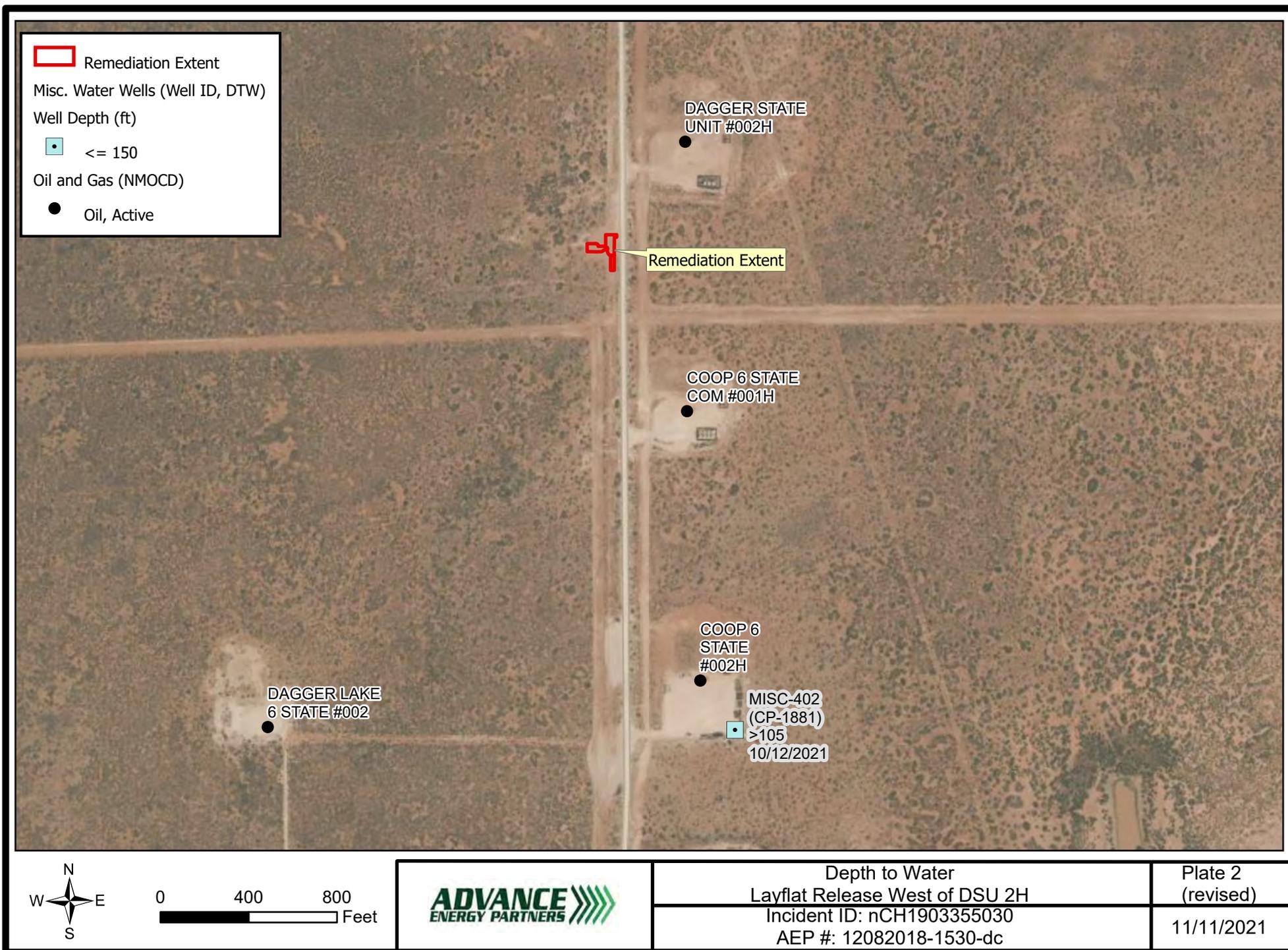
OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: 01/18/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv





2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

10/29/2021

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record CP-1881 Pod1

To whom it may concern:

Attached please find a well log & record and a plugging record, in duplicate, for a one (1) soil borings, CP-1881 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive, flowing style.

Lucas Middleton

Enclosures: as noted above

USE DII NOV 1 2021 PM 4:43



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). CP-1881		
	WELL OWNER NAME(S) Advanced Energy Partners				PHONE (OPTIONAL) 832.672.4700		
	WELL OWNER MAILING ADDRESS 11490 Westheimer Rd. Stuit 950				CITY Houston	STATE TX	ZIP 77077
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 25	SECONDS 22	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
	LATITUDE	LONGITUDE		N			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE SE NE Sec. 06 T22S R33E							

2. DRILLING & CASING INFORMATION	LICENSE NO. 1249	NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.			
	DRILLING STARTED 10/12/2021	DRILLING ENDED 10/12/2021	DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 105	DEPTH WATER FIRST ENCOUNTERED (FT) n/a			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a			
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
0	105	±6.5	Boring- HSA	--	--	--	--	

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

CP-1881_OSE_Well Record and Log-forsign

Final Audit Report

2021-10-29

Created:	2021-10-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAQ3vtH-svpKXba6sweCTSv6bY9FHI1cHt

"CP-1881_OSE_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2021-10-29 - 3:53:42 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-10-29 - 3:54:01 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2021-10-29 - 4:18:46 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-10-29 - 4:19:17 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.
2021-10-29 - 4:19:17 PM GMT

OSE DIT NOV 1 2021 PM 2:44



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-1881-POD1

Well owner: Advanced Energy Partners Phone No.: 832.672.4700

Mailing address: 11490 Westheimer Rd. Stuit 950

City: Houston State: Texas Zip code: 77077

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Lupe Leyba
- 4) Date well plugging began: 10/14/2021 Date well plugging concluded: 10/14/2021
- 5) GPS Well Location: Latitude: 32 deg, 25 min, 22 sec
Longitude: 103 deg, 36 min, 12 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 105 ft below ground level (bgl),
by the following manner: weighted tape
- 7) Static water level measured at initiation of plugging: n/a ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 07/08/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OSE DT NOV 1 2021 PM 4:00

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	15.6 gallons	15 gallons	Augers	
10'-110'	Drill Cuttings	Approx. 151 gallons	151 gallons	Boring	

MULTIPLY	BY	AND OBTAIN
cubic feet x	7.4805	= gallons
cubic yards x	201.97	= gallons

III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Jackie D. Atkins

Signature of Well Driller

10/27/2021

Date

USE OIT NOV 1 2021 PM 4:12:22

DATE__WD-11 Plugging Record-forsign

Final Audit Report

2021-10-29

Created:	2021-10-29
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAfR6dClvgQcGMZKORwRcBWHfk6EYZjwn4

"DATE__WD-11 Plugging Record-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2021-10-29 - 3:51:59 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2021-10-29 - 3:54:13 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2021-10-29 - 4:18:25 PM GMT- IP address: 64.90.153.232
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2021-10-29 - 4:18:39 PM GMT - Time Source: server- IP address: 64.90.153.232
-  Agreement completed.
2021-10-29 - 4:18:39 PM GMT

OSE DTI NOV 1 2021 PM 4:44



March 7, 2019

1RP-5313 Characterization & Closure Report Dagger State Unit No. 002H



Sample Trenching at Point of Release

**Prepared for
Advance Energy Partners Hat Mesa LLC
Houston, Texas**

**Prepared by
R.T. Hicks Consultants, Ltd.
Albuquerque, New Mexico**

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996
Artesia ▲ Carlsbad ▲ Durango ▲ Midland

March 7, 2018

NMOCD District 1 (vacant)
District 1 - HOBBS
1625 N. French Drive
Hobbs, New Mexico 88240
(575) 370-3180 Ext. 111
Via Email:
ocd-district1spills@state.nm.us

Bradford Billings
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Via Email:
bradford.billings@state.nm.us; emnrd-

RE: 1RP-5313 – Dagger State Unit No. 002H
Advance Energy Partners Hat Mesa, LLC
Characterization and Closure Report

NMOCD:

R.T. Hicks Consultants submits this characterization and closure report on the behalf of Advance Energy Partners Hat Mesa, LLC (Advance Energy).

Characterization and remediation began on December 08, 2018 and was completed by February 22, 2019. The C-141 including the Characterization and Closure Forms is attached. We respectfully ask NMOCD for closure of the regulatory file.

Hick Consultants relied on 19.15.29 NMAC for characterization, remediation, and closure reporting for the Dagger State Unit No. 002H (DSU 2H) treated produced water transfer line release.

The report is divided into three sections:

- I. Initial Response
- II. Characterization
- III. Remediation and Closure

Plates

- Plate 1 – Site Map
- Plates 2 through 10 – As labeled on the C-141 Characterization Checklist
- Plate 11 – Initial Characterization EM Survey and Sample Results
- Plate 12 – Excavation Extent Relative to Initial Release Extent
- Plate 13 - Excavation Confirmation Sample Results

March 7, 2019
Page 10

DSU 2H Release

Tables

- Table 1 – Nearby OSE Well Summary
- Table 2 – EM Survey and Initial Sampling Data
- Table 3 – Final Excavation Confirmation Sampling Data

Appendices

- Appendix A – OSE Well Logs
- Appendix B – EM Survey Calibration Data
- Appendix C - Laboratory Certificate of Analyses

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

I. Initial Response

The release occurred on December 08, 2018 along a treated produced water transfer line (Plate 1) located at N 32.428738, W 103.604459 (NAD 83) on State Land. Flow was shutoff within 10 minutes of release as Select Energy personnel was on location at the time of the initial release. The layflat line was repaired within 40 minutes. Initial volume of release was estimated at less than 20 barrels. The release did not impact surface or groundwater.

The release occurred on silty sand surface soils. Free standing liquid quickly soaked into the sand. Within 15 hours, removal of surface soils within the upper 2-foot of soil column along the east-west extent of the release was excavated and temporarily stockpiled. Near surface soils along north-south release extent (Figure 1), which is along a buried pipeline, was excavated to a depth of a few inches.



Figure 1: Initial release response excavation along the north-south pipeline. Stockpiled soil is visible photo left. GPS: 32.4284833 N, -103.6045694 W

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

II. Characterization

The following sections address items as described in 19.15.29.11.A, paragraphs 1- 4. Please refer to the C-141 characterization checklist for additional setback criteria and verification (Plates 2-10).

1. Site Map

Horizontal extent was determined by wet soil from the release and an electromagnetic survey (EM Survey) with a field reading of 20 mS/m (30 mS/m at 25° C.)¹. Plate 1 shows the release extent relative to the release point, produced water transfer line, and a subsurface pipeline. A north-south access road easement bounds the release to east.

2. Depth to Ground Water

Most recent depth to water data was queried from the USGS and New Mexico Office of the State Engineer (OSE) online databases (Plate 2). Spatial analysis shows:

- The nearest water well is located 1.9-miles northeast of the release (OSE CP-00854) with a depth to water of 600-feet.
- The next two nearest water wells are located
 - 2.1-miles north-northeast (USGS-14980) with a depth to water of 178.75-feet.
 - 2.2-miles east-northeast (OSE CP-01356) with a depth to water of 555 feet.

Review of well logs available from the New Mexico Office of the State Engineer (OSE) online database (see Table 1, below) shows that the depth to the top of the water-bearing zone exceeds 700 feet below land surface, as shown in the “top of water bearing strata” column. Appendix A contains well logs available online from the OSE.

POD Number	Date	Top of Water Bearing Strata	Bottom of Water Bearing Strata	Depth to Water	Source	Height Above Confining Layer
		Feet	Feet	Feet		Feet
CP 00854	6/22/1996	755	890	600	Artesian	155
CP 01349 POD 1	7/18/2014	990	1188	572	Artesian	418
CP 01355 POD 1	7/29/2014	925	1185	582	Artesian	343
CP 01356 POD 1	8/9/2014	765	1092	555	Artesian	210
CP 01357 POD 1	8/26/2014	945	1286	578	Artesian	367

¹ See Appendix B for a discussion on EM Survey and calibration curves.

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

OSE well logs show that the nearby wells have a minimum of 155 feet of pressure head above the confining layer. It is important to recognize that at CP-00854 ground water is at a depth of 755 feet and confining pressure causes the water column to rise 155 feet for a perceived depth to water of 600 feet bgs.

We recognize that thin water-bearing units above the regional water-bearing zone may not have been recorded by the well drillers. However, more shallow water-bearing zones would be sandstone units within the Dockum Group redbeds and, like the regional water-bearing zone, would be under artesian pressure.

Ground water flow is to the southwest as demonstrated on the potentiometric map (Plate 3). We relied on the USGS water wells to generate the potentiometric surface. Regionally, USGS water wells show that ground water is within the Santa Rosa and Chinle Formation.

The potentiometric surface indicates that the depth to water, which is under artesian flow, is approximately 368 feet below ground surface, where
 $368 \text{ feet} = 3688 \text{ ft surface elevation} - 3320 \text{ ft potentiometric surface}$.

3. Wellhead Protection Area

Plate 4 shows that the release extent is not:

- Within incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within ½-mile private and domestic water sources (wells and springs).
- 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
- Within 1000 feet of any other fresh water well or spring

4. Distance to Nearest Significant Water Course

Plate 5 shows that the release extent is not:

- Within ½ mile of any significant water course.
- Within 300 feet of a continuously flowing watercourse or any other significant watercourse.
- Within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

5. Soil/Waste Characteristics

The release occurred in an area where depth to water is greater than 100 ft below ground surface (bgs) and within:

- A pipeline ROW that is considered in-use for oil and gas operations, and

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

- Pasture land not in-use for oil and gas operations.

Advance Energy elected to reclaim (not in-use) all impacted soils rather than to restore the surface for areas in-use.

According to Table 1 19.15.29 NMAC, closure criteria limits are as follows:

Table 1 19.15.29 NMAC		Chloride	GRO+DRO	TPH+Ext	BTEX	Benzene
DTW > 100ft		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Closure Criteria	0-4 ft (not in-use)	600	1,000	2,500	50	10
Closure Criteria	>4 ft or "in-use"	20,000	1,000	2,500	50	10

Soil sampling and an electromagnetic survey (EM Survey) was employed to delineate the release extent. As discussed in Appendix B and verified on Plate 11, an electrical conductivity (EC) reading from the EM Survey shows that an EC reading of >30 mS/m (temperature corrected to 25 deg. C. (TC)) correlates with a chloride concentration > 600 mg/kg. Therefore, an EC reading of >30 mS/m was used to delineate the horizontal extent.

Initial soil samples were obtained either via a grab sample or using a backhoe (trench sample, Figure 2) for testing of chloride. Soil samples were either field titrated or submitted for laboratory analysis. Table 2 shows the analytical results of the initial characterization sampling. Soil samples listed in Table 2 are categorized under their corresponding grid number as shown on Plate 12. Plate 12 also shows the initial release extent relative to the excavation extent during remedial actions.

The Laboratory Certificate of Analyses is located in Appendix C.



Figure 2: Sample Trench 7. Total depth 6-ft. Photo viewing west. GPS: 32.4286333 N , -103.6049194 W

Initial sampling showed that chloride in the upper 4-feet exceeded the 600 mg/kg closure limit. "S3 Trench" showed the highest chloride concentration of 18,000 mg/kg from 6 to 7 feet bgs; at 9-feet bgs, chloride

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

decreased to 64 mg/kg. No soil sample exceeded the 20,000 mg/kg chloride closure limit.

Trench sampling and excavation showed the lithology as:

0 - 4.5 ft : Silty Sand, medium brown, loose.

5 - 9 ft : Caliche, white, dense.

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

III. Remediation and Closure

1. Excavation Protocol

Excavation extent of impacted soils was determined by chloride concentrations via laboratory confirmation via EPA Method 200.1 or SM4500. TPH, BTEX, and Benzene were below Closure Criteria Limits and are not discussed further.

All surfaces were remediated in accordance with 19.15.29.13 NMAC. Advance Energy elected to reclaim surface soils within the pipeline right-of-way rather than to defer and restore the area as in-use (Figure 3). Surface soils that were reclaimed to Table 1 19.15.29

NMAC limits with the upper 4-feet of soil containing less than 600 mg/kg chloride. Below 4-feet, chloride limit is 20,000 mg/kg.

Five-point composite soil samples were collected at the north, south, east, and west walls of the excavation from 0 to 4 feet. If soil sample results exceeded 600 mg/kg chloride at



Figure 3: Excavation along the pipeline ROW. The pipeline is 4.5 feet below ground surface. Photograph is viewing north from the southern edge of Grid 4. Grid 5 is visible photo top right. GPS 32.428561 N, -103.6045389 W.

the excavation walls, the excavation wall was extended horizontally and resampled. Horizontal excavation continued until subsequent sampling showed chloride below 600 mg/kg in the upper 4-feet. Excavation depth was determined by 5-point composite sampling of the base. Vertical excavation continued until the base of the excavation exhibited chloride less than 600 mg/kg at 4.5 feet bgs. At all grid locations, excavation depth was at least 4.5-feet bgs, with the exception of Grid 1 where the base at 2-feet exhibit 48 mg/kg chloride (Plate 11). Excavated soil was transported to Lea Land, Inc. or R-360 for proper disposal. Clean backfill soil was purchased from the land owner under a Surface Use Agreement.

2. Remediation Activities

The excavation extent is irregular in shape and covers a surface area of 802 yards with a volume of 3,608 cu. yds. Five-point composite confirmation sampling shows that the north, south, east, and west walls of each grid from 0 to 4 ft below ground surface (bgs) are less than 600 mg/kg chloride – with a maximum concentration of 544 mg/kg at Grid 6 South Wall. Five-point composite sample at

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

the base (4.5 ft gbs) of each grid shows that chloride is below 20,000 mg/kg – with a maximum concentration of 11,200 mg/kg at Grid 4.

Table 3 is a summary of analytical results showing final confirmation for the excavation walls and bases.

Figures 4 and 5, below, are photographs of the excavation prior to backfilling.



Figure 4: Photo of complete excavation prior to backfilling. Photo is viewing east from Grid 8 west wall. Excavation depth is 4.5-feet. GPS: 32.4286333 N, -103.6049278 W



Figure 5: Photograph of excavation along pipeline. Pipeline is at the excavation wall, photo right. Photo is viewing south from the north edge of Grid 2. GPS: 32.4285778 N, -103.6049417 W

R.T. Hicks Consultants, LTD

March 7, 2019
Page 10

DSU 2H Release

The excavation was backfilled with clean fill dirt (Figure 6). Final surface seeding and contouring will occur during the next favorable growing season in Spring 2019.



Figure 6: Backfilled excavation. Photo is viewing north from the south end of Grid 1. GPS: 32.4281806 N, -103.6044833 W

Please contact me with any questions at andrew@rthicksconsult.com or 970-570-9535.

Sincerely,
R.T. Hicks Consultants, Ltd.



