

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department  
  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification Responsible Party

DENIED

Responsible Party: BP America Production Co	OGRID: 778	Closure - Remediation Variance
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # (assigned by OCD) <b>NCS1916949750</b>	
Contact mailing address: 1199 Main St., Suite 101, Durango CO, 81301		

### Location of Release Source

Latitude: 36.7228889° Longitude: -108.1172104°  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name: GALLEGOS CANYON UNIT #505	Site Type: Natural Gas Production Well Pad
Date Release Discovered: March 6, 2019	API#: 30-045-28235

- Closure Report does not meet the requirements of 19.15.29.12.E (No Summary of Events)  
- Variance Request does not meet the requirements of 19.15.29.14.A  
Must submit a detailed description of why Operator is requesting Variance, and must clearly state why the variance is protective of fresh water human health and the environment.

Unit Letter	Section	Township	Range	County
P	17	T29N	R12W	San Juan

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): Unknown	Volume Recovered (bbls): 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input 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:  
Release of condensate and produced water caused from a storage tank integrity failure.

**BP has found that the extent of the elevated chlorides appears to not be related to the below grade tank, but may in fact be naturally occurring. The attached document and lab results indicate that the chloride impact footprint far exceeds what is expected and is consistent across approximately 4' from ground surface. The estimated minimum disturbance is approximately 200'x150', or 3,000 square feet, based on current delineation points. Two thirds of this area is covered with native vegetation.**

**Further, based on the vegetation growth and density, it is apparent that the chloride serves no impact to plan vigor. The excavation and continued delineation would in fact be more detrimental to the area than to leave in place. Currently, the area is covered with native grasses and other plant species that are not exhibiting any type of stress. BP request a variance to close this release.**

State of New Mexico  
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Greater than 25 bbls
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Steve Moskal to Cory Smith (cell phone – Voicemail) on October 14, 2019 at 2:00 PM	

### 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 checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:   
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: _____ Title: _____  Signature: _____ Date: _____  email: _____ Telephone: _____
<b><u>OCD Only</u></b>  Received by: _____ Date: _____

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?	>100 (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?	<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)?	<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?	<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?	<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?	<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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> 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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Remediation Plan

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

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

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

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

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

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	
District RP	
Facility ID	
Application ID	

## Closure

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

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

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

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

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature:  Date: 1/31/2020

email: steven.moskal@bpx.com Telephone: (505) 330-9179

**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: **DENIED** Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

BP has found that the extent of the elevated chlorides appears to not be related to the below grade tank, but may in fact be naturally occurring. The attached document and lab results indicate that the chloride impact footprint far exceeds what is expected and is consistent across approximately 4' from ground surface. The estimated minimum disturbance is approximately 200'x150', or 3,000 square feet, based on current delineation points. Two thirds of this area is covered with native vegetation.

Further, based on the vegetation growth and density, it is apparent that the chloride serves no impact to plan vigor. The excavation and continued delineation would in fact be more detrimental to the area than to leave in place. Currently, the area is covered with native grasses and other plant species that are not exhibiting any type of stress. **BP requests a variance for closure of this release.**

# **SITE MAPS & PHOTOGRAPHS**

GCU 505  
(P) Sec 17 - T29N - R12W  
API: 30-045-28235

TH-A  
(Field Chloride = 948 ppm)  
Lab Data = 1,210 ppm

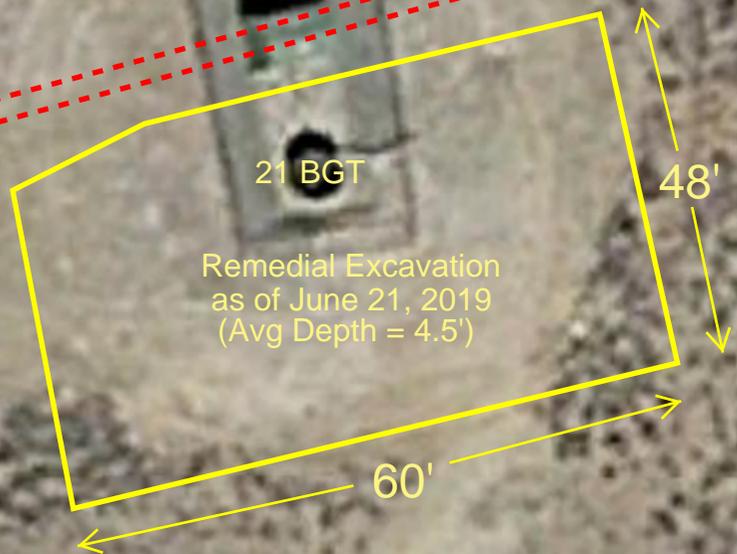
TH-E  
(Field Chloride = 628 ppm)  
Lab Data = 731 ppm

TH-F  
(Field Chloride = 184 ppm)  
Lab Data = 113 ppm

TH-B  
(Field Chloride = 684 ppm)  
Lab Data = 983 ppm

TH-D  
(Field Chloride = 684 ppm)  
Lab Data = 875 ppm

TH-C  
(Field Chloride = 684 ppm)  
Lab Data = 827 ppm



Pipeline  
Corridore

Test Hole A

*Received by OCD: 2/7/2019 11:51 AM Page 9 of 75*



Test Hole B  
*Received by OCD: 2/3/2020 11:14:51 AM Page 10 of 75*  
(35' East of Excavation)



Test Hole C

Received by OGD: 2/5/2020 11:14:51 AM Page 11 of 75

(35' South of Excavation)



# Test Hole D

Received by (35' West of Excavation) 2/5/2011 11:51 AM Page 12 of 75



# Test Hole E

Received by OGD 2/5/2020 11:11:51 AM Page 13 of 75



Test Hole F

Received by OCD: 2/5/2020 (100' East of Excavation) Page 14 of 75



(P) Sec 17 - T29N - R12W  
API: 30-045-28235

Possible Extent  
of Impacts

June 19, 2019  
Remedial Excavation  
11' x 15' x 4.5' Deep

2'-4' Composite  
CL:- Field Test = 212 ppm,  
Lab Test = 127 ppm

2'-4' Composite:  
CL:- Field Test = 432 ppm,  
Lab Test = 219 ppm

2'-4' Composite  
CL:- Field Test = 1,380 ppm

11' Depth  
CL:- Field Test = 684 ppm,  
Lab Test = Pending

2'-4' Composite  
CL:- Field Test = 2,020 ppm,  
Lab Test = 1,340 ppm

2'-4' Composite  
CL:- Field Test = 388 ppm,  
Lab Test = 143 ppm



# **LABORATORY DATA & REPORTS**

GALLEGOS CANYON UNIT #505												
Lab Summary (Values in ppm)												
Sample ID	Date	Time	GRO	DRO	MRO	TPH	Benzene	Toluene	Ethylbenzene	Xylene	BTEX	Chloride
West Wall 10pt (1-4')	6/21/2019	3:10 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	1810
North Wall 10pt (1-4')	6/21/2019	3:17 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	1370
East Wall 10pt (1-4')	6/21/2019	3:24 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	503
South Wall 10 pt (1-4')	6/21/2019	3:31 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	1020
TH-A (70' NE)	6/24/2019	3:00 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	1210
TH-B (35' East)	6/24/2019	3:04 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	983
TH-C (35' South)	6/24/2019	3:08 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	827
TH-D (35' West)	6/24/2019	3:12 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	875
TH-E (30' NW)	6/24/2019	3:16 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	731
TH-F (100' East)	6/24/2019	4:22 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	113
<b>Release Center @ -11'</b>	6/19/2019	12:00 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	230
12' South of Fence (2'-4')	6/19/2019	2:03 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	1340
12' East of Fence (2'-4')	6/19/2019	2:25 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	219
20' South of Fence (2'-4')	6/19/2019	3:02 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	143
2' North of Fence (2'-4')	6/19/2019	3:13 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	127
<b>5PC-TB @ 3' &amp; 4' (21)</b>	3/6/2019	10:20 AM	ND	ND	ND	ND	ND	ND	ND	ND	ND	1900
<b>NMOCD Closure Standards (ppm)</b>						<b>100</b>	<b>10</b>				<b>50</b>	<b>600</b>



## Analytical Report

### Report Summary

Client: BP America Production Co.