Andrew Parker
Sr. Env. Specialist

Copy: David Harwell (DHarwell@advanceenergypartners.com)
Advance Energy Partners Hat Mesa, LLC
Ryan Mann (rmann@slo.state.nm.us); State Land Office

R.T. Hicks Consultants, LTD

C-141

Including Closure Form

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

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	NCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	pCH1903356077

Release Notification

Responsible Party

Responsible Party: Advance Energy Partners Hat Mesa, LLC	OGRID	372417
Contact Name: David Harwell	Contact Telephone: 832-672-4604	
Contact email: DHarwell@advanceenergypartners.com	Incident #	NCH1903355030 BSU 2H @ 30-025-41178
Contact mailing address: 11490 Westheimer Rd. STE 950, Houston, TX 77077		

Location of Release Source

Latitude N 32.428738 _____ Longitude W 103.604459 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: BSU 2H	Site Type: Transfer pipe
Date Release Discovered : Dec. 08, 2018 (15:30)	API# (if applicable) 30-025-41178

Unit Letter	Section	Township	Range	County
P	31	21 S.	33 E.	Lea County

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 20	Volume Recovered (bbls)
Treated PW	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Puncture/tare in layflat treated produced water transfer line. Transfer line originates at the Dagger State frac pond and terminates at the 806 Frac on the 501/502 pad. Flow was shutoff within 10 minutes of release as Select Energy personnel was on location at the time of the initial release. The layflat line was repaired with 40 minutes.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
---	--

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:
 The release was in silty sand surface soils. Free standing liquid quickly soaked into the sand. Within 15 hours, removal of surface soils within the upper 2-feet of soil column along the east-west extent of the release was excavated and temporarily stockpiled. Near surface soils along north-south release extent, which is along a buried pipeline, was excavated to a depth of a few inches. A one-call is in progress and excavation of impacted soil will resume within the next few days.
 [SEE ATTACHED MAP]
 Release characterization and remediation will occur under NMAC 19.15.29.

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

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

Printed Name: David Harwell Title: Vice President
 Signature: *David Harwell* Date: Dec 12 2018
 email: DHarwell@advanceenergypartners.com Telephone: 832-672-4604

OCD Only

Received by: **RECEIVED**
 By CHernandez at 3:38 pm, Feb 02, 2019

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release? (Plates 2 and 3)	<u>368</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse? (Plate 5)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)? (Plates 5)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church? (Plate 6)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? (Plates 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring? (Plates 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field? (Plate 4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland? (Plate 7)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine? (Plate 8)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology? (Plate 9)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain? (Plate 10)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	pCH1903356077

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: David Harwell Title: VP Eng. & Ops
 Signature: David Harwell Date: 3-7-19
 email: dharwell@adronceenergypartners.com Telephone: 832-672-4604

OCD Only

Received by: _____ Date: _____

Released to Imaging: 1/18/2022 2:19:06 PM

Received by OCD: 1/6/2022 8:41:31 AM

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: David Harwell Title: Vice President

Signature: _____ Date: _____

email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

OCD Only

Received by: _____ Date: _____

- Approved
 Approved with Attached Conditions of Approval
 Denied
 Deferral Approved

Signature: _____ Date: _____

Incident ID	NCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	pCH1903356077

Remediation Plan

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

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

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

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: David Harwell Title: VP Eng. & Ops.
 Signature: David Harwell Date: 3-7-19
 email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

Released to Imaging: 1/8/2022 2:19:06 PM

Received by OCD: 1/6/2022 8:41:31 AM

Incident ID	NCH1903355030
District RP	1RP-5313
Facility ID	
Application ID	pCH1903356077

Closure

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

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

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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

Printed Name: David Harwell Title: VP Eng. + Ops.
 Signature: David Harwell Date: 3-7-19
 email: dharwell@advanceenergypartners.com Telephone: 832-672-4604

OCD Only

Received by: _____ Date: _____

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

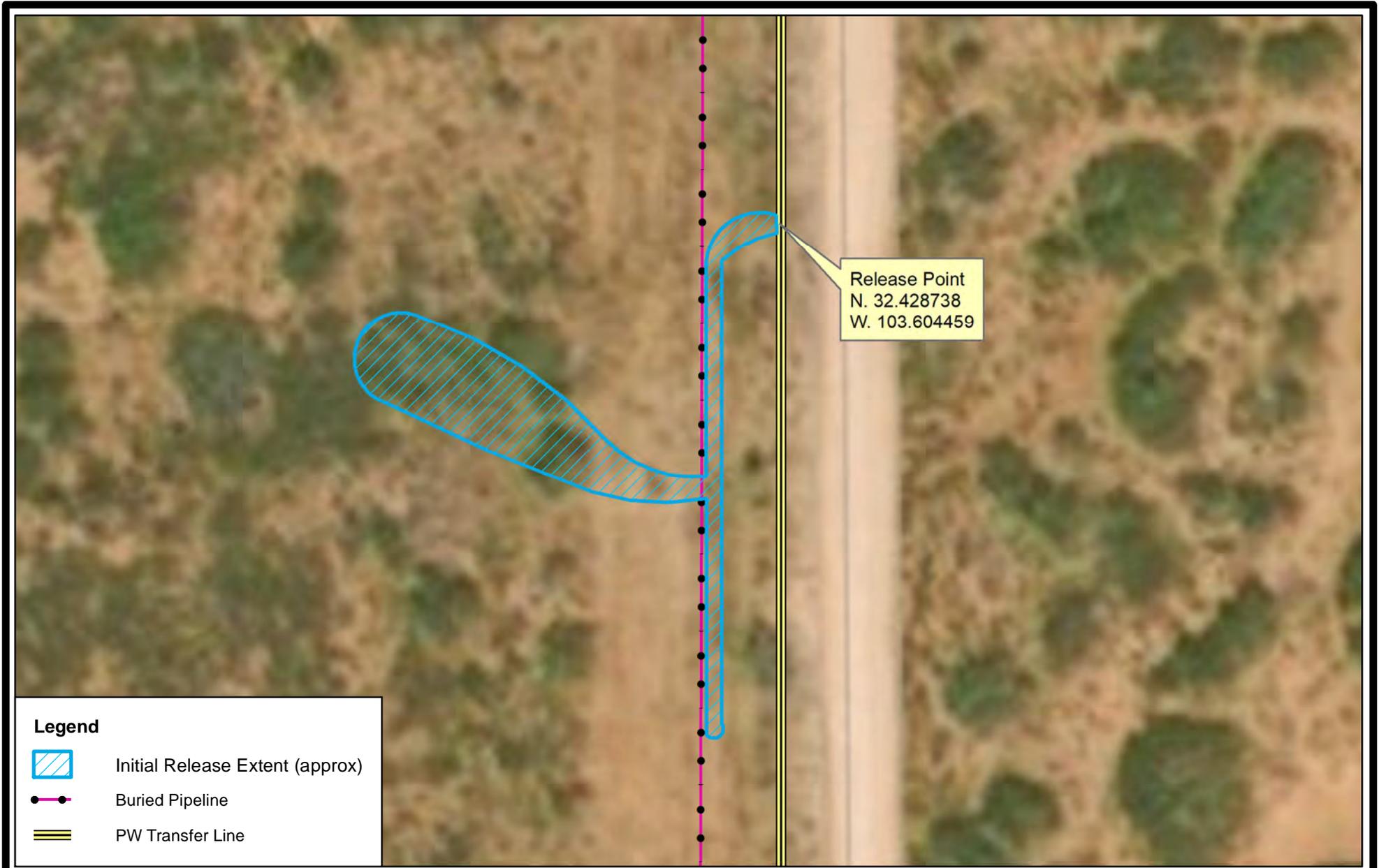
Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Released to Imaging: 1/18/2022 2:19:06 PM

Received by OCD: 1/6/2022 8:41:31 AM

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Figure C141\C141 Map.mxd



Legend

-  Initial Release Extent (approx)
-  Buried Pipeline
-  PW Transfer Line



A north arrow is located on the left side of the block. To its right is a scale bar with markings at 0, 20, and 40 feet.

R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Initial Release Extent Approximate Boundary
 Dec. 8 2018
 Advacne Energy Partners
 BSU 2H PW Transfer Line

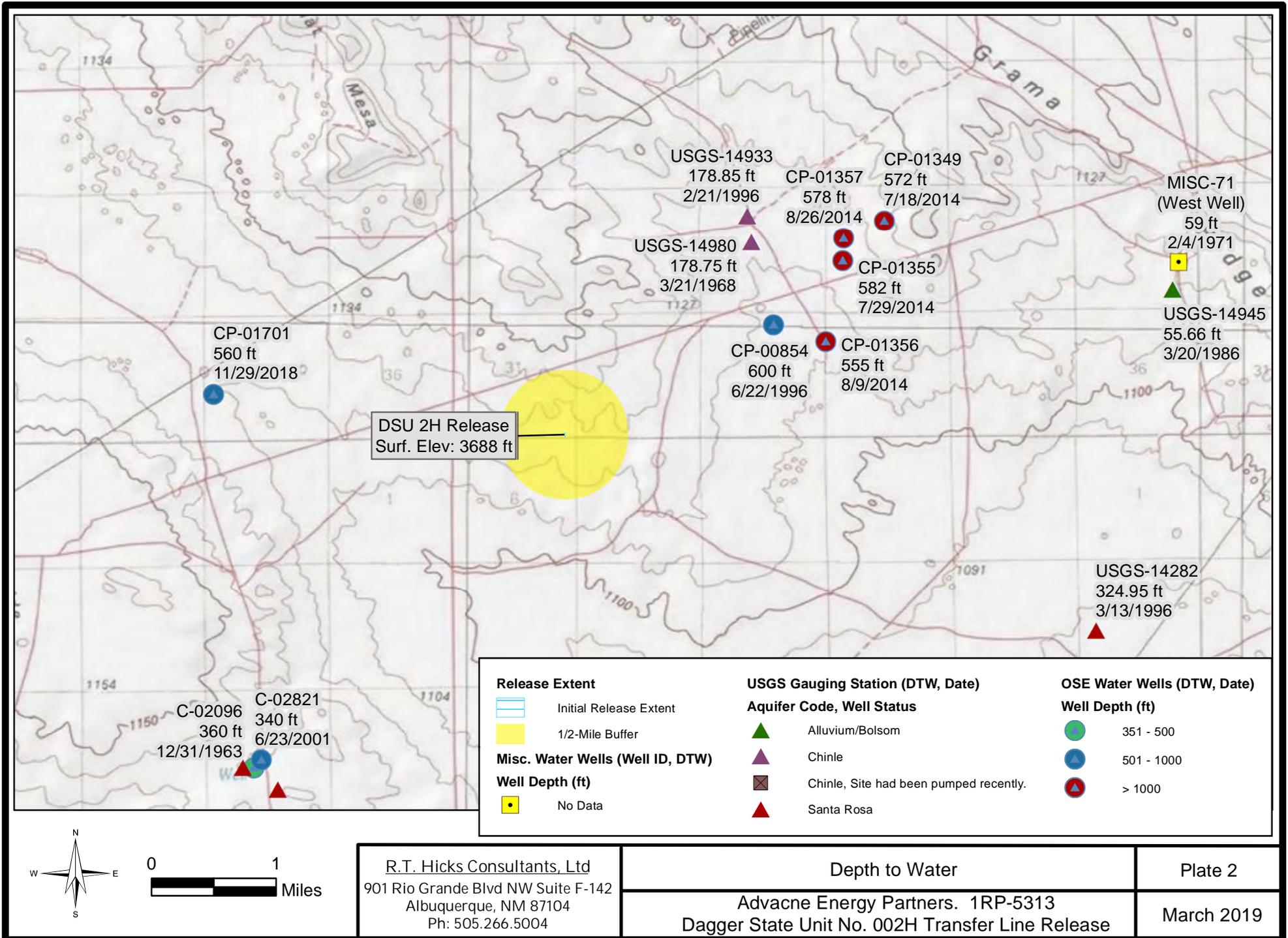
For C-141
 Dec 2018

Plates

R.T. Hicks Consultants, Ltd.

901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 2 Depth to Water.mxd

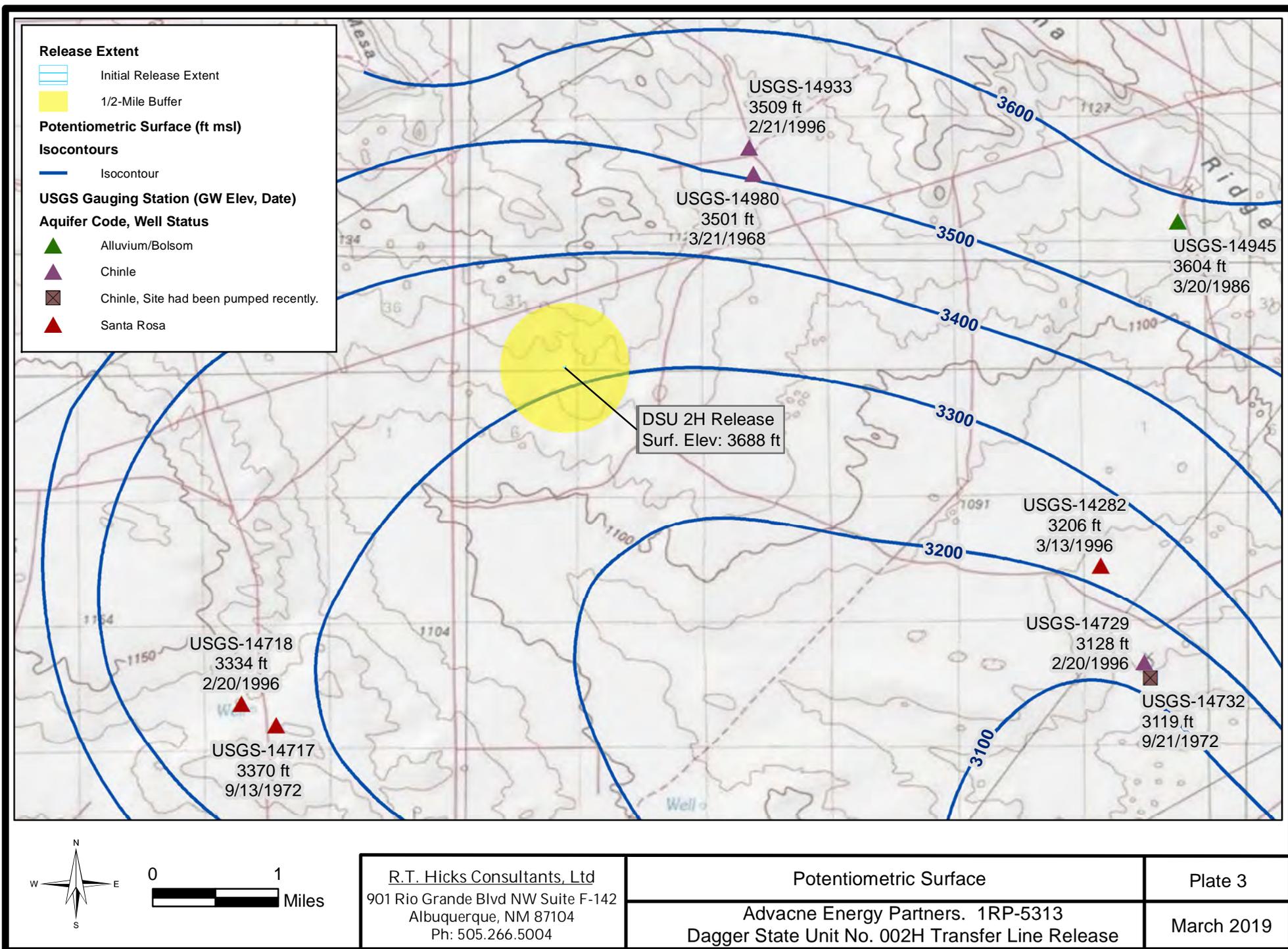


R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

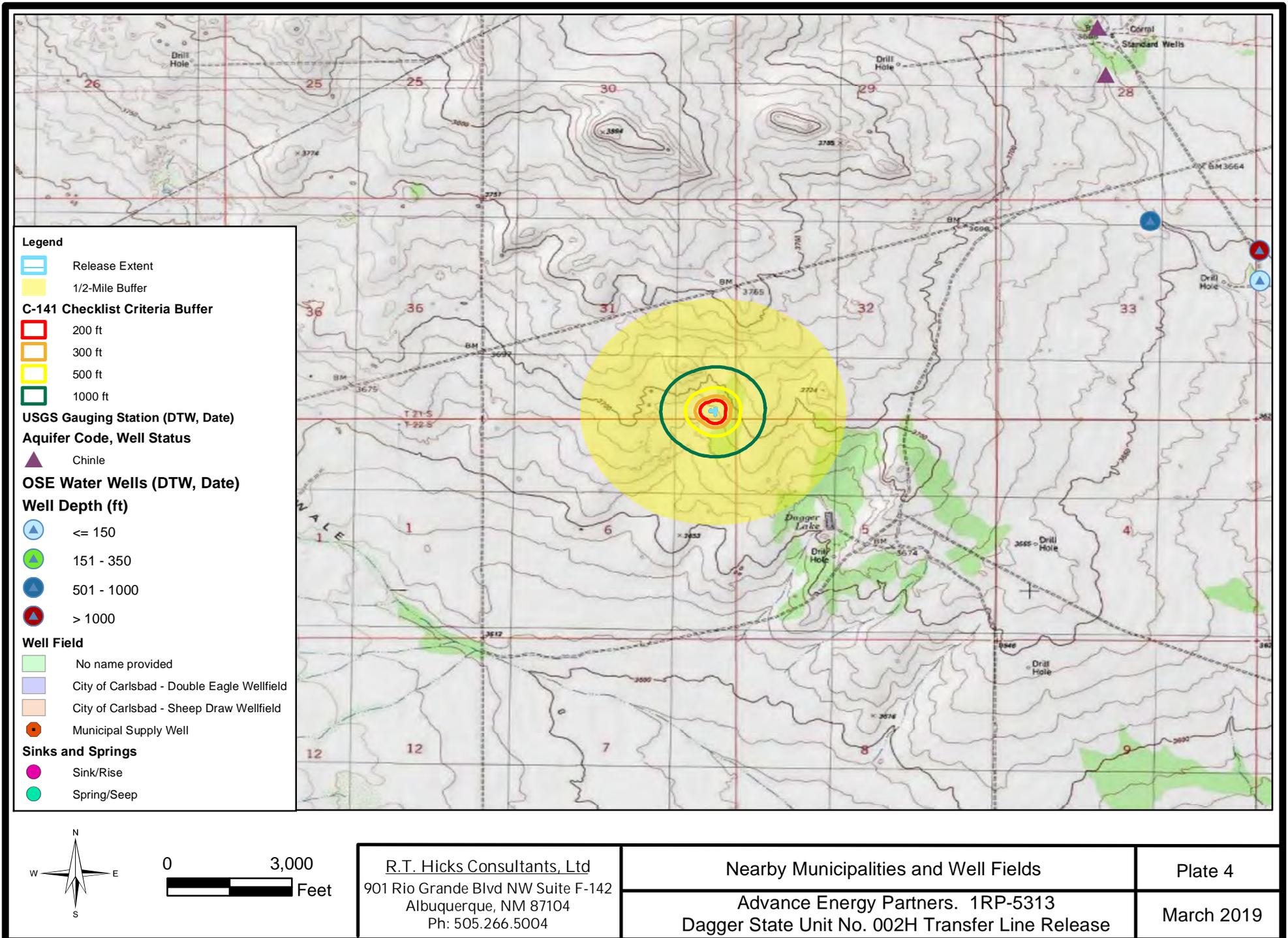
Depth to Water
 Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 2
 March 2019