Samples Received: 6/25/2019

Job Number: 03143-0424

Work Order: P906111

Project Name/Location: GCU 505

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 7/2/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.  
 Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
 Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
 Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.



BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: GCU 505  
Project Number: 03143-0424  
Project Manager: Steve Moskal

**Reported:**  
07/02/19 09:43

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
TH-A (70' NE)	P906111-01A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.
TH-B (35' East)	P906111-02A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.
TH-C (35' South)	P906111-03A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.
TH-D (35' West)	P906111-04A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.
TH-E (30' NW)	P906111-05A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.
TH-F (100' East)	P906111-06A	Soil	06/24/19	06/25/19	Glass Jar, 4 oz.

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BP America Production Co.	Project Name:	GCU 505	<b>Reported:</b> 07/02/19 09:43
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	

**TH-A (70' NE)**

**P906111-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>1210</b>	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 07/02/19 09:43
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**TH-B (35' East)**

**P906111-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>983</b>	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 07/02/19 09:43
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**TH-C (35' South)  
P906111-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	827	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 07/02/19 09:43
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**TH-D (35' West)**

**P906111-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	875	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co.	Project Name:	GCU 505	<b>Reported:</b> 07/02/19 09:43
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	

**TH-E (30' NW)**

**P906111-05 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	731	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 07/02/19 09:43
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**TH-F (100' East)  
P906111-06 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	113	20.0	mg/kg	1	1926020	06/26/19	06/26/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 07/02/19 09:43
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**Anions by 300.0/9056A - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1926020 - Anion Extraction EPA 300.0/9056A**

**Blank (1926020-BLK1)**

Prepared & Analyzed: 06/26/19 1

Chloride	ND	20.0	mg/kg							
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**LCS (1926020-BS1)**

Prepared & Analyzed: 06/26/19 1

Chloride	255	20.0	mg/kg	250		102	90-110			
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**Matrix Spike (1926020-MS1)**

Source: P906110-01

Prepared & Analyzed: 06/26/19 1

Chloride	258	20.0	mg/kg	250	ND	103	80-120			
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**Matrix Spike Dup (1926020-MSD1)**

Source: P906110-01

Prepared & Analyzed: 06/26/19 1

Chloride	264	20.0	mg/kg	250	ND	106	80-120	2.51	20	
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QC Summary Report

Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	07/02/19 09:43

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- \*\* Methods marked with \*\* are non-accredited methods.

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<b>Project Information</b>		<b>Chain of Custody</b>				Page 1 of 1														
Client: <u>BPX ENERGY</u>		<b>Report Attention</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>EPA Program</b>												
Project: <u>GCU 505</u>		Report due by: <u>JULY 3, 2019</u>		Lab WO# <u>P906111</u>		Job Number <u>03143-0424</u>		1D	3D	RCRA	CWA	SDWA								
Project Manager: <u>Steve Moskai</u>		Attention: <u>Steve Moskai / Jeff Blagg</u>		Address:		Analysis and Method		State												
Address:		Address:		City, State, Zip		City, State, Zip		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>NM</td> <td>CO</td> <td>UT</td> <td>AZ</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> </tr> </table>					NM	CO	UT	AZ	X			
NM	CO	UT	AZ																	
X																				
City, State, Zip		City, State, Zip		Phone:		Phone:		Remarks												
Phone:		Phone:		Email:		Email:														
Email:		Email:																		

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks				
1500	6/24/2019	SOIL	1	TH-A (70' NE)	1						X						
1504			1	TH-B (35' EAST)	2						X						
1508			1	TH-C (35' SOUTH)	3						X						
1512			1	TH-D (35' WEST)	4						X						
1516			1	TH-E (30' NW)	5						X						
1622			1	TH-F (100' EAST)	6						X						

**Additional Instructions:** BKX BPX  
Contact Steve Moskai P.O. For this Project

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Jeff Blagg

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) <u>Jeff Blagg</u>	Date <u>6/25/2019</u>	Time <u>1337</u>	Received by: (Signature) <u>Rana Lopez</u>	Date <u>6/25/19</u>	Time <u>13:36</u>	<b>Lab Use Only</b>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Received on ice: <u>(Y)</u> / N	
						T1	T2
						AVG Temp °C <u>4</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.





## Analytical Report

### Report Summary

Client: BP America Production Co.

Samples Received: 6/21/2019

Job Number: 03143-0424

Work Order: P906104

Project Name/Location: GCU 505

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 6/25/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.  
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.  
Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.



BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: GCU 505  
Project Number: 03143-0424  
Project Manager: Steve Moskal

**Reported:**  
06/25/19 14:55

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
West Wall 10-pt (1'-4')	P906104-01A	Soil	06/21/19	06/21/19	Glass Jar, 4 oz.
North Wall 10-pt (1'-4')	P906104-02A	Soil	06/21/19	06/21/19	Glass Jar, 4 oz.
East Wall 10-pt (1'-4')	P906104-03A	Soil	06/21/19	06/21/19	Glass Jar, 4 oz.
South Wall 10-pt (1'-4')	P906104-04A	Soil	06/21/19	06/21/19	Glass Jar, 4 oz.

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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/25/19 14:55
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**West Wall 10-pt (1'-4')  
P906104-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>1810</b>	20.0	mg/kg	1	1926001	06/24/19	06/24/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/25/19 14:55
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**North Wall 10-pt (1'-4')  
P906104-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>1370</b>	20.0	mg/kg	1	1926001	06/24/19	06/24/19	EPA 300.0/9056A	
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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/25/19 14:55

**East Wall 10-pt (1'-4')  
P906104-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>503</b>	20.0	mg/kg	1	1926001	06/24/19	06/24/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/25/19 14:55
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**South Wall 10-pt (1'-4')  
P906104-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>1020</b>	20.0	mg/kg	1	1926001	06/24/19	06/24/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/25/19 14:55
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**Anions by 300.0/9056A - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1926001 - Anion Extraction EPA 300.0/9056A**

**Blank (1926001-BLK1)**

Prepared: 06/24/19 0 Analyzed: 06/24/19 1

Chloride	ND	20.0	mg/kg							
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**LCS (1926001-BS1)**

Prepared: 06/24/19 0 Analyzed: 06/24/19 1

Chloride	251	20.0	mg/kg	250		100	90-110			
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**Matrix Spike (1926001-MS1)**

Source: P906104-01

Prepared: 06/24/19 0 Analyzed: 06/24/19 1

Chloride	1220	20.0	mg/kg	250	1810	NR	80-120			SPK1
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**Matrix Spike Dup (1926001-MSD1)**

Source: P906104-01

Prepared: 06/24/19 0 Analyzed: 06/24/19 1

Chloride	1270	20.0	mg/kg	250	1810	NR	80-120	4.43	20	SPK1
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QC Summary Report

Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/25/19 14:55

**Notes and Definitions**

- SPK1 The spike recovery is outside of quality control limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- \*\* Methods marked with \*\* are non-accredited methods.