M:\Advance Energy\BSU 2H Release\lap_nmGIS\Plates\Plate 3 Potentiometric.mxd



M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 4_wellFields.mxd



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

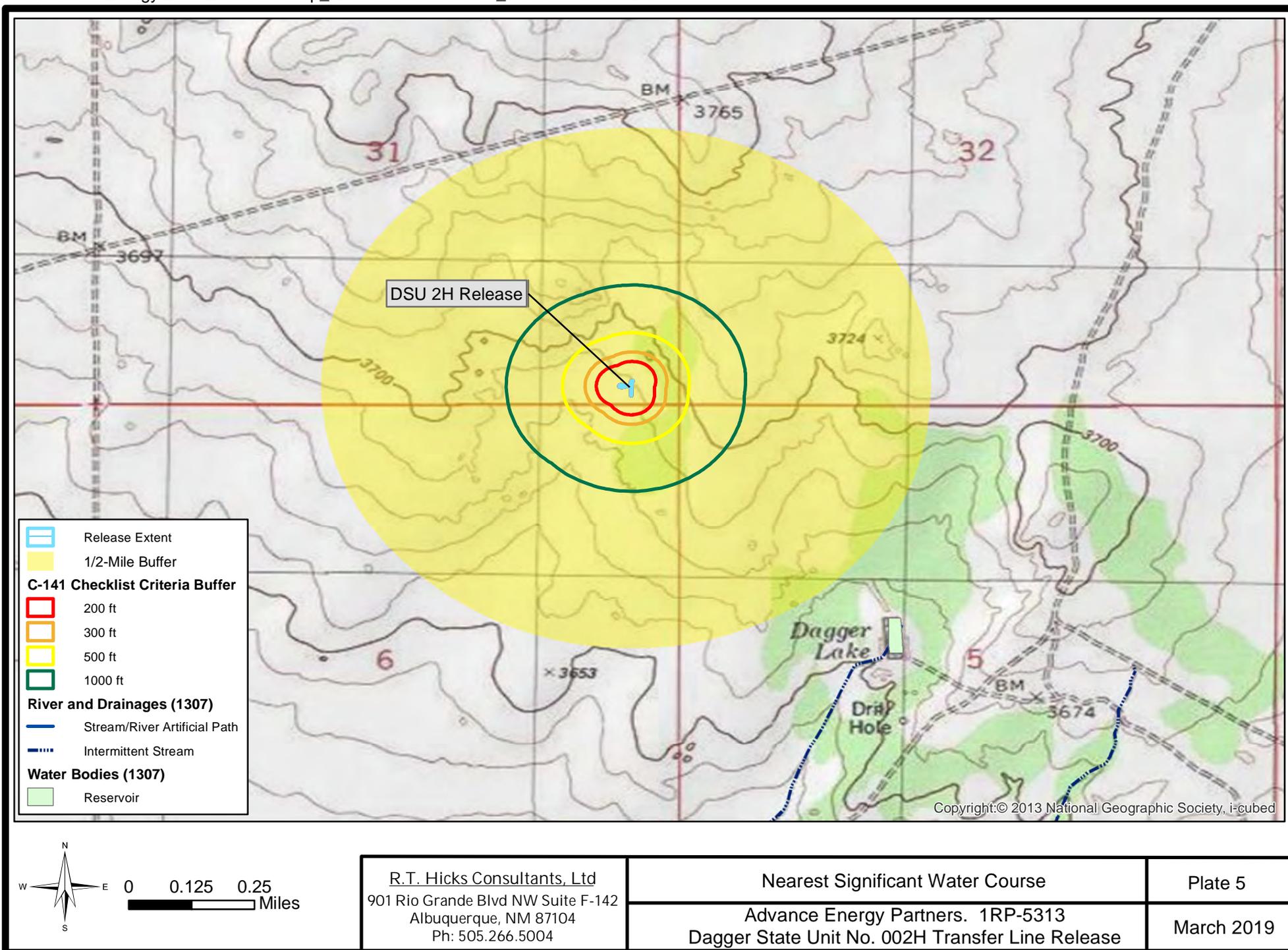
Nearby Municipalities and Well Fields

Advance Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

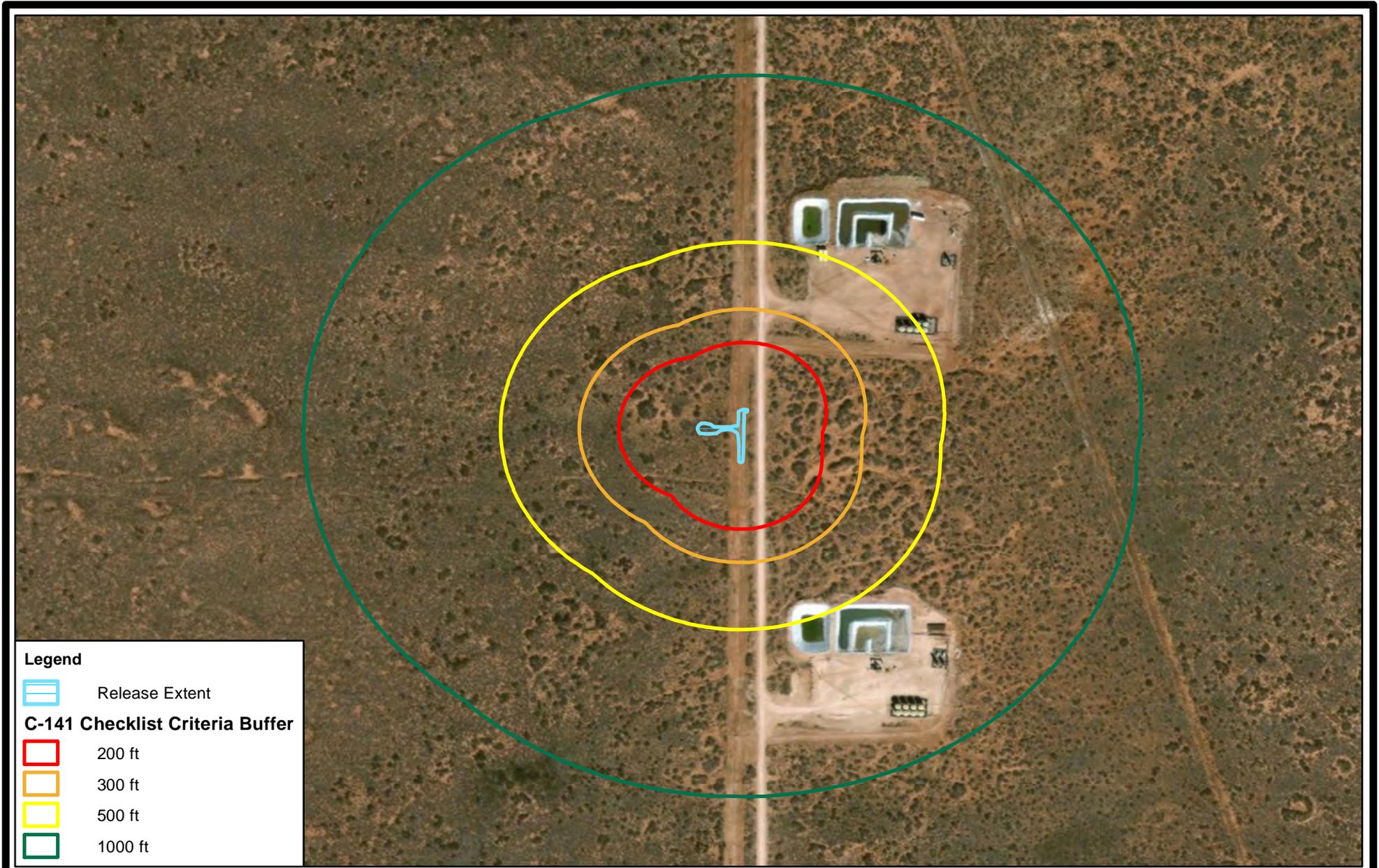
Plate 4

March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 5_WaterCourses.mxd

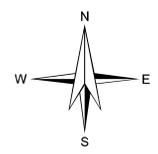


M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 6_NearbyStructures.mxd



Legend

-  Release Extent
- C-141 Checklist Criteria Buffer**
-  200 ft
-  300 ft
-  500 ft
-  1000 ft



R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

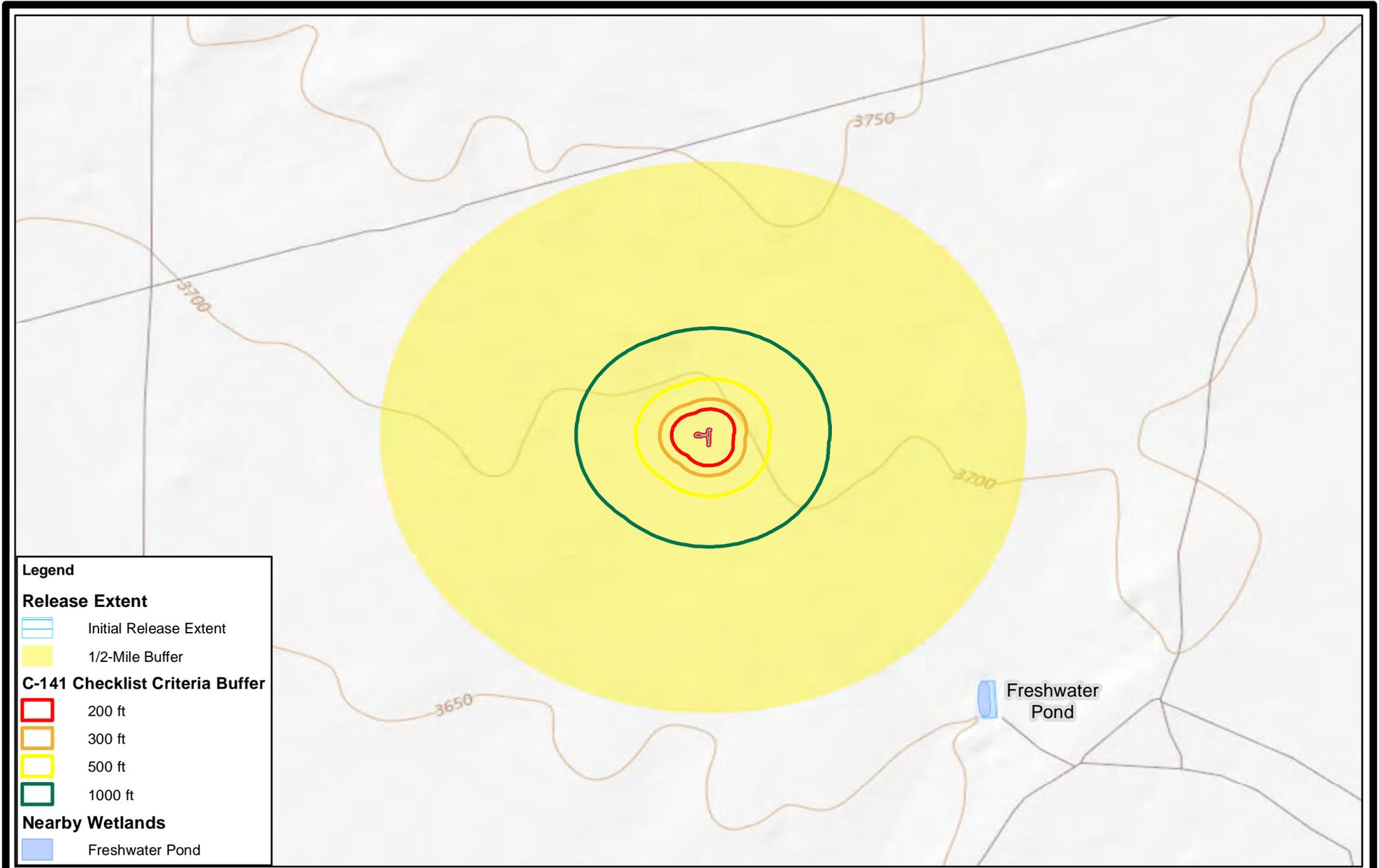
Nearby Structures

Advacne Energy Partners. 1RP-5313
Dagger State Unit No. 002H Transfer Line Release

Plate 6

March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 7_wetlands.mxd



Legend

Release Extent

- Initial Release Extent
- 1/2-Mile Buffer

C-141 Checklist Criteria Buffer

- 200 ft
- 300 ft
- 500 ft
- 1000 ft

Nearby Wetlands

- Freshwater Pond



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

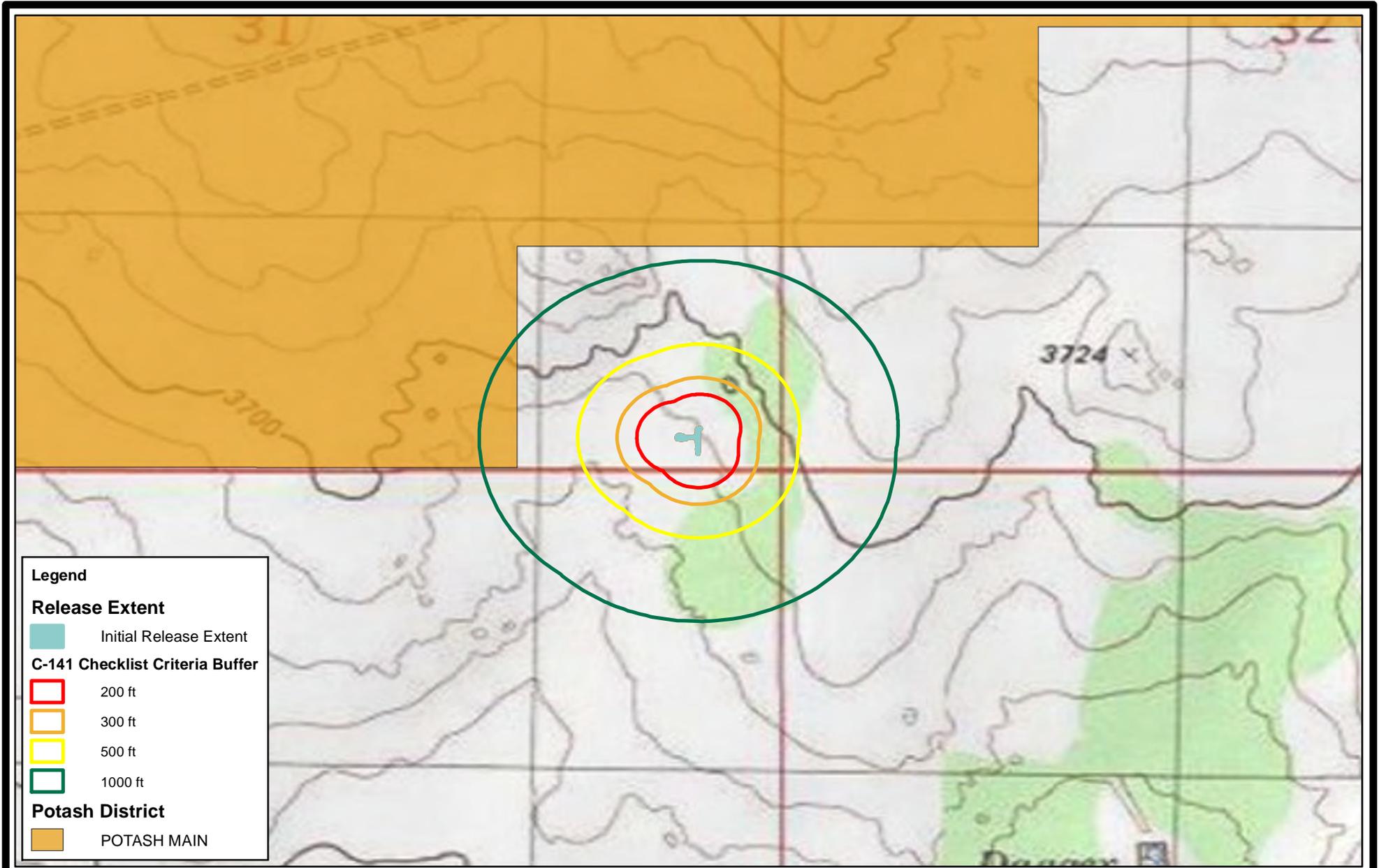
Nearby Wetlands

Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 7

March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 8_minesMinerals.mxd



Legend

Release Extent

- Initial Release Extent

C-141 Checklist Criteria Buffer

- 200 ft
- 300 ft
- 500 ft
- 1000 ft

Potash District

- POTASH MAIN



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

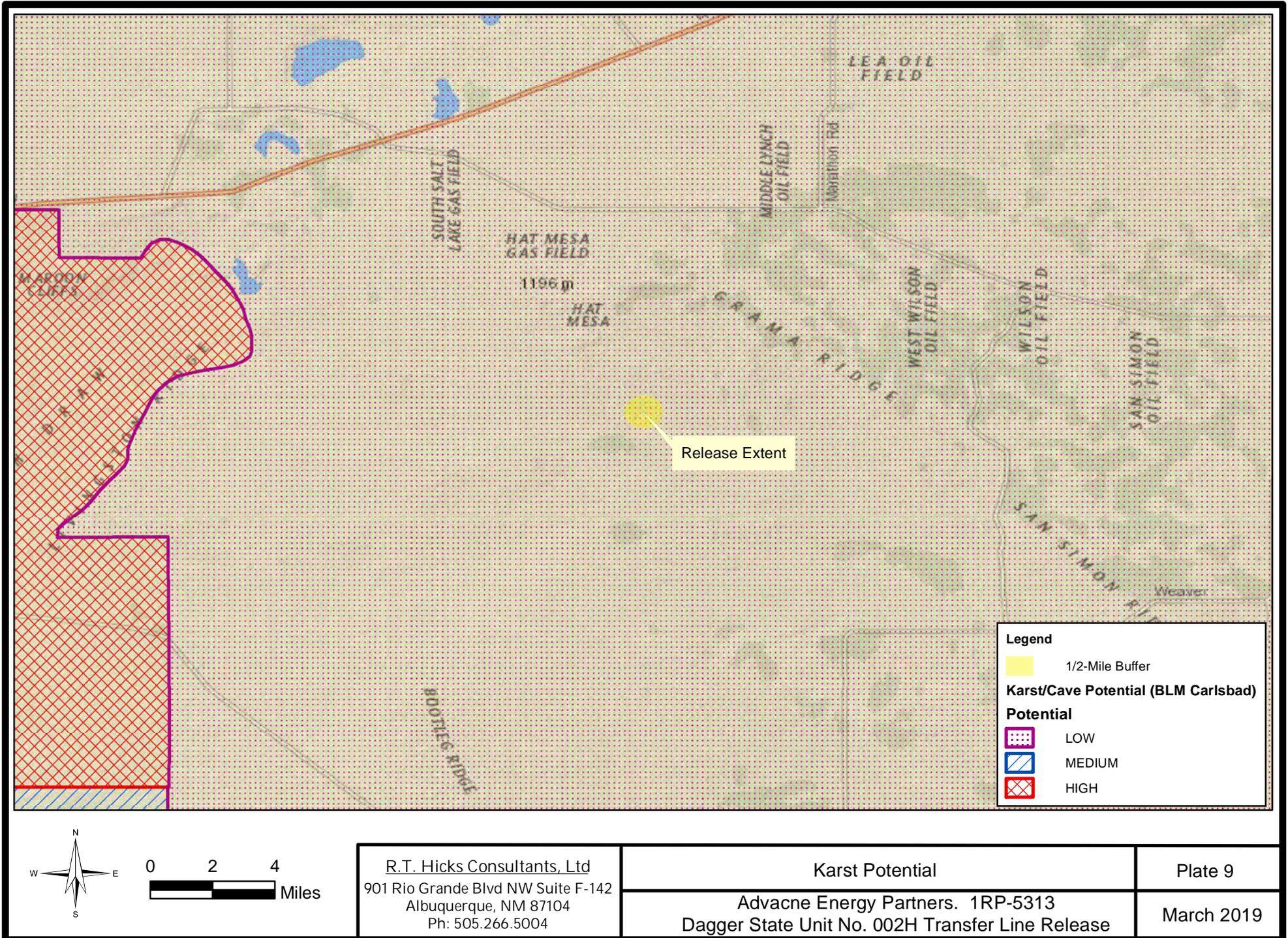
Nearby Mines and Minerals

Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 8

March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 9_karstPotential.mxd



Legend

- 1/2-Mile Buffer
- Karst/Cave Potential (BLM Carlsbad)**
- Potential**
- LOW
- MEDIUM
- HIGH