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Project Information

Client: BPX  
 Project: GCU 505  
 Project Manager: Steve Moskai  
 Address:  
 City, State, Zip  
 Phone:  
 Email:

Chain of Custody

**Report Attention**  
 Report due by: JUNE 24 2019  
 Attention: Steve Moskai / Jeff Blagg  
 Address:  
 City, State, Zip  
 Phone:  
 Email:

**Lab Use Only**  
 Lab WO# P 906104 Job Number 03143-0424  
 TAT 1D  3D   
**EPA Program**  
 RCRA  CWA  SDWA

**Analysis and Method**  
 DRO/ORO by 8015  GRO/DRO by 8015   
 BTEX by 8021  VOC by 8260   
 Metals 6010  Chloride 300.0   
 TPH 418.1   
**State**  
 NM  CO  UT  AZ

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
1510	6/21/19	SOIL	1	West Wall 10-pt (1'-4')	1						X		
1517			1	North Wall 10-pt (1'-4')	2						X		
1524			1	East Wall 10-pt (1'-4')	3						X		
1531			1	South Wall 10-pt (1'-4')	4						X		

**Additional Instructions:** Bill BPX contact: Steve Moskai P.O. for this Project

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Jeff Blagg

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) Jeff Blagg Date 6/21/19 Time 16:53  
 Relinquished by: (Signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

**Lab Use Only**  
 Received on ice:  Y / N  
 T1 \_\_\_\_\_ T2 \_\_\_\_\_ T3 \_\_\_\_\_  
 AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Received by OCD: 2/5/2020 11:14:51 AM

Page 37 of 75



## Analytical Report

### Report Summary

Client: BP America Production Co.

Samples Received: 6/19/2019

Job Number: 03143-0424

Work Order: P906088

Project Name/Location: GCU 505

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 6/26/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.  
 Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
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 Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.



BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/26/19 09:48

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Release Center @ -11'	P906088-01A	Soil	06/19/19	06/19/19	Glass Jar, 4 oz.

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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/26/19 09:48

**Release Center @ -11'  
P906088-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>230</b>	20.0	mg/kg	1	1925040	06/21/19	06/21/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/26/19 09:48
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**Anions by 300.0/9056A - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1925040 - Anion Extraction EPA 300.0/9056A**

<b>Blank (1925040-BLK1)</b>				Prepared: 06/21/19 0 Analyzed: 06/21/19 1						
Chloride	ND	20.0	mg/kg							
<b>LCS (1925040-BS1)</b>				Prepared: 06/21/19 0 Analyzed: 06/21/19 1						
Chloride	252	20.0	mg/kg	250		101	90-110			
<b>Matrix Spike (1925040-MS1)</b>				Source: P906094-01 Prepared: 06/21/19 0 Analyzed: 06/21/19 1						
Chloride	263	20.0	mg/kg	250	ND	105	80-120			
<b>Matrix Spike Dup (1925040-MSD1)</b>				Source: P906094-01 Prepared: 06/21/19 0 Analyzed: 06/21/19 1						
Chloride	263	20.0	mg/kg	250	ND	105	80-120	0.0608	20	

QC Summary Report

Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/26/19 09:48

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- \*\* Methods marked with \*\* are non-accredited methods.

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## Analytical Report

### Report Summary

Client: BP America Production Co.

Samples Received: 6/19/2019

Job Number: 03143-0424

Work Order: P906087

Project Name/Location: GCU 505

Report Reviewed By:

A handwritten signature in black ink that reads 'Walter Hinchman'.

Date: 6/21/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNi unless footnoted otherwise.  
 Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.  
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 Envirotech, Inc, currently holds the appropriate and available Utah TNi certification NM009792018-1 for the data reported.



BP America Production Co.  
PO Box 22024  
Tulsa OK, 74121-2024

Project Name: GCU 505  
Project Number: 03143-0424  
Project Manager: Steve Moskal

**Reported:**  
06/21/19 11:35

### Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
12' South of Fence (2'-4')	P906087-01A	Soil	06/19/19	06/19/19	Glass Jar, 4 oz.
12' East of Fence (2'-4')	P906087-02A	Soil	06/19/19	06/19/19	Glass Jar, 4 oz.
20' South of Fence (2'-4')	P906087-03A	Soil	06/19/19	06/19/19	Glass Jar, 4 oz.
2' North of Fence (2'-4')	P906087-04A	Soil	06/19/19	06/19/19	Glass Jar, 4 oz.