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

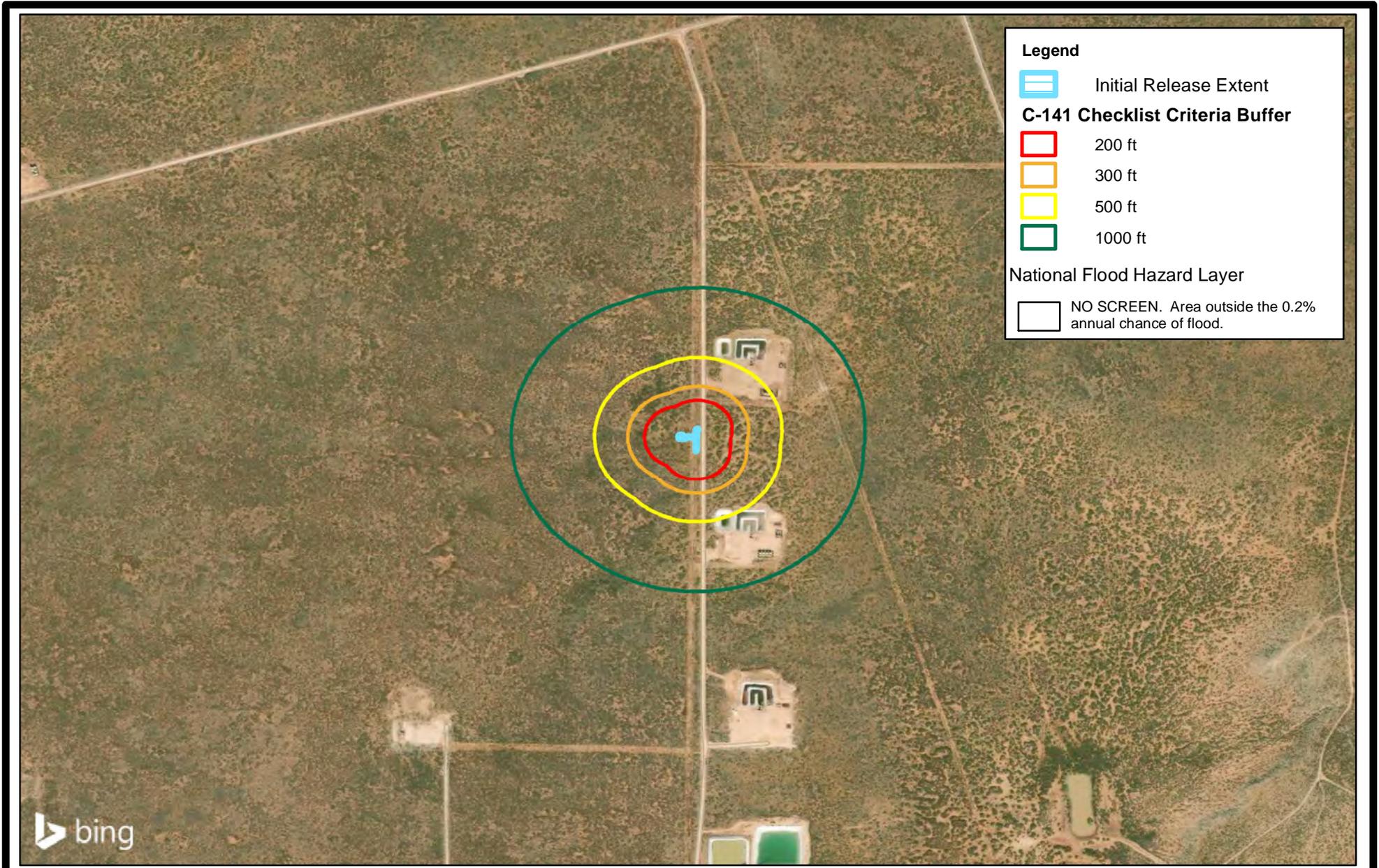
Karst Potential

Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 9

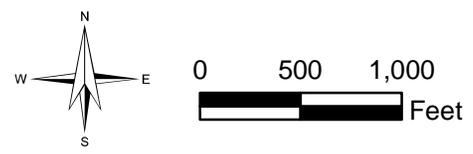
March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 10_femaFlood.mxd



Legend

-  Initial Release Extent
- C-141 Checklist Criteria Buffer**
-  200 ft
-  300 ft
-  500 ft
-  1000 ft
- National Flood Hazard Layer**
-  NO SCREEN. Area outside the 0.2% annual chance of flood.

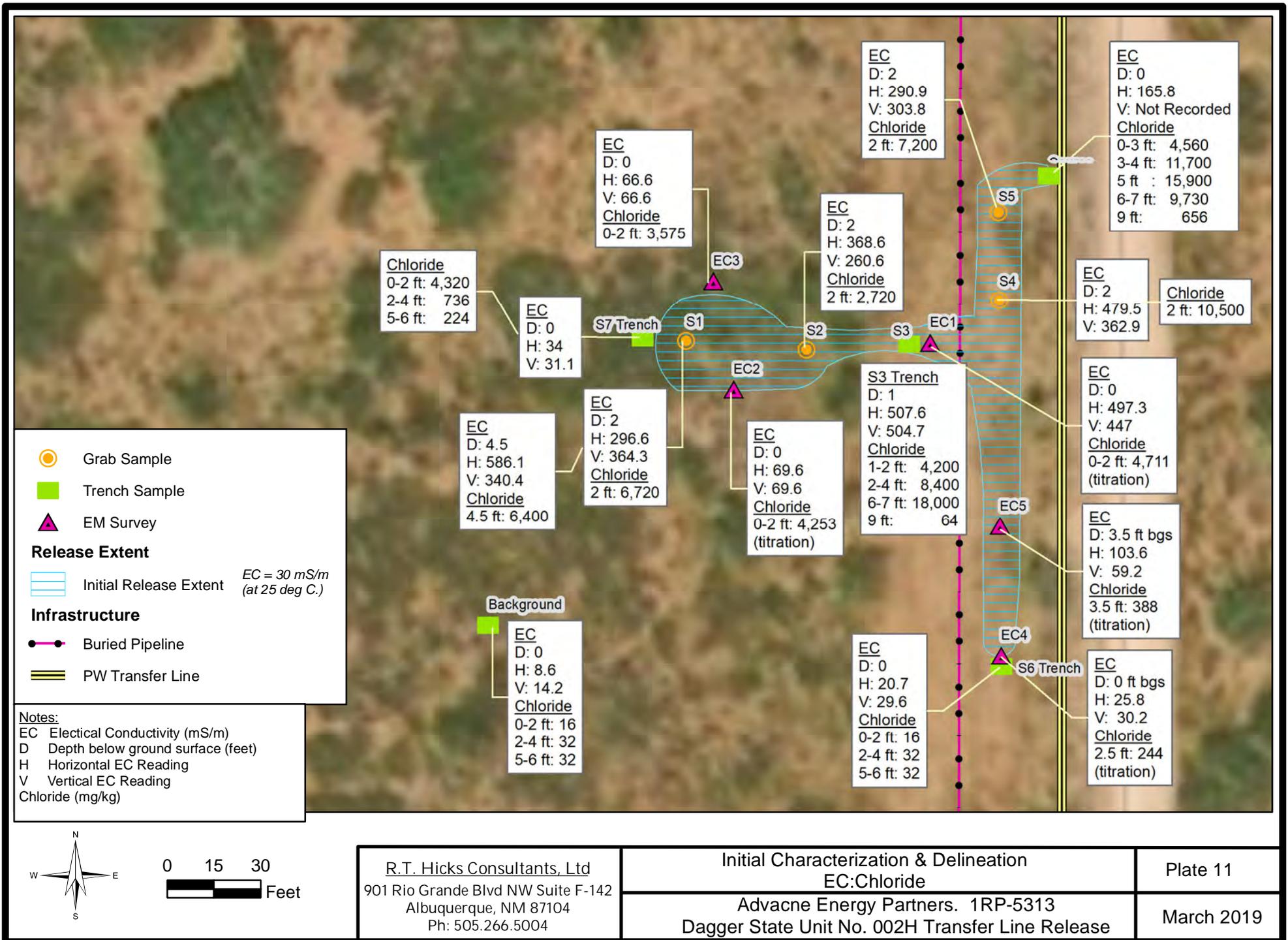


R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

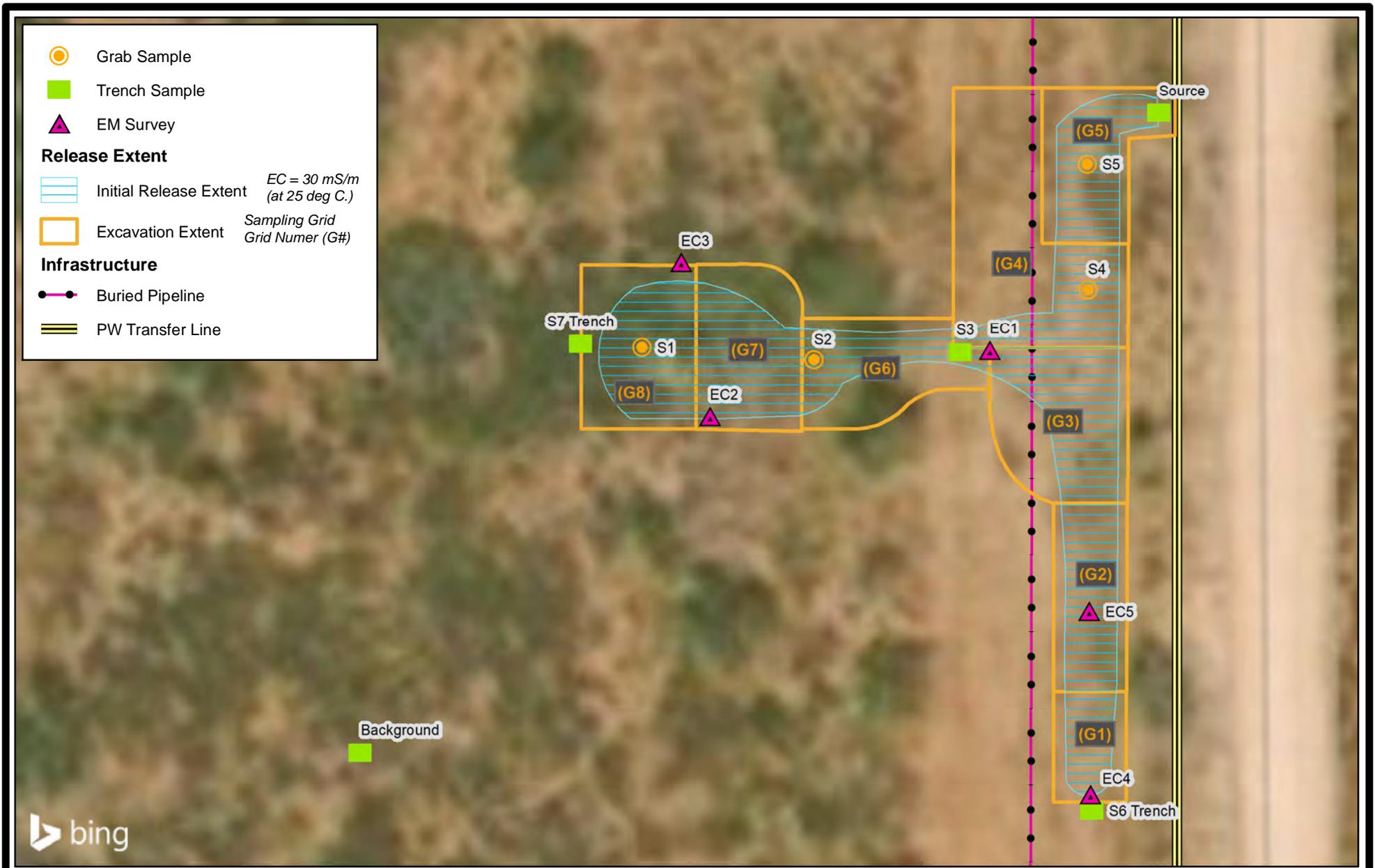
FEMA Flood Map
 Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 10
 March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 11 Characterization Sampling.mxd



M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 12 Release Extend and Grid.mxd

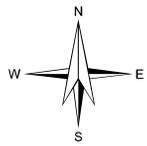


R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Initial Release Extent Relative to
 Excavation Extent and Sample Grid
 Advacne Energy Partners. 1RP-5313
 Dagger State Unit No. 002H Transfer Line Release

Plate 12
 March 2019

M:\Advance Energy\BSU 2H Release\ap_nmGIS\Plates\Plate 13 Confirmation Sampling.mxd



R.T. Hicks Consultants, Ltd
 901 Rio Grande Blvd NW Suite F-142
 Albuquerque, NM 87104
 Ph: 505.266.5004

Chloride Confirmation Sampling Results Relative to Sampling Grid
Advacne Energy Partners. 1RP-5313 Dagger State Unit No. 002H Transfer Line Release

Plate 13
March 2019

Tables

R.T. Hicks Consultants, Ltd.

901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

Table 2
Initial Characterization Sampling

DSU #2H
1RP-5313

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	EM 38	EM 38	EM 38 TC	EM 38 TC	Cl (titration)	Cl mg/kg
				mS/m	mS/m	mS/m	mS/m		
NMOCD Limits									
0 - 4 feet & "not in-use"				Horizontal	Vertical	Horizontal	Vertical		
				100mS/m	100mS/m	100mS/m	100mS/m		600
> 4 ft or "in-use"									20,000
Background	12/12/2018	0	No	5.8	9.6	8.6	14.2		
Background	12/17/2018	0 - 2	No						16
Background	12/17/2018	2 - 4	No						32
Background	12/17/2019	5 - 6	No						32
Grid 1 (EC4; S6 Trench)									
EC4	12/01/2018	0	No	17.9	21	25.8	30.2		
EC4	12/01/2018	2.5	No					244	
S6 Trench (Grid 1 S. Wall)	12/17/2018	0	No	14	20	20.7	29.6		
S6 Trench (Grid 1 S. Wall)	12/17/2018	0 - 2	No						16
S6 Trench (Grid 1 S. Wall)	12/17/2018	2 - 4	No						32
S6 Trench	12/17/2018	5 - 6	No						32
Grid 2 (EC5)									
EC-5	12/19/2018	3.5	Yes	70	40	103.6	59.2	388	
Grid 3									
Grid 4 (S4)									
S4 Base	12/10/2018	2	Yes	333	252	479.5	362.9		10,500
S4 Wall	12/10/2018	0 - 1	Yes						5,330
S4 Wall	12/10/2018	0 - 2	Yes						8,530
G5 (Source Area, S5)									
S5 Base	12/10/2018	2	Yes	202	211	290.9	303.8		7,200
S5 Wall	12/10/2018	0 - 1	Yes						4,800
S5 Wall	12/10/2018	1 - 2	Yes						7,860
Source (at metal coupling)	12/11/2018		Yes	112		165.8			
Source Wall	12/11/2018	0 - 3	Yes						4,560
Source Wall	12/11/2018	3 - 4	Yes						11,700
Source Base	12/11/2018	5	Yes						15,900
Source Wall	12/19/2018	6 - 7	Yes						9,730
Source Wall	12/19/2018	9	Yes						656
Source Wall (sluffing from wall)	12/19/2018	12	Yes						7,060

Table 2
Initial Characterization Sampling

DSU #2H
1RP-5313

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	EM 38	EM 38	EM 38 TC	EM 38 TC	Cl (titration)	Cl mg/kg
				mS/m	mS/m	mS/m	mS/m		
NMOCD Limits				Horizontal	Vertical	Horizontal	Vertical		
0 - 4 feet & "not in-use"				100mS/m	100mS/m	100mS/m	100mS/m		600
> 4 ft or "in-use"									20,000
Grid 6 (S2, S3, EC1)									
S2 Base	12/10/2018	2	No	256	181	368.6	260.6	1,355	2,720
S2 N. Wall	12/10/2018	0 - 2	No						5,760
S2 S. Wall	12/10/2018	0 - 2	No						5,840
EC1	12/11/2018	0	No	336	302	497.3	447.0		
EC1	12/11/2018	0 - 2	No					4,711	
S3 Base	12/10/2018	2	No	277	250	398.9	360.0	5,575	8,000
S3 N. Wall	12/10/2018	0 - 2	No						96
S3 S. Wall	12/10/2018	0 - 2	No						48
S3 Trench	12/17/2018	1	No	343	341	507.6	504.7		
S3 Trench	12/17/2018	1 - 2	No						4,200
S3 Trench	12/17/2018	2 - 4	No						8,400
S3 Trench	12/17/2018	6 - 7	No						18,000
S3 Trench	12/17/2018	9	No						64
Grid 7 (EC2)									
EC-2	12/11/2018	0	No	47	47	69.6	69.6		
EC-2	12/11/2018	0 - 2	No					4,253	
Grid 8 (S1, EC3)									
S1 N. Wall	12/10/2018	0 - 2	No						5,280
S1 S. Wall	12/10/2018	0 - 2	No						832
S1 Base	12/10/2018	2	No	206	253	296.6	364.3	4,992	6,720
S1 Base	12/17/2018	4.5	No	396	230	586.1	340.4	4,588	6,400
EC3	12/11/2018	0	No	45	45	66.6	66.6		
EC3	12/11/2018	0 - 2	No					3,575	
S7 Trench	12/17/2018	0	No	23	21	34.0	31.1		
S7 Trench	12/17/2018	0 - 2	No						4,320
S7 Trench	12/17/2018	2 - 4	No						736
S7 Trench	12/17/2018	5 - 6	No						224

Table 3
Excavation Confirmation Sample Data

DSU #2H
1RP-5313

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	Cl mg/kg	GRO+DRO mg/kg	TPH Ext mg/kg	BTEX mg/kg	Benzene mg/kg
NMOCD Limits								
0 - 4 feet & "not in-use"				600	--	2,500	10	50
> 4 ft or "in-use"				20,000	1,000	2,500	10	50
Grid 1 (EC4; S6 Trench)								
S6 Trench (Grid 1 S. Wall)	12/17/2018	0 - 2	No	16				
S6 Trench (Grid 1 S. Wall)	12/17/2018	2 - 4	No	32				
Grid 1 (G1) E. Wall	12/18/2018	0 - 2	Yes	32				
Grid 1 (G1) W. Wall	12/18/2018	0 - 2	Yes	16				
Grid 1 (G1) Base	12/18/2018	2	Yes	48				
Grid 2 (EC5)								
Grid 2 (G2) E. Wall	01/21/2019	0-4	Yes	80	<20	<30	<0.3	<0.05
Grid 2 (G2) W. Wall	01/30/2019	0-4	Yes	32	<20	<30	<0.3	<0.05
Grid 2 (G2) Base	01/21/2019	4.5	Yes	3,040	<20	<30	<0.3	<0.05
Grid 3								
Grid 3 (G3) SW Wall	01/30/2019	0-4	Yes	48	<20	<30	<0.3	<0.05
Grid 3 (G3) E. Wall	01/21/2019	0-4	Yes	16	<20	<30	<0.3	<0.05
Grid 3 (G3) Base	01/21/2019	4.5	Yes	1,480	<20	<30	<0.3	<0.05
Grid 4 (S4)								
Grid 4 (G4) W. Wall	01/29/2019	0-4	Yes	32	<20	<30	<0.3	<0.05
Grid 4 (G4) E. Wall	01/21/2019	0-4	Yes	144	<20	<30	<0.3	<0.05
Grid 4 (G4) Base	01/21/2019	4.5	Yes	11,200	<20	<30	<0.3	<0.05
G5 (Source Area, S5)								
Grid 5 (G5) N. Wall	01/21/2019	0-4	Yes	176	<20	<30	<0.3	<0.05
Grid 5 (G5) S. Wall	01/21/2019	0-4	Yes	64	<20	<30	<0.3	<0.05
Grid 5 (G5) SE Wall	01/30/2019	0-4	Yes	16	<20	<30	<0.3	<0.05
Grid 5 (G5) NE Wall	01/30/2019	0-4	Yes	464	<20	<30	<0.3	<0.05
Grid 5 (G5) Base	01/21/2019	4.5	Yes	7,600	<20	<30	<0.3	<0.05

Table 3
Excavation Confirmation Sample Data

DSU #2H

1RP-5313

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	Cl mg/kg	GRO+DRO mg/kg	TPH Ext mg/kg	BTEX mg/kg	Benzene mg/kg
NMOCD Limits								
0 - 4 feet & "not in-use"				600	--	2,500	10	50
> 4 ft or "in-use"				20,000	1,000	2,500	10	50
Grid 6 (S2, S3, EC1)								
Grid 6 (G6) N. Wall	01/29/2018	0-4	No	32	<20	<30	<0.3	<0.05
Grid 6 (G6) S. Wall	01/21/2019	0-4	No	544	<20	<30	<0.3	<0.05
Grid 6 (G6) Base	01/21/2019	4.5	No	9,330	<20	<30	<0.3	<0.05
Grid 7 (EC2)								
Grid 7 (G7) S. Wall	01/29/2019	0-4	No	32	<20	<30	<0.3	<0.05
Grid 7 (G7) N. Wall	01/21/2019	0-4	No	32	<20	<30	<0.3	<0.05
Grid 7 (G7) Base	01/21/2019	4.5	No	8,800	<20	<30	<0.3	<0.05
Grid 8 (S1, EC3)								
Grid 8 (G8) N. Wall	01/21/2019	0-4	No	16	<20	<30	<0.3	<0.05
Grid 8 (G8) S. Wall	01/29/2019	0-4	No	16	<20	<30	<0.3	<0.05
Grid 8 (G8) W. Wall	01/21/2019	0-4	No	400	<20	<30	<0.3	<0.05
Grid 8 (G8) Base	01/21/2019	4.5	No	3,080	<20	<30	<0.3	<0.05

Appendix A

OSE Well Logs

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104



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 00854 POD1	1 1 2	33	21S	33E	633879	3590223

Driller License: 421	Driller Company: GLENN'S WATER WELL SERVICE	
Driller Name: GLENN, CLARK A."CORKY" (LD)		
Drill Start Date: 06/22/1996	Drill Finish Date: 06/22/1996	Plug Date:
Log File Date: 07/11/1996	PCW Rcv Date: 10/17/2013	Source: Shallow
Pump Type: SUBMER	Pipe Discharge Size: 2.875	Estimated Yield: 100 GPM
Casing Size: 6.63	Depth Well: 950 feet	Depth Water: 600 feet

Water Bearing Stratifications:	Top	Bottom	Description
	755	805	Sandstone/Gravel/Conglomerate
	860	890	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	760	950

Meter Number: 8514	Meter Make: BLANCETT
Meter Serial Number: 040711711	Meter Multiplier: 1.0000
Number of Dials: 7	Meter Type: Diversion
Unit of Measure: Barrels 42 gal.	Return Flow Percent:
Usage Multiplier:	Reading Frequency: Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount
03/15/2004	2004	121	A	jw		0
03/29/2004	2004	69871	A	jw		0
05/17/2004	2004	8758	A	jw		2.651
06/11/2004	2004	79641	A	jw		2.998
01/27/2012	2012	18062553	A	RPT	Initial reading	0
03/01/2012	2012	19039807	A	RPT		2.999
05/29/2013	2013	179696	A	RPT	initial reading	0
10/07/2013	2013	460774	A	RPT	Qtr IV 2013	36.229
11/11/2013	2013	540326	A	RPT		10.254
01/01/2014	2013	614283	A	RPT		9.533
10/01/2014	2014	1122654	A	RPT		65.526
01/01/2015	2014	1212343	A	RPT		11.560
03/31/2015	2015	1307063	A	RPT		12.209
06/27/2015	2015	1369556	A	RPT		8.055

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr Comment	Mtr Amount
09/30/2015	2015	1371471	A	RPT	0.247
10/22/2015	2015	1400502	A	RPT	3.742
11/30/2015	2015	1400502	A	RPT	0
04/28/2016	2016	1464116	A	RPT "JD33 Well"	8.199
06/01/2016	2016	1464116	A	RPT	0
07/27/2016	2016	1496980	A	RPT JD33 Well	4.236
09/01/2016	2016	1510835	A	RPT JD 33 Well	1.786
09/30/2016	2016	1517146	A	RPT	0.813
10/31/2016	2016	1531178	A	RPT JD 33 well	1.809
11/29/2016	2016	1553285	A	RPT JD33 Well	2.849
03/01/2017	2017	1583100	A	RPT	3.843

**YTD Meter Amounts:	Year	Amount
	2004	5.649
	2012	2.999
	2013	56.016
	2014	77.086
	2015	24.253
	2016	19.692
	2017	3.843

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



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 01349 POD1	2	3	1	27	21S	33E	635304	3591576

Driller License: 421	Driller Company: GLENN'S WATER WELL SERVICE		
Driller Name: GLENN, CLARK A. "CORKY"			
Drill Start Date: 07/12/2014	Drill Finish Date: 07/18/2014	Plug Date:	
Log File Date: 08/04/2014	PCW Rcv Date:	Source: Artesian	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 7.00	Depth Well: 1188 feet	Depth Water: 572 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	990	1188	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	721	1188

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
205 WELLS, NEW MEXICO

2014 SEP 10 PM 2:15

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP-1355 (East Standard South) *** Revised 09/09/14 ***				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) Merchants/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) 575-398-2424			
	WELL OWNER MAILING ADDRESS P. O. Box 692				CITY Tatum	STATE NM	ZIP 88267	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 26	SECONDS 54.8	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	33	58.3	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE1/4NW1/4SW1/4 Section 27, Township 21 South, Range 33 East on Merchants Livestock Land								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421	NAME OF LICENSED DRILLER Corky Glenn			NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.			
	DRILLING STARTED 07/22/14	DRILLING ENDED 07/29/14	DEPTH OF COMPLETED WELL (FT) 1,192'	BORE HOLE DEPTH (FT) 1,192'	DEPTH WATER FIRST ENCOUNTERED (FT) 925'			
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 582'			
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0'	40'	20"	16"	None	15 1/2"	.250	
	0'	757'	14 3/4"	9 5/8"	Thread & Collar	8.921"	36 lbs.	none
	690'	1,192'	8 3/4"	7" (502.14' Total) 317.96 perforated on bottom of liner	Thread & Collar	6.366"	23 lbs.	1/8"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0'	40'	20"	Cemented	2 yds.	Top Pour		
0	757'	14 3/4"	Float and shoe cemented to surface	962	Circulated			

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	CP-1355	POD NUMBER	1
LOCATION	Expl	TRN NUMBER	549450
			215.33E.27.312
			PAGE 1 OF 2

DEPTH (feet bgl)	THICKNESS (feet)		COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			
0	4'	4'	Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
4'	28'	24'	Caliche	<input type="radio"/> Y <input checked="" type="radio"/> N	
28'	120'	92'	Sand & Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
120'	260'	140'	Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
260'	757'	497'	Red & Brown Shale, and Clay (some blue)	<input type="radio"/> Y <input checked="" type="radio"/> N	
757'	815'	58'	Red & Brown Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
815'	840'	25'	Blue Clay & Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
840'	925'	85'	Red and Brown Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
925'	975'	50'	Watersand and Gravel	<input checked="" type="radio"/> Y <input type="radio"/> N	
975'	1,185'	210'	Watersand (brown sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
1,185'	1,192'	7'	Red Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input checked="" type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP				TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
	0' to 757' drilled with mud. 757' to 1192' drilled with air and foam.	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Coakly Glen H DATE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	CP-1355	POD NUMBER	1
LOCATION	215.33E.27.312	TRN NUMBER	549450
			PAGE 2 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
 2014 AUG - 9 AM 9:53
 88267

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP - 1355 East Standard (South)				OSE FILE NUMBER(S)				
	WELL OWNER NAME(S) Merchants Livestock/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) (575)398-2424				
	WELL OWNER MAILING ADDRESS P.O. Box 692				CITY Tatum		STATE NM		ZIP 88267
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32	MINUTES 26	SECONDS 54.8	N		* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
			LONGITUDE 103	33	58.3	W		* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE/NW/SW Sec. 27, T21S, R33E on Merchants Livestock Land									

2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421		NAME OF LICENSED DRILLER Corky Glenn			NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.				
	DRILLING STARTED 7/29/14		DRILLING ENDED 8/2/14		DEPTH OF COMPLETED WELL (FT) 1192'		BORE HOLE DEPTH (FT) 1192'		DEPTH WATER FIRST ENCOUNTERED (FT) 925'	
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)								STATIC WATER LEVEL IN COMPLETED WELL (FT) 582'	
	DRILLING FLUID: <input type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:									
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:									
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)		
	FROM	TO								
	0'	40'	20"	16"	None	15 1/2"	.250			
	0'	757'	14 3/4"	9 5/8"	Thread and Collar	.352	36 lbs.	none		
	757'	1192'	8 3/4"	7"	Thread and Collar	6.5"	23 lbs.	1/8"		

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	0'	40'	20"	Cemented	2 yds	Top Pour
	0'	757'	14 3/4"	Float and Shoe Cemented to Surface	1034	Circulated

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)			
FILE NUMBER	CP-1355	POD NUMBER	1	TRN NUMBER	549450
LOCATION	Exp1	21S.33E.27.312			PAGE 1 OF 2

DEPTH (feet bgl)	THICKNESS (feet)		COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			
0'	4'	4'	Soil	<input type="radio"/> Y <input checked="" type="radio"/> N	
4'	28'	24'	Caleche	<input type="radio"/> Y <input checked="" type="radio"/> N	
28'	120'	92'	Sand and Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
120'	260'	140'	Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
260'	757'	497'	Red and Brown Shale and Clay(some blue)	<input type="radio"/> Y <input checked="" type="radio"/> N	
757'	815'	58'	Red and Brown Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
815'	840'	25'	Blue Clay and Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
840'	925'	85'	Red and Brown Shale(some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
925'	975'	50'	Watersand and Gravel	<input checked="" type="radio"/> Y <input type="radio"/> N	
975'	1185'	210'	Watersand(brown sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
1185'	1192'	7'	Red Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
				<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP				TOTAL ESTIMATED WELL YIELD (gpm): 50	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
	0' to 757' drilled with mud. 757' to 1192' drilled with air and foam.	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE
	<i>Corky Glenn</i> / <u>Corky Glenn</u>	<u>8/7/14</u>

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	<u>CP-1355</u>	POD NUMBER	<u>1</u>
LOCATION	<u>Exp1</u>	TRN NUMBER	<u>549450</u>
	<u>215.33E.27.312</u>		PAGE 2 OF 2



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 01356 POD1	4 2 2	33	21S	33E	634560	3590014

Driller License: 421	Driller Company: GLENN'S WATER WELL SERVICE		
Driller Name: GLENN, CLARK A."CORKY"			
Drill Start Date: 08/01/2014	Drill Finish Date: 08/09/2014	Plug Date:	
Log File Date: 08/25/2014	PCW Rcv Date:	Source: Artesian	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 6.37	Depth Well: 1098 feet	Depth Water: 555 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	765	795	Sandstone/Gravel/Conglomerate
	795	825	Shale/Mudstone/Siltstone
	825	920	Sandstone/Gravel/Conglomerate
	920	935	Shale/Mudstone/Siltstone
	935	968	Sandstone/Gravel/Conglomerate
	968	976	Shale/Mudstone/Siltstone
	976	1005	Sandstone/Gravel/Conglomerate
	1005	1092	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	735	1098

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



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 01357 POD1	4 3 1	27 21S 33E	634782	3591347

Driller License: 421	Driller Company: GLENN'S WATER WELL SERVICE		
Driller Name: GLENN, CLARK A."CORKY"			
Drill Start Date: 08/16/2014	Drill Finish Date: 08/26/2014	Plug Date:	
Log File Date: 09/10/2014	PCW Rcv Date:	Source: Artesian	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size: 6.37	Depth Well: 1286 feet	Depth Water: 578 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	945	960	Sandstone/Gravel/Conglomerate
	960	1077	Shale/Mudstone/Siltstone
	1077	1215	Sandstone/Gravel/Conglomerate
	1215	1286	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	846	1286

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Appendix B

EM Survey Calibration

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745
✦ Durango, CO ✦ Carlsbad, NM ✦ Midland, TX

ELECTROMAGNETIC SURVEY CALIBRATION TO CHLORIDE

Revised: March 7, 2019 (DRAFT)

Electromagnetic surveys (EM Survey) are commonly used to measure electrical conductivity (EC, “soil salinity”) in soils. Employing a Geonics EM38 (Exhibit 1), field personnel can effectively delineate the horizontal extent of a produced water release by measuring EC and monitoring for EC changes between background and higher EC readings. Increasing EC measurements suggest that the edge of the release extent is approaching.



Exhibit 1: Measuring EC with the EM38 in the vertical position.

The EM38 detects EC from the surface to a depth of approximately 4-feet. EC measurements can be obtained in the vertical or horizontal positions. In the vertical position, EC readings are weighted toward the lower depths of 3 to 4 feet. In the horizontal position, EC readings are weighted toward the upper 0 to 2 feet. If a higher EC reading is obtained in the horizontal position than the vertical position, produced water has likely impacted the upper surface more than at lower depths. If a higher EC reading is obtained in the vertical position than the horizontal position, produced water has likely impacted lower soils than the upper surface soils.

The below charts show the correlation between EC and Chloride (Cl) measurements. The EC measurements collected in the field were temperature corrected (TC) to 25° Celsius. Table 1 shows

7 March 2019

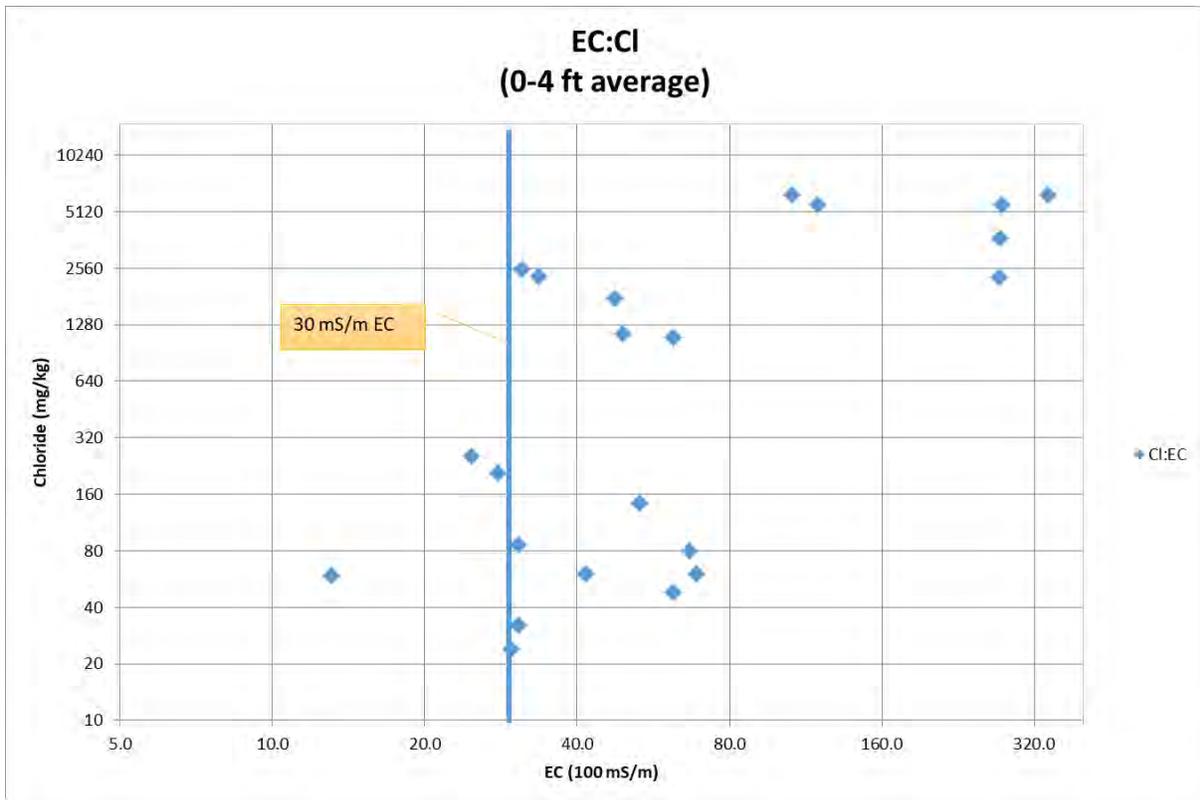
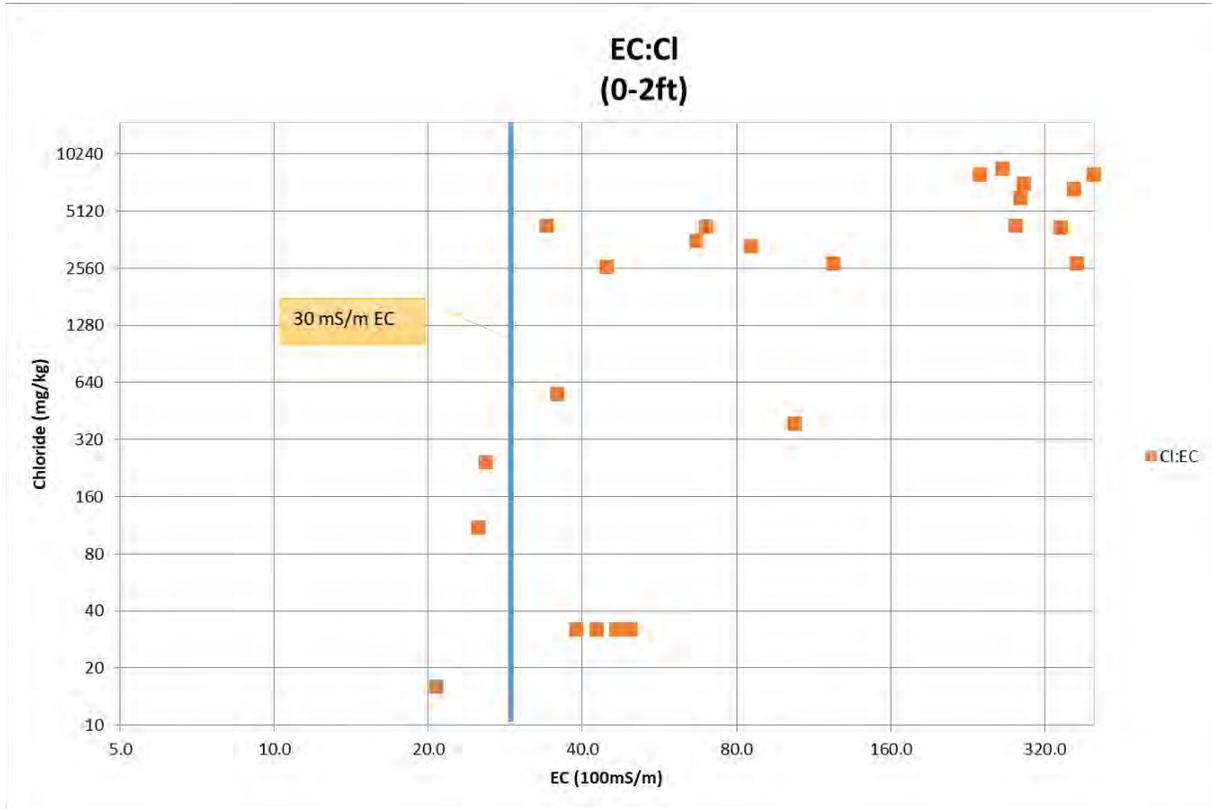
Page 2