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BP America Production Co.	Project Name:	GCU 505	<b>Reported:</b> 06/21/19 11:35
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	

**12' South of Fence (2'-4')  
P906087-01 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	<b>1340</b>	20.0	mg/kg	1	1925028	06/19/19	06/20/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/21/19 11:35
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**12' East of Fence (2'-4')  
P906087-02 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	219	20.0	mg/kg	1	1925028	06/19/19	06/20/19	EPA 300.0/9056A	
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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/21/19 11:35

**20' South of Fence (2'-4')  
P906087-03 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	143	20.0	mg/kg	1	1925028	06/19/19	06/20/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/21/19 11:35
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**2' North of Fence (2'-4')**

**P906087-04 (Solid)**

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

**Anions by 300.0/9056A**

Chloride	127	20.0	mg/kg	1	1925028	06/19/19	06/20/19	EPA 300.0/9056A	
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BP America Production Co. PO Box 22024 Tulsa OK, 74121-2024	Project Name: GCU 505 Project Number: 03143-0424 Project Manager: Steve Moskal	<b>Reported:</b> 06/21/19 11:35
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**Anions by 300.0/9056A - Quality Control**

**Envirotech Analytical Laboratory**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1925028 - Anion Extraction EPA 300.0/9056A**

<b>Blank (1925028-BLK1)</b>				Prepared: 06/19/19 1 Analyzed: 06/20/19 0						
Chloride	ND	20.0	mg/kg							
<b>LCS (1925028-BS1)</b>				Prepared: 06/19/19 1 Analyzed: 06/20/19 0						
Chloride	268	20.0	mg/kg	250		107	90-110			
<b>Matrix Spike (1925028-MS1)</b>				Source: P906086-01 Prepared: 06/19/19 1 Analyzed: 06/20/19 1						
Chloride	265	20.0	mg/kg	250	ND	106	80-120			
<b>Matrix Spike Dup (1925028-MSD1)</b>				Source: P906086-01 Prepared: 06/19/19 1 Analyzed: 06/20/19 1						
Chloride	267	20.0	mg/kg	250	ND	107	80-120	0.644	20	

QC Summary Report

Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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BP America Production Co.	Project Name:	GCU 505	
PO Box 22024	Project Number:	03143-0424	<b>Reported:</b>
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/21/19 11:35

**Notes and Definitions**

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- \*\* Methods marked with \*\* are non-accredited methods.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.

Project Information

Chain of Custody

Client: BPX  
 Project: GCW 505  
 Project Manager: Steve Moskala  
 Address:  
 City, State, Zip  
 Phone:  
 Email:

Report Attention  
 Report due by: 6/20/2019  
 Attention: Jeff Blagg / Steve Moskala  
 Address:  
 City, State, Zip  
 Phone:  
 Email:

Lab Use Only  
 Lab WO# P906087 Job Number 03143-0424  
 TAT 1D  3D   
 EPA Program RCRA  CWA  SDWA

Analysis and Method  
 State  
 NM  CO  UT  AZ   
 DRO/ORO by 8015  
 GRO/DRO by 8015  
 BTEX by 8021  
 VOC by 8260  
 Metals 6010  
 Chloride 300.0  
 TPH 418.1

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	Remarks
1403	6/19/2019	SOIL	1	12' South of Fence (2'-4')	1						X		
1425			1	12' EAST OF Fence (2'-4')	2						X		
1502			1	20' South of Fence (2'-4')	3						X		
1513			1	2' NORTH OF Fence (2'-4')	4						X		

Additional Instructions: Bill BPX P.O. to be Prepared vis in cooler

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Jeff Blagg

Relinquished by: (Signature) <u>Jeff Blagg</u>	Date <u>6/19/19</u>	Time <u>16:37</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>6/19/19</u>	Time <u>16:37</u>	Lab Use Only Received on ice: <u>Y</u> / N
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	T1 T2 T3 AVG Temp °C <u>4</u>