the data, collected by R.T. Hicks Consultants, which was used for the EC:Cl correlation. Table 2 shows the temperature correction factor.

Analysis of data shows that an EC_{tc} value greater than 30 mS/m is the delineation curve where chloride in soil will be greater than 600 mg/kg. Furthermore, field personnel can survey a release and identify “hot spots” with the highest EC readings. These hot spots are likely areas where impacted to near surface soils (0 to 4 feet) from released produced water will be the greatest.

R.T. Hicks Consultants, LTD

7 March 2019
Page 3



R.T. Hicks Consultants, LTD

Table 1
EM 38 Survey
EC:Cl

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	EM38 (Horizontal)	EM38 (vertical)	EM38 TC (Horizontal)	EM38 TC (vertical)	Cl (titration)	Cl mg/kg
				100mS/m	100mS/m	100mS/m	100mS/m		
Background	12/12/2018	0	No	4.2	6.8	6.2	10.1		
Background	12/17/2018	0 - 2	No						16
Background	12/17/2018	2 - 4	No						32
Background	12/17/2018	5 - 6	No						32
S1 Base	12/10/2018	2	No	206	253.0	296.6	364.3	4,992	6,720
S1 Base	12/17/2018	4.5	No	396	230.0	586.1	340.4	4,588	6,400
S2 Base	12/10/2018	2	No	256	181.0	368.6	260.6	1,355	2,720
S3 Base	12/10/2018	2	No	277	250.0	398.9	360.0	5,575	8,000
S3 Trench	12/17/2018	1	No	343	341.0	343	341.0		
S3 Trench	12/17/2018	1 - 2	No						4,200
S3 Trench	12/17/2018	2 - 4	No						8,400
S4 Base	12/10/2018	2	Yes	333	252.0	479.5	362.9		10,500
S5 Base	12/10/2018	2	Yes	202	211.0	290.9	303.8		7,200
S6 Trench	12/17/2018	0	No	14	20.0	20.7	29.6		
S6 Trench	12/17/2018	0 - 2	No						16
S6 Trench	12/17/2018	2 - 4	No						32
S6 Trench	12/17/2018	5 - 6	No						32
S7 Trench	12/17/2018	0	No	23	21.0	34.0	31.1		
S7 Trench	12/17/2018	0 - 2	No						4,320
S7 Trench	12/17/2018	2 - 4	No						736
S7 Trench	12/17/2018	5 - 6	No						224
EC-1	12/11/2018	0	No	336	302.0	497.3	447.0		
EC-1	12/11/2018	0 - 2	No					4,711	
EC-2	12/11/2018	0	No	47	47.0	69.6	69.6	4,253	
EC-2	12/11/2018	0 - 2	No					4,253	
EC-3	12/11/2018	0	No	45		66.6			
EC-3	12/11/2018	0 - 2	No					3,575	
EC-4	12/01/2018	2.5	No	17.9	21.0	25.8	30.2		
EC-4	12/01/2018	2.5	No					244	
EC-5	12/19/2018	3.5	Yes	70	40.0	103.6	59.2		
EC-5	12/19/2018	3.5	Yes					388	

Table 1
EM 38 Survey
EC:Cl

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	EM38 (Horizontal	EM38 (vertical)	EM38 TC (Horizontal	EM38 TC (vertical)	Cl (titration)	Cl mg/kg
				100mS/m	100mS/m	100mS/m	100mS/m		
Tee (release origin)	12/15/2018	0	Yes	189.6	153.4	280.6	227.0		
Tee (release origin)	04/26/2018	0-0.5	Yes						4,800
Tee (release origin)	04/26/2018	0.5-1.0	Yes						830
Tee (release origin)	04/26/2018	1-2	Yes						1,100
Tee (release origin)	04/26/2018	2-3	Yes						1,100
Tee (release origin)	04/26/2018	3-4	Yes						1,500
Tee (release origin)	04/26/2018	4-5	Yes						1,600
83 ft East (of origin)	12/15/2018	0		193.8	185.2	286.8	274.1		
83 ft East (of origin)	01/16/2019	0-2	Yes						6,000
83 ft East (of origin)	01/16/2019	2-4	Yes						1,420
83 ft East (of origin)	01/16/2019	5	Yes						1,760
35 ft Northeast (of origin)	12/15/2018	0	No	189.8	186.3	280.9	275.7		
35 ft Northeast (of origin)	01/16/2019	0-2	No						4,320
35 ft Northeast (of origin)	01/16/2019	2-4	No						3,920
35 ft Northeast (of origin)	01/16/2019	0-4	No						5,600
35 ft Northeast (of origin)	01/16/2019	5	No						5,040
230 ft East (of origin)	12/15/2018	0		178.8	71.8	264.6	106.3		
230 ft East (of origin)	01/16/2019	0-2	Yes						8,660
230 ft East (of origin)	01/16/2019	2-4	Yes						960
230 ft East (of origin)	01/16/2019	0-4	Yes						6,320
230 ft East (of origin)	01/16/2019	5	Yes						368
390 ft East (of origin)	12/15/2018	0		161.5	80.8	239.0	119.6		
390 ft East (of origin)	01/16/2019	0-2							8,000
390 ft East (of origin)	01/16/2019	2-4							624
390 ft East (of origin)	01/16/2019	0-4							5,600
390 ft East (of origin)	01/16/2019	4.3							3,360
Background	12/15/2018	0	No	16.9	20.7	25.0	30.6		
Background	01/30/2019	0-2	No						110
Background	01/30/2019	2-4	No						61
Background	01/30/2019	5	No						120
EC-01	12/15/2018	0	No	30.1	33.3	44.5	49.3		
EC-01	01/16/2019	0-2	No						2,600
EC-01	01/16/2019	2-4	No						352
EC-01	01/16/2019	0-4	No						1,140
EC-01	01/16/2019	4.3	No						64
EC-02	12/15/2018	0	No	18.3	16.7	27.1	24.7		
EC-02	01/16/2019	0-4	No						256
EC-02	01/16/2019	4.3	No						7,200
EC-03	12/15/2018	0	No	21.8	20.7	32.3	30.6		
EC-03	01/16/2019	0-4	No						32
EC-03	01/16/2019	5.0	No						48
EC-04	12/15/2018	0	No	83.4	22.7	123.4	33.6		
EC-04	01/16/2019	0-2	No						2,720
EC-04	01/16/2019	2-4	No						688
EC-04	01/16/2019	0-4	No						2,320
EC-04	01/16/2019	5.0	No						192
EC-05	12/15/2018	0	No	57.4	32.1	85.0	47.5		
EC-05	01/16/2019	0-2	No						3,360
EC-05	01/16/2019	2-4	No						1,010
EC-05	01/16/2019	0-4	No						1,760
EC-05	01/16/2019	5.0	No						704

Table 1
EM 38 Survey
EC:Cl

Sample Name	Date	Depth (ft)	In-Use (Yes/No)	EM38 (Horizontal)	EM38 (vertical)	EM38 TC (Horizontal)	EM38 TC (vertical)	Cl (titration)	Cl mg/kg
				100mS/m	100mS/m	100mS/m	100mS/m		
HA1	1/9/2019	0	Yes	27.5	18.0	42.6	27.9		
HA1	1/23/2019	0-2	Yes						32
HA1	1/23/2019	2-4	Yes						304
HA1	1/23/2019	0-4	Yes						208
HA2	1/9/2019	0	Yes	25.0	34.3	38.8	53.2		
HA2	1/23/2019	0-2	Yes						32
HA2	1/23/2019	2-4	Yes						160
HA2	1/23/2019	0-4	Yes						144
HA3	1/9/2019	0	Yes	23.0	40.0	35.7	62.0		
HA3	1/23/2019	0-2	Yes						560
HA3	1/23/2019	2-4	Yes						1840
HA3	1/23/2019	0-4	Yes						1100
HA1	1/9/2019	0	Yes	30.0	40.0	46.5	62.0		
HA1	1/23/2019	0-2	Yes						32
HA1	1/23/2019	2-4	Yes						64
HA1	1/23/2019	0-4	Yes						48
HA1	1/23/2019	4-4.2	Yes						64
HA2	1/23/2019	0	Yes	32.0	43.0	49.6	66.7		
HA2	1/23/2019	0-2	Yes						32
HA2	1/23/2019	2-4	Yes						112
HA2	1/23/2019	0-4	Yes						80
HA2	1/23/2019	0-4.4	Yes						96
Trench 1	2/24/2019	0	Yes	187.0	145.0	273.0	211.7		
Trench 1	2/24/2019	0-4	Yes						2300
Trench 1	2/24/2019	4.5	Yes						<60
Trench 2	2/24/2019	0	Yes	6.0	9.0	8.8	13.1		
Trench 2	2/24/2019	0-4	Yes						<59
Trench 2	2/24/2019	4.5	Yes						<60
HA-01	2/24/2019	1	No	32.7	47.2	47.7	68.9		
HA-01	2/24/2019	1-4	No						<60
HA-01	2/24/2019	4.5	No						<60
HA-02	2/24/2019	0	No	18.0	28.5	26.3	41.6		
HA-02	2/24/2019	0-4	No						<60
HA-02	2/24/2019	4.5	No						<60

Table 2
EC Temperature Correction Factor

Date	Correction Factor
01/01	1.55
01/02	1.55
01/03	1.55
01/04	1.55
01/05	1.55
01/06	1.55
01/07	1.55
01/08	1.55
01/09	1.55
01/10	1.55
01/11	1.56
01/12	1.56
01/13	1.56
01/14	1.56
01/15	1.56
01/16	1.56
01/17	1.56
01/18	1.56
01/19	1.56
01/20	1.56
01/21	1.55
01/22	1.55
01/23	1.55
01/24	1.55
01/25	1.55
01/26	1.55
01/27	1.55
01/28	1.55
01/29	1.55
01/30	1.55
01/31	1.55
02/01	1.53
02/02	1.53
02/03	1.53
02/04	1.53
02/05	1.53
02/06	1.53
02/07	1.53
02/08	1.53
02/09	1.53
02/10	1.53
02/11	1.5
02/12	1.5
02/13	1.5
02/14	1.5
02/15	1.5
02/16	1.5
02/17	1.5
02/18	1.5
02/19	1.5
02/20	1.5
02/21	1.46
02/22	1.46
02/23	1.46
02/24	1.46
02/25	1.46
02/26	1.46
02/27	1.46
02/28	1.46
02/29	1.46

Table 2
EC Temperature Correction Factor

Date	Correction Factor
03/01	1.42
03/02	1.42
03/03	1.42
03/04	1.42
03/05	1.42
03/06	1.42
03/07	1.42
03/08	1.42
03/09	1.42
03/10	1.42
03/11	1.36
03/12	1.36
03/13	1.36
03/14	1.36
03/15	1.36
03/16	1.36
03/17	1.36
03/18	1.36
03/19	1.36
03/20	1.36
03/21	1.3
03/22	1.3
03/23	1.3
03/24	1.3
03/25	1.3
03/26	1.3
03/27	1.3
03/28	1.3
03/29	1.3
03/30	1.3
03/31	1.3
04/01	1.24
04/02	1.24
04/03	1.24
04/04	1.24
04/05	1.24
04/06	1.24
04/07	1.24
04/08	1.24
04/09	1.24
04/10	1.24
04/11	1.18
04/12	1.18
04/13	1.18
04/14	1.18
04/15	1.18
04/16	1.18
04/17	1.18
04/18	1.18
04/19	1.18
04/20	1.18
04/21	1.13
04/22	1.13
04/23	1.13
04/24	1.13
04/25	1.13
04/26	1.13
04/27	1.13
04/28	1.13
04/29	1.13
04/30	1.13

Table 2
EC Temperature Correction Factor

Date	Correction Factor
05/01	1.08
05/02	1.08
05/03	1.08
05/04	1.08
05/05	1.08
05/06	1.08
05/07	1.08
05/08	1.08
05/09	1.08
05/10	1.08
05/11	1.04
05/12	1.04
05/13	1.04
05/14	1.04
05/15	1.04
05/16	1.04
05/17	1.04
05/18	1.04
05/19	1.04
05/20	1.04
05/21	1
05/22	1
05/23	1
05/24	1
05/25	1
05/26	1
05/27	1
05/28	1
05/29	1
05/30	1
05/31	1
06/01	0.97
06/02	0.97
06/03	0.97
06/04	0.97
06/05	0.97
06/06	0.97
06/07	0.97
06/08	0.97
06/09	0.97
06/10	0.97
06/11	0.94
06/12	0.94
06/13	0.94
06/14	0.94
06/15	0.94
06/16	0.94
06/17	0.94
06/18	0.94
06/19	0.94
06/20	0.94
06/21	0.92
06/22	0.92
06/23	0.92
06/24	0.92
06/25	0.92
06/26	0.92
06/27	0.92
06/28	0.92
06/29	0.92
06/30	0.92

Table 2
EC Temperature Correction Factor

Date	Correction Factor
07/01	0.91
07/02	0.91
07/03	0.91
07/04	0.91
07/05	0.91
07/06	0.91
07/07	0.91
07/08	0.91
07/09	0.91
07/10	0.91
07/11	0.91
07/12	0.91
07/13	0.91
07/14	0.91
07/15	0.91
07/16	0.91
07/17	0.91
07/18	0.91
07/19	0.91
07/20	0.91
07/21	0.91
07/22	0.91
07/23	0.91
07/24	0.91
07/25	0.91
07/26	0.91
07/27	0.91
07/28	0.91
07/29	0.91
07/30	0.91
07/31	0.91
08/01	0.92
08/02	0.92
08/03	0.92
08/04	0.92
08/05	0.92
08/06	0.92
08/07	0.92
08/08	0.92
08/09	0.92
08/10	0.92
08/11	0.93
08/12	0.93
08/13	0.93
08/14	0.93
08/15	0.93
08/16	0.93
08/17	0.93
08/18	0.93
08/19	0.93
08/20	0.93
08/21	0.91
08/22	0.91
08/23	0.91
08/24	0.91
08/25	0.91
08/26	0.91
08/27	0.91
08/28	0.91
08/29	0.91
08/30	0.91
08/31	0.91

Table 2
EC Temperature Correction Factor

Date	Correction Factor
09/01	0.98
09/02	0.98
09/03	0.98
09/04	0.98
09/05	0.98
09/06	0.98
09/07	0.98
09/08	0.98
09/09	0.98
09/10	0.98
09/11	1.01
09/12	1.01
09/13	1.01
09/14	1.01
09/15	1.01
09/16	1.01
09/17	1.01
09/18	1.01
09/19	1.01
09/20	1.01
09/21	1.05
09/22	1.05
09/23	1.05
09/24	1.05
09/25	1.05
09/26	1.05
09/27	1.05
09/28	1.05
09/29	1.05
09/30	1.05
10/01	1.09
10/02	1.09
10/03	1.09
10/04	1.09
10/05	1.09
10/06	1.09
10/07	1.09
10/08	1.09
10/09	1.09
10/10	1.09
10/11	1.14
10/12	1.14
10/13	1.14
10/14	1.14
10/15	1.14
10/16	1.14
10/17	1.14
10/18	1.14
10/19	1.14
10/20	1.14
10/21	1.2
10/22	1.2
10/23	1.2
10/24	1.2
10/25	1.2
10/26	1.2
10/27	1.2
10/28	1.2
10/29	1.2
10/30	1.2
10/31	1.2

Table 2
EC Temperature Correction Factor

Date	Correction Factor
11/01	1.26
11/02	1.26
11/03	1.26
11/04	1.26
11/05	1.26
11/06	1.26
11/07	1.26
11/08	1.26
11/09	1.26
11/10	1.26
11/11	1.32
11/12	1.32
11/13	1.32
11/14	1.32
11/15	1.32
11/16	1.32
11/17	1.32
11/18	1.32
11/19	1.32
11/20	1.32
11/21	1.38
11/22	1.38
11/23	1.38
11/24	1.38
11/25	1.38
11/26	1.38
11/27	1.38
11/28	1.38
11/29	1.38
11/30	1.38
12/01	1.44
12/02	1.44
12/03	1.44
12/04	1.44
12/05	1.44
12/06	1.44
12/07	1.44
12/08	1.44
12/09	1.44
12/10	1.44
12/11	1.48
12/12	1.48
12/13	1.48
12/14	1.48
12/15	1.48
12/16	1.48
12/17	1.48
12/18	1.48
12/19	1.48
12/20	1.48
12/21	1.52
12/22	1.52
12/23	1.52
12/24	1.52
12/25	1.52
12/26	1.52
12/27	1.52
12/28	1.52
12/29	1.52
12/30	1.52
12/31	1.52

Appendix C

Laboratory Certificates of Analyses

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104



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

December 11, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: DAGGER 2H PW

Enclosed are the results of analyses for samples received by the laboratory on 12/10/18 16:30.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/10/2018	Sampling Date:	12/10/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	DAGGER 2H PW	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S 1 BASE @ 2' (H803613-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6720	16.0	12/11/2018	ND	432	108	400	3.77	

Sample ID: S 1 S. WALL @ 0-2' (H803613-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	12/11/2018	ND	432	108	400	3.77	

Sample ID: S 1 N. WALL @ 0-2' (H803613-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	12/11/2018	ND	432	108	400	3.77	

Sample ID: S 2 BASE @ 2' (H803613-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2720	16.0	12/11/2018	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/10/2018	Sampling Date:	12/10/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	DAGGER 2H PW	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S 2 N. WALL @ 0-2' (H803613-05)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	12/11/2018	ND	448	112	400	0.00	QM-07

Sample ID: S 2 S. WALL @ 0- 2' (H803613-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5840	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 3 BASE @ 2' (H803613-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 3 S. WALL @ 0-2' (H803613-08)

Chloride, SM4500CI-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	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 3 N. WALL @ 0-2' (H803613-09)

Chloride, SM4500CI-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	12/11/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/10/2018	Sampling Date:	12/10/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	DAGGER 2H PW	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S 4 BASE @ 2' (H803613-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10500	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 4 1-2' (H803613-11)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8530	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 4 0-1' (H803613-12)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5330	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 5 BASE @ 2' (H803613-13)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7200	16.0	12/11/2018	ND	448	112	400	0.00	

Sample ID: S 5 1-2' (H803613-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7860	16.0	12/11/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/10/2018	Sampling Date:	12/10/2018
Reported:	12/11/2018	Sampling Type:	Soil
Project Name:	DAGGER 2H PW	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

Sample ID: S 5 0-1' (H803613-15)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	12/11/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- 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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <i>RT Hicks consultants</i>		BILL TO				ANALYSIS REQUEST																					
Project Manager: <i>Andrew Parker</i>		P.O. #:																									
Address: <i>on file</i>		Company: <i>RT Hicks</i>																									
City: State: Zip:		Attn: <i>Andrew Parker</i>																									
Phone #: Fax #:		Address:																									
Project #: Project Owner:		City:																									
Project Name:		State: Zip:																									
Project Location: <i>Dagger 2H PW</i>		Phone #:																									
Sampler Name: <i>Andrew</i>		Fax #:																									
FOR LAB USE ONLY				MATRIX												PRESERV.		SAMPLING									
Lab I.D.	Sample I.D.	(CYMBOR) (COMP.)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME													
<i>H803613</i>																											
<i>1</i>	<i>S1 Base @ 2ft</i>	<i>C</i>				<i>X</i>							<i>12/6/18</i>	<i>13:00</i>	<i>X</i>	<i>X</i>	<i>X</i>										
<i>2</i>	<i>S1 S.WALL 0-2 ft</i>	<i>C</i>												<i>13:05</i>													
<i>3</i>	<i>S1 N.WALL 0-2</i>	<i>C</i>												<i>13:10</i>													
<i>4</i>	<i>S2 Base @ 2ft</i>													<i>13:15</i>													
<i>5</i>	<i>S2 N.WALL 0-2</i>													<i>13:20</i>													
<i>6</i>	<i>S2 S.WALL 0-2</i>													<i>13:30</i>													
<i>7</i>	<i>S3 Base @ 2ft</i>													<i>13:40</i>													
<i>8</i>	<i>S3 S.WALL 0-2 ft</i>													<i>13:45</i>													
<i>9</i>	<i>S3 N.WALL 0-2 ft</i>													<i>13:50</i>													

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: <i>[Signature]</i>	Date: <i>12/10/18</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <i>16:30</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		<p><i>CHLORIDE RFLV</i></p> <p><i>Rush!</i></p> <p><i>Text when Cl. are emailed to 970-570-9535</i></p>	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other:	Cool Intact	<i>JP</i>		
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <i>RT Hicks Consultants</i>		BILL TO				ANALYSIS REQUEST																		
Project Manager: <i>Andrew Parker</i>		P.O. #:																						
Address:		Company: <i>RT Hicks</i>																						
City:	State:	Zip:	Attn: <i>Andrew Parker</i>																					
Phone #:	Fax #:	Address:																						
Project #:	Project Owner:		City:																					
Project Name:		State:			Zip:																			
Project Location: <i>Daguer 2H PW</i>		Phone #:																						
Sampler Name:		Fax #:																						
FOR LAB USE ONLY																								
Lab I.D.	Sample I.D.	(GRAB OR (C)OMP. # CONTAINERS	MATRIX				PRESERV.		SAMPLING															
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME	CI	TPH EXT	BTEX, BENZENE								
<i>H803613</i>																								
<i>10</i>	<i>S4 Box @ 2ft</i>	<i>6</i>			<i>X</i>							<i>12-10</i>	<i>14:00</i>	<i>X</i>	<i>X</i>	<i>X</i>								
<i>11</i>	<i>S4 1-2 ft</i>												<i>14:05</i>											
<i>12</i>	<i>S4 0-1 ft</i>												<i>14:10</i>											
<i>13</i>	<i>S5 Box @ 2ft</i>												<i>14:15</i>											
<i>14</i>	<i>S5 1-2 ft</i>												<i>14:20</i>											
<i>15</i>	<i>S5 0-1 ft</i>												<i>14:25</i>											

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: <i>[Signature]</i>	Date: <i>12-10</i>	Received By: <i>[Signature]</i>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <i>16:30</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: <i>Rush!</i>	
	Time:		<i>CHLORIDE RFN</i>	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)	<i>PAGE 2</i>	
Sampler - UPS - Bus - Other:	Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>TO.</i>	<i>HOLD BTEX, TPH, BENZENE</i>	

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



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

December 12, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: DAGGER 2H PW

Enclosed are the results of analyses for samples received by the laboratory on 12/11/18 16:25.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/11/2018	Sampling Date:	12/11/2018
Reported:	12/12/2018	Sampling Type:	Soil
Project Name:	DAGGER 2H PW	Sampling Condition:	** (See Notes)
Project Number:	ADVANCE ENERGY	Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM		

Sample ID: SOURCE BASE @ 5' (H803623-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15900	16.0	12/12/2018	ND	416	104	400	0.00	

Sample ID: SOURCE 0-3' (H803623-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	12/12/2018	ND	416	104	400	0.00	

Sample ID: SOURCE 3-4' (H803623-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11700	16.0	12/12/2018	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: RT Hicks Construction	P.O. #:
Project Manager: Andrew Parker	Company:
Address:	Attn:
City:	Address:
State:	City:
Zip:	State:
Phone #:	Phone #:
Fax #:	Fax #:
Project #:	Project Owner:
Project Name: Advance Energy	State:
Project Location: Dryer 2H Pu	Zip:
Sampler Name: Andrew Parker	Phone #:
FOR LAB USE ONLY	Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
H909623	1 Source Box @ 5 ft	G	6	X						12-11	10:30	Chloride
	2 Source 0-3 ft	G	6	X						12-11	10:35	
	3 Source 3-4 ft	G	6	X						12-11	10:40	

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: *Andrew Parker* Date: 12-11-18
 Relinquished By: *Scott Jensen* Date: 12-16-25
 Received By: *Scott Jensen*

Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 REMARKS: 24 RSH
 RFV

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: 17:40 / #97
 Sample Condition: Cool Intact Yes No
 Checked By: *RFV*

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



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

December 18, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/18/18 8:05.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/18/2018	Sampling Date:	12/17/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	BSU 2H	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: S 3 TRENCH 1-2' (H803671-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4240	16.0	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 3 TRENCH 2-4' (H803671-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 3 TRENCH 6-7' (H803671-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18000	16.0	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 3 TRENCH 9' (H803671-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/18/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/18/2018	Sampling Date:	12/17/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	BSU 2H	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: S 6 TRENCH 0-2' (H803671-05)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 6 TRENCH 2-4' (H803671-06)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 6 TRENCH 5-6' (H803671-07)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 7 TRENCH 0-2' (H803671-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4320	16.0	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 7 TRENCH 2-4' (H803671-09)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	12/18/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/18/2018	Sampling Date:	12/17/2018
Reported:	12/18/2018	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	BSU 2H	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: S 7 TRENCH 5-6' (H803671-10)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	12/18/2018	ND	448	112	400	0.00	

Sample ID: BACKGROUND 0-2' (H803671-11)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: BACKGROUND 2-4' (H803671-12)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: BACKGROUND 5-6' (H803671-13)

Chloride, SM4500CI-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	12/18/2018	ND	448	112	400	0.00	

Sample ID: S 1 TRENCH 4.5' (H803671-14)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6400	16.0	12/18/2018	ND	448	112	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: RT Hicks Consultants
Project Manager: Andrew Parker
Address: on-file
City: State: Zip:
Phone #: Fax #:
Project #: Advance Energy Project Owner:
Project Name: BSU 2H
Project Location:
Sampler Name: Andrew Parker
BILL TO ANALYSIS REQUEST
P.O. #:
Company: RT Hicks
Attn: Andrew Parker
Address:
City:
State: Zip:
Phone #: 970-570-9535
Fax #:

Table with columns: Lab I.D., Sample I.D., (G)RAB-OR-(C)OMP., # CONTAINERS, MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV., SAMPLING (DATE, TIME). Includes handwritten entries for 10 samples from S3 and S6/S7 trenches.

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.

Relinquished By: [Signature] Date: 12-18-18 Time: 8:05
Received By: [Signature]
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 5:90 #97
Sample Condition: Cool Intact [Yes/No]
CHECKED BY: (Initials) TO.
REMARKS: R FNNW - Rush! Page 1/2 Text when results emailed.

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>RT Hicks consultants</u>		BILL TO		ANALYSIS REQUEST									
Project Manager: <u>Andrew Parker</u>		P.O. #:											
Address: <u>on-file</u>		Company: <u>RT Hicks</u>											
City:	State:	Zip:	Attn: <u>Andrew Parker</u>										
Phone #:	Fax #:	Address:											
Project #: <u>Advance Energy</u>	Project Owner:		City:										
Project Name: <u>BSU 211</u>	State:		Zip:										
Project Location:	Phone #: <u>970-570-5353</u>		Fax #:										
Sampler Name: <u>Andrew Parker</u>													

FOR LAB USE ONLY		Lab I.D.	Sample I.D.	(GRAB OR (C)OMP. # CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME	Chloride
GROUNDWATER	WASTEWATER				SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :					
		<u>H803671</u>														
		<u>11</u>	<u>Background 0-2 ft</u>	<u>G</u>			<u>X</u>						<u>12-17-18</u>	<u>15:40</u>	<u>X</u>	
		<u>12</u>	<u>Background 2-4 ft</u>	<u>↓</u>									<u>↓</u>	<u>15:35</u>	<u>↓</u>	
		<u>13</u>	<u>Background 5-6 ft</u>	<u>↓</u>									<u>↓</u>	<u>15:30</u>	<u>↓</u>	
		<u>14</u>	<u>S1 Trench 4.5 ft</u>	<u>↓</u>									<u>↓</u>	<u>16:10</u>	<u>↓</u>	

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: <u>[Signature]</u>	Date: <u>12-18-18</u> Time: <u>8:05</u>	Received By: <u>[Signature]</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>5.9c #97</u>		Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <u>TO.</u>	
REMARKS: <u>RFNN</u> <u>Rush!</u> <u>2/2</u>				

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



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

December 19, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/18/18 17:15.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/18/2018	Sampling Date:	12/18/2018
Reported:	12/19/2018	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU 2H	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: G1 BASE @ 2' (H803694-01)

Chloride, SM4500CI-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	12/19/2018	ND	416	104	400	0.00	

Sample ID: G1 E WALL 0- 2' (H803694-02)

Chloride, SM4500CI-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	12/19/2018	ND	416	104	400	0.00	

Sample ID: G1 W WALL 0- 2' (H803694-03)

Chloride, SM4500CI-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	12/19/2018	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

December 20, 2018

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 12/19/18 16:10.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	12/19/2018	Sampling Date:	12/19/2018
Reported:	12/20/2018	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	Cool & Intact
Project Number:	BSU 2H	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SOURCE 6-7' (H803725-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9730	16.0	12/20/2018	ND	400	100	400	3.92	

Sample ID: SOURCE 9' (H803725-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	12/20/2018	ND	400	100	400	3.92	

Sample ID: SOURCE 12' (H803725-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7060	16.0	12/20/2018	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: RT Hicks consultants
Project Manager: Andrew Parker
Address: on file
City: State: Zip:
Phone #: Fax #:
Project #: Project Owner:
Project Name: Advance Energy
Project Location: BSU 2H
Sampler Name: Andrew Parker

BILL TO ANALYSIS REQUEST
P.O. #:
Company: RT Hicks
Attn: Andrew Parker
Address:
City:
State: Zip:
Phone #:
Fax #:

Table with columns: Lab I.D., Sample I.D., (GRAB OR (C)OMP., # CONTAINERS, MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV. (ACID/BASE, ICE/COOL, OTHER), SAMPLING (DATE, TIME). Includes handwritten entries for samples 1, 2, and 3.

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.

Relinquished By: [Signature] Date: 12-19-18 Time: 16:10
Received By: Jodi Henson
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 5.9c #97
Sample Condition: Cool Intact
CHECKED BY: [Signature]
REMARKS: RFN Text when results emailed 970-570-9535
Sampled and brought directly to lab

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



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

January 29, 2019

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/22/19 15:40.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G2 EW 0-4 (H900221-01)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/23/2019	ND	416	104	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 87.1 % 41-142

Surrogate: 1-Chlorooctadecane 94.6 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G2 WW (H900221-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3520	16.0	01/23/2019	ND	416	104	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G2 B (H900221-03)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	01/23/2019	ND	416	104	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 89.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.7 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G3 SW (H900221-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2080	16.0	01/23/2019	ND	416	104	400	3.92	

Sample ID: G3 WW 0-4 (H900221-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	01/23/2019	ND	416	104	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G3 EW 0-4 (H900221-06)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

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	01/23/2019	ND	416	104	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G3 B (H900221-07)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.4 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1480	16.0	01/23/2019	ND	416	104	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 89.3 % 41-142

Surrogate: 1-Chlorooctadecane 86.5 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G4 WW 0-4 (H900221-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10900	16.0	01/23/2019	ND	400	100	400	3.92	QM-07	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G4 EW 0-4 (H900221-09)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 88.0 % 41-142

Surrogate: 1-Chlorooctadecane 83.5 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G4 B (H900221-10)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 91.2 % 41-142

Surrogate: 1-Chlorooctadecane 86.8 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G5 NW 0-4 (H900221-11)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 91.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G5 WW 0-4 (H900221-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3280	16.0	01/23/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G5 SW 0-4 (H900221-13)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 92.8 % 41-142

Surrogate: 1-Chlorooctadecane 88.5 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G5 EW 0-4 (H900221-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	01/23/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G5 B (H900221-15)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 88.9 % 41-142

Surrogate: 1-Chlorooctadecane 84.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G6 NW 0-4 (H900221-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	01/23/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G6 SW 0-4 (H900221-17)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/28/2019	ND	221	110	200	0.996	
DRO >C10-C28*	<10.0	10.0	01/28/2019	ND	217	108	200	0.132	
EXT DRO >C28-C36	<10.0	10.0	01/28/2019	ND					

Surrogate: 1-Chlorooctane 93.8 % 41-142

Surrogate: 1-Chlorooctadecane 90.4 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G6 B (H900221-18)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9330	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	222	111	200	3.58	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	244	122	200	16.4	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 87.8 % 41-142

Surrogate: 1-Chlorooctadecane 84.1 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G7 SW 0-4 (H900221-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	01/23/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G7 NW 0-4 (H900221-20)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129

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	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	222	111	200	3.58	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	244	122	200	16.4	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 90.0 % 41-142

Surrogate: 1-Chlorooctadecane 87.0 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G7 B (H900221-21)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	182	91.2	200	0.296	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	200	100	200	0.940	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 93.2 % 41-142

Surrogate: 1-Chlorooctadecane 83.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G8 NW 0-4 (H900221-22)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 73.3-129

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	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	182	91.2	200	0.296	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	200	100	200	0.940	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 89.5 % 41-142

Surrogate: 1-Chlorooctadecane 84.1 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G8 SW 0-4 (H900221-23)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	01/23/2019	ND	400	100	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G8 WW 0-4 (H900221-24)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 88.6 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	182	91.2	200	0.296	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	200	100	200	0.940	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 88.2 % 41-142

Surrogate: 1-Chlorooctadecane 78.8 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 ANDREW PARKER
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/22/2019	Sampling Date:	01/21/2019
Reported:	01/29/2019	Sampling Type:	Soil
Project Name:	ADVANCE ENERGY	Sampling Condition:	** (See Notes)
Project Number:	BSU #2	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: G8 B (H900221-25)

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	01/28/2019	ND	1.85	92.7	2.00	0.379	
Toluene*	<0.050	0.050	01/28/2019	ND	1.97	98.3	2.00	0.292	
Ethylbenzene*	<0.050	0.050	01/28/2019	ND	2.06	103	2.00	1.82	
Total Xylenes*	<0.150	0.150	01/28/2019	ND	5.94	99.0	6.00	3.01	
Total BTEX	<0.300	0.300	01/28/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3080	16.0	01/23/2019	ND	400	100	400	3.92	

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	01/29/2019	ND	182	91.2	200	0.296	
DRO >C10-C28*	<10.0	10.0	01/29/2019	ND	200	100	200	0.940	
EXT DRO >C28-C36	<10.0	10.0	01/29/2019	ND					

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 79.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- 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

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: R.T. Hicks Consultants
Project Manager: Andrew Parker
Address: on-file
City: State: Zip:
Phone #: Fax #:
Project #: Advance Project Owner:
Project Name: Advance Energy
Project Location: BSU #2 or Tomahawk SWD Trench 5
Sampler Name: Erica Hart

Table with columns: Lab I.D., Sample I.D., (G)RAB OR (C)OMP., # CONTAINERS, MATRIX (GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER), PRESERV. (ACID/BASE, ICE / COOL, OTHER), SAMPLING (DATE, TIME). Includes handwritten entries for samples 1-10 and analysis results for Chlorides, BTEX, and TPHExt.

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.

Relinquished By: Erica Hart
Date: 1/22/19
Time: 15:40
Received By: Tamara [Signature]
Phone Result: [] Yes [] No
Fax Result: [] Yes [] No
REMARKS: Email results to andrew@rthicksconsult.com
Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 15.6c #97
Sample Condition: Cool Intact [] Yes [] No
Checked By: (Initials) TO

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



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: R.T. Hicks Consultants		BILL TO		ANALYSIS REQUEST											
Project Manager: Andrew Parker		P.O. #:													
Address: on-file		Company: R.T. Hicks													
City:	State:	Zip:	Attn: Andrew Parker												
Phone #:	Fax #:	Address:													
Project #: Advance	Project Owner:		City:												
Project Name: Advance Energy		State: Zip:													
Project Location: BSU #2 or Tomahawk SWD Trench 5		Phone #: 970-570-9535													
Sampler Name: Erica Hart		Fax #:													

FOR LAB USE ONLY		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		SAMPLING		DATE	TIME	REMARKS	
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:					
H900221																Chloride (push) BTEX added 1/25/19 TPHExt not push May require add. tests.	
11	G5NW0-4		1			✓							1/21/19				
12	G5W0-4		1			✓											
13	G5SW0-4		1			✓											
14	G5EW0-4		1			✓											
15	G5B		1			✓											
16	G6NW0-4		1			✓											
17	G6SW0-4		1			✓											
18	G6B		1			✓											
19	G7SW0-4		1			✓											
20	G7NW0-4		1			✓											

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: Erica Hart	Date: 1/20/19	Received By: Tamara Eldaker	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 15:40		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: Email results to andrew@rthicksconsult.com	
	Time:			
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other: 15.1c #77	Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	TO		

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



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

February 01, 2019

ANDREW PARKER

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/30/19 8:10.

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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G 6 N WALL 0-4'	H900312-01	Soil	29-Jan-19 14:00	30-Jan-19 08:10
G 7 S WALL 0-4'	H900312-02	Soil	29-Jan-19 14:15	30-Jan-19 08:10
G 8 S WALL 0-4'	H900312-03	Soil	29-Jan-19 14:30	30-Jan-19 08:10
G 4 W WALL 0-4'	H900312-04	Soil	29-Jan-19 15:15	30-Jan-19 08:10

BTEX and TPH analysis were added to the work order on 01/30/19 as per Andrew. This is the revised report that replaces the one sent on 01/30/19.

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

**G 6 N WALL 0-4'
H900312-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	9013001	AC	30-Jan-19	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9013103	ms	31-Jan-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %		73.3-129	9013103	ms	31-Jan-19	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	

Surrogate: 1-Chlorooctane			90.9 %		41-142	9013102	MS	31-Jan-19	8015B	
---------------------------	--	--	--------	--	--------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			85.4 %		37.6-147	9013102	MS	31-Jan-19	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

**G 7 S WALL 0-4'
H900312-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	9013001	AC	30-Jan-19	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9013103	ms	31-Jan-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			103 %	73.3-129		9013103	ms	31-Jan-19	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	

Surrogate: 1-Chlorooctane			86.8 %	41-142		9013102	MS	31-Jan-19	8015B	
---------------------------	--	--	--------	--------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			77.6 %	37.6-147		9013102	MS	31-Jan-19	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY
Project Number: BSU #2H
Project Manager: ANDREW PARKER
Fax To: NONE

Reported:
01-Feb-19 14:07

G 8 S WALL 0-4'
H900312-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	16.0		16.0	mg/kg	4	9013001	AC	30-Jan-19	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9013103	ms	31-Jan-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.3-129 9013103 ms 31-Jan-19 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	

Surrogate: 1-Chlorooctane 93.5 % 41-142 9013102 MS 31-Jan-19 8015B

Surrogate: 1-Chlorooctadecane 84.6 % 37.6-147 9013102 MS 31-Jan-19 8015B

Cardinal Laboratories

* = Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

**G 4 W WALL 0-4'
H900312-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	9013001	AC	30-Jan-19	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9013103	ms	31-Jan-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9013103	ms	31-Jan-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	73.3-129		9013103	ms	31-Jan-19	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9013102	MS	31-Jan-19	8015B	

Surrogate: 1-Chlorooctane			90.5 %	41-142		9013102	MS	31-Jan-19	8015B	
---------------------------	--	--	--------	--------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			80.7 %	37.6-147		9013102	MS	31-Jan-19	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9013001 - General Prep - Wet Chem										
Blank (9013001-BLK1)										
Prepared & Analyzed: 30-Jan-19										
Chloride	ND	16.0	mg/kg							
LCS (9013001-BS1)										
Prepared & Analyzed: 30-Jan-19										
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (9013001-BSD1)										
Prepared & Analyzed: 30-Jan-19										
Chloride	416	16.0	mg/kg	400		104	80-120	3.92	20	

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
---	--	------------------------------

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 9013103 - Volatiles

Blank (9013103-BLK1)

Prepared & Analyzed: 31-Jan-19

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.101		mg/kg	0.100		101	73.3-129			

LCS (9013103-BS1)

Prepared & Analyzed: 31-Jan-19

Benzene	2.36	0.050	mg/kg	2.00		118	72.2-131			
Toluene	2.24	0.050	mg/kg	2.00		112	71.7-126			
Ethylbenzene	2.20	0.050	mg/kg	2.00		110	68.9-126			
Total Xylenes	6.73	0.150	mg/kg	6.00		112	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0991		mg/kg	0.100		99.1	73.3-129			

LCS Dup (9013103-BSD1)

Prepared & Analyzed: 31-Jan-19

Benzene	2.37	0.050	mg/kg	2.00		119	72.2-131	0.804	6.91	
Toluene	2.26	0.050	mg/kg	2.00		113	71.7-126	0.837	7.12	
Ethylbenzene	2.22	0.050	mg/kg	2.00		111	68.9-126	1.03	7.88	
Total Xylenes	6.80	0.150	mg/kg	6.00		113	71.4-125	1.10	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0999		mg/kg	0.100		99.9	73.3-129			

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE, NM, 87104	Project: ADVANCE ENERGY Project Number: BSU #2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 01-Feb-19 14:07
--	--	------------------------------

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 9013102 - General Prep - Organics

Blank (9013102-BLK1)		Prepared & Analyzed: 31-Jan-19								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.3		mg/kg	50.0		90.6	41-142			
Surrogate: 1-Chlorooctadecane	39.1		mg/kg	50.0		78.1	37.6-147			

LCS (9013102-BS1)		Prepared & Analyzed: 31-Jan-19								
GRO C6-C10	171	10.0	mg/kg	200		85.3	76.5-133			
DRO >C10-C28	177	10.0	mg/kg	200		88.5	72.9-138			
Total TPH C6-C28	348	10.0	mg/kg	400		86.9	78-132			
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.8	41-142			
Surrogate: 1-Chlorooctadecane	38.3		mg/kg	50.0		76.6	37.6-147			

LCS Dup (9013102-BSD1)		Prepared & Analyzed: 31-Jan-19								
GRO C6-C10	173	10.0	mg/kg	200		86.6	76.5-133	1.48	20.6	
DRO >C10-C28	180	10.0	mg/kg	200		89.8	72.9-138	1.49	20.6	
Total TPH C6-C28	353	10.0	mg/kg	400		88.2	78-132	1.48	18	
Surrogate: 1-Chlorooctane	44.9		mg/kg	50.0		89.8	41-142			
Surrogate: 1-Chlorooctadecane	39.7		mg/kg	50.0		79.5	37.6-147			

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>RT Hicks consultants</u>		BILL TO		ANALYSIS REQUEST							
Project Manager: <u>Andrew Parker</u>		P.O. #:		<div style="display: flex; justify-content: space-between;"> <div style="width: 15%;">Chloride</div> <div style="width: 15%;">BTEX</div> <div style="width: 15%;">7 added</div> <div style="width: 15%;">1/30/19</div> <div style="width: 15%;">PH EXT</div> </div>							
Address: <u>on-file</u>		Company: <u>RT Hicks</u>									
City: State: Zip:		Attn: <u>Andrew Parker</u>									
Phone #: Fax #:		Address:									
Project #: Project Owner:		City:									
Project Name: <u>Advance Energy</u>		State: Zip:									
Project Location: <u>BSU #2H</u>		Phone #:									
Sampler Name: <u>Andrew Parker</u>		Fax #:									

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS	MATRIX						PRESERV.			SAMPLING		
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	
<u>H900312</u>														
	<u>1 66 N. WALL 0-4 ft</u>	<u>C</u>			<u>X</u>							<u>1:29:19</u>	<u>14:00</u>	<u>X</u>
	<u>2 67 S. WALL 0-4 ft</u>	<u>↓</u>			<u>↓</u>							<u>↓</u>	<u>14:15</u>	<u>↓</u>
	<u>3 68-5 68 S. WALL 0-4 ft</u>	<u>↓</u>			<u>↓</u>							<u>↓</u>	<u>14:30</u>	<u>↓</u>
	<u>4 64 W WALL 0-4 ft</u>											<u>↓</u>	<u>15:15</u>	<u>X</u>

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: <u>[Signature]</u>	Date: <u>1-30-19</u>	Received By: <u>[Signature]</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <u>0810</u>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		<u>RFN Thanks</u>	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)	<u>Rush!</u>	
Sampler - UPS - Bus - Other: <u>2.4c #97</u>	Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<u>TO</u>		

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



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

February 06, 2019

ANDREW PARKER
R T HICKS CONSULTANTS
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE, NM 87104

RE: ADVANCE ENERGY

Enclosed are the results of analyses for samples received by the laboratory on 01/31/19 8:00.

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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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
Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G5 S-E WALL 0-4'	H900350-01	Soil	30-Jan-19 14:00	31-Jan-19 08:00
G5 N-E WALL 0-4'	H900350-02	Soil	30-Jan-19 14:15	31-Jan-19 08:00
G2 W WALL 0-4'	H900350-03	Soil	30-Jan-19 15:00	31-Jan-19 08:00
G2 + 2' W WALL 0-4'	H900350-04	Soil	30-Jan-19 15:30	31-Jan-19 08:00
G3 SW WALL 0-4'	H900350-05	Soil	30-Jan-19 13:30	31-Jan-19 08:00

BTEX and TPH were added to samples -01, -02, -04 and -05 on 01/31/19 as per Andrew. This is the revised report that replaces the one sent on 01/31/19.

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

**G5 S-E WALL 0-4'
H900350-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	16.0		16.0	mg/kg	4	9013114	AC	31-Jan-19	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9020303	ms	03-Feb-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9020303	ms	03-Feb-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9020303	ms	03-Feb-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9020303	ms	03-Feb-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9020303	ms	03-Feb-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %		73.3-129	9020303	ms	03-Feb-19	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9020109	MS	01-Feb-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9020109	MS	01-Feb-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9020109	MS	01-Feb-19	8015B	

Surrogate: 1-Chlorooctane			80.5 %		41-142	9020109	MS	01-Feb-19	8015B	
---------------------------	--	--	--------	--	--------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			82.5 %		37.6-147	9020109	MS	01-Feb-19	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104

Project: ADVANCE ENERGY
Project Number: BSU 2H
Project Manager: ANDREW PARKER
Fax To: NONE

Reported:
06-Feb-19 10:31

G5 N-E WALL 0-4'**H900350-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories**Inorganic Compounds**

Chloride	464		16.0	mg/kg	4	9013114	AC	31-Jan-19	4500-CI-B	
----------	-----	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9020407	MS	05-Feb-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			92.6 %		73.3-129	9020407	MS	05-Feb-19	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	

Surrogate: 1-Chlorooctane			95.0 %		41-142	9020109	MS	02-Feb-19	8015B	
---------------------------	--	--	--------	--	--------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			94.2 %		37.6-147	9020109	MS	02-Feb-19	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

**G2 W WALL 0-4'
H900350-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	688		16.0	mg/kg	4	9013114	AC	31-Jan-19	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

**G2 + 2' W WALL 0-4'
H900350-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	32.0		16.0	mg/kg	4	9013114	AC	31-Jan-19	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9020407	MS	05-Feb-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			96.2 %		73.3-129	9020407	MS	05-Feb-19	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	

Surrogate: 1-Chlorooctane			89.7 %		41-142	9020109	MS	02-Feb-19	8015B	
---------------------------	--	--	--------	--	--------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			88.2 %		37.6-147	9020109	MS	02-Feb-19	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

**G3 SW WALL 0-4'
H900350-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

Cardinal Laboratories

Inorganic Compounds

Chloride	48.0		16.0	mg/kg	4	9013114	AC	31-Jan-19	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Toluene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	9020407	MS	05-Feb-19	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	9020407	MS	05-Feb-19	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			91.4 %		73.3-129	9020407	MS	05-Feb-19	8021B	
---------------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	9020109	MS	02-Feb-19	8015B	

Surrogate: 1-Chlorooctane			74.8 %		41-142	9020109	MS	02-Feb-19	8015B	
---------------------------	--	--	--------	--	--------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			73.2 %		37.6-147	9020109	MS	02-Feb-19	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9013114 - General Prep - Wet Chem										
Blank (9013114-BLK1)										
Prepared & Analyzed: 31-Jan-19										
Chloride	ND	16.0	mg/kg							
LCS (9013114-BS1)										
Prepared & Analyzed: 31-Jan-19										
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (9013114-BSD1)										
Prepared & Analyzed: 31-Jan-19										
Chloride	400	16.0	mg/kg	400		100	80-120	7.69	20	

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE, NM, 87104

Project: ADVANCE ENERGY
Project Number: BSU 2H
Project Manager: ANDREW PARKER
Fax To: NONE

Reported:
06-Feb-19 10:31

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 9020303 - Volatiles**Blank (9020303-BLK1)**

Prepared & Analyzed: 03-Feb-19

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0995		mg/kg	0.100		99.5	73.3-129			

LCS (9020303-BS1)

Prepared & Analyzed: 03-Feb-19

Benzene	2.17	0.050	mg/kg	2.00		108	72.2-131			
Toluene	2.06	0.050	mg/kg	2.00		103	71.7-126			
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	68.9-126			
Total Xylenes	6.19	0.150	mg/kg	6.00		103	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0988		mg/kg	0.100		98.8	73.3-129			

LCS Dup (9020303-BSD1)

Prepared & Analyzed: 03-Feb-19

Benzene	2.18	0.050	mg/kg	2.00		109	72.2-131	0.766	6.91	
Toluene	2.06	0.050	mg/kg	2.00		103	71.7-126	0.165	7.12	
Ethylbenzene	2.00	0.050	mg/kg	2.00		100	68.9-126	1.83	7.88	
Total Xylenes	6.10	0.150	mg/kg	6.00		102	71.4-125	1.33	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0971		mg/kg	0.100		97.1	73.3-129			

Batch 9020407 - Volatiles**Blank (9020407-BLK1)**

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0909		mg/kg	0.100		90.9	73.3-129			

Cardinal Laboratories

* = Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
---	---	------------------------------

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 9020407 - Volatiles

LCS (9020407-BS1)

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

Benzene	1.86	0.050	mg/kg	2.00		93.0	72.2-131			
Toluene	1.88	0.050	mg/kg	2.00		94.1	71.7-126			
Ethylbenzene	1.85	0.050	mg/kg	2.00		92.6	68.9-126			
Total Xylenes	5.40	0.150	mg/kg	6.00		89.9	71.4-125			
Surrogate: 4-Bromofluorobenzene (PID)	0.0978		mg/kg	0.100		97.8	73.3-129			

LCS Dup (9020407-BSD1)

Prepared: 04-Feb-19 Analyzed: 05-Feb-19

Benzene	1.82	0.050	mg/kg	2.00		91.0	72.2-131	2.12	6.91	
Toluene	1.83	0.050	mg/kg	2.00		91.7	71.7-126	2.58	7.12	
Ethylbenzene	1.76	0.050	mg/kg	2.00		88.1	68.9-126	4.94	7.88	
Total Xylenes	5.15	0.150	mg/kg	6.00		85.9	71.4-125	4.62	7.46	
Surrogate: 4-Bromofluorobenzene (PID)	0.0929		mg/kg	0.100		92.9	73.3-129			

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS 901 RIO GRANDE BLVD SUITE F-142 ALBUQUERQUE, NM, 87104	Project: ADVANCE ENERGY Project Number: BSU 2H Project Manager: ANDREW PARKER Fax To: NONE	Reported: 06-Feb-19 10:31
--	---	------------------------------

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 9020109 - General Prep - Organics

Blank (9020109-BLK1)		Prepared & Analyzed: 01-Feb-19								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.7	41-142			
Surrogate: 1-Chlorooctadecane	47.4		mg/kg	50.0		94.8	37.6-147			

LCS (9020109-BS1)		Prepared & Analyzed: 01-Feb-19								
GRO C6-C10	167	10.0	mg/kg	200		83.5	76.5-133			
DRO >C10-C28	179	10.0	mg/kg	200		89.3	72.9-138			
Total TPH C6-C28	346	10.0	mg/kg	400		86.4	78-132			
Surrogate: 1-Chlorooctane	47.7		mg/kg	50.0		95.4	41-142			
Surrogate: 1-Chlorooctadecane	48.6		mg/kg	50.0		97.1	37.6-147			

LCS Dup (9020109-BSD1)		Prepared & Analyzed: 01-Feb-19								
GRO C6-C10	168	10.0	mg/kg	200		83.8	76.5-133	0.387	20.6	
DRO >C10-C28	186	10.0	mg/kg	200		93.2	72.9-138	4.23	20.6	
Total TPH C6-C28	354	10.0	mg/kg	400		88.5	78-132	2.39	18	
Surrogate: 1-Chlorooctane	47.5		mg/kg	50.0		95.0	41-142			
Surrogate: 1-Chlorooctadecane	47.9		mg/kg	50.0		95.8	37.6-147			

Cardinal Laboratories

*=Accredited Analyte

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

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 client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage 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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: RT Hicks Consultants		BILL TO				ANALYSIS REQUEST																			
Project Manager: Andrew Parker		P.O. #:				<div style="display: flex; flex-direction: column; align-items: center; justify-content: center;"> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">added 1/31/19</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH EXT</p> </div>																			
Address: on-file		Company: RT Hicks																							
City: State: Zip:		Attn: Andrew Parker																							
Phone #: Fax #:		Address:																							
Project #: Project Owner:		City:																							
Project Name: Advance Energy		State: Zip:																							
Project Location: BSU 2H		Phone #:																							
Sampler Name: Andrew Parker		Fax #:																							
FOR LAB USE ONLY		# CONTAINERS (G/RAB OR (C)OMP.	MATRIX					PRESERV.		SAMPLING															
Lab I.D.	Sample I.D.		GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME												
H900350	65	6			X						1-30-19	14:00													
	1 S-B WALL 0-4 ft																								
	2 G5 N-E WALL 0-4 ft											14:15													
	3 G2 W. WALL 0-4 ft											15:00													
	4 G2 +2f W. WALL 0-4 ft											15:30													
	5 G3 SW WALL 0-4 ft											13:30													

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: Andrew Parker	Date: 1-31-19	Received By: Jamara [Signature]	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 0800		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		CI (RFN) IF CI < 600 will run BTEX, Benzene TPH EXT (Normal)	
Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)		
Sampler - UPS - Bus - Other: 4.1c H91	Cool <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	TP		

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

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS
 Action 62807

CONDITIONS

Operator: ADVANCE ENERGY PARTNERS HAT MESA, LLC 11490 Westheimer Rd., Ste 950 Houston, TX 77077	OGRID: 372417
	Action Number: 62807
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	1/18/2022