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other  
 Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



5796 US Highway 64, Farmington, NM 87401  
 Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865  
 Ph (970) 259-0615 Fr (800) 362-1879

envirotech-inc.com  
 laboratory@envirotech-inc.com

Received by OCD: 2/5/2020 11:14:51 AM Page 52 of 75

**BELOW GRADE TANK  
CLOSURE INFO  
3/6/2019**

CLIENT: **BPX**

**BLAGG ENGINEERING, INC.**  
**P.O. BOX 87, BLOOMFIELD, NM 87413**  
**(505) 632-1199**

API #: **3004528235**  
TANK ID (if applicable): **A**

# FIELD REPORT:

(circle one):  **BGT CONFIRMATION** /  RELEASE INVESTIGATION /  OTHER:

PAGE #: **1** of **1**

**SITE INFORMATION:** SITE NAME: **GCU # 505**  
QUAD/UNIT: **P** SEC: **17** TWP: **29N** RNG: **12W** PM: **NM** CNTY: **SJ** ST: **NM**  
1/4 - 1/4 FOOTAGE: **1,204'S / 1,160'E SE/SE** LEASE TYPE:  **FEDERAL** /  STATE /  INDIAN  
LEASE #: **SF080491** PROD. FORMATION: **FT** CONTRACTOR: **CROSSFIRE BPX - D. BULLER**

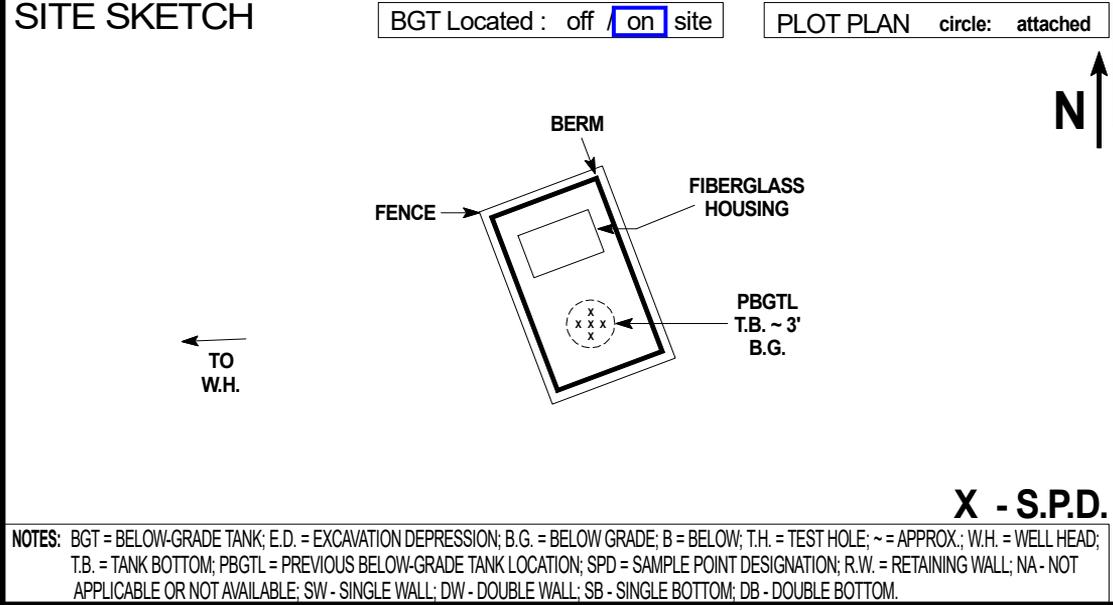
DATE STARTED: **03/06/19**  
DATE FINISHED: \_\_\_\_\_  
ENVIRONMENTAL SPECIALIST(S): **NJV**

**REFERENCE POINT:** WELL HEAD (W.H.) GPS COORD.: **36.722894 X 108.117216** GL ELEV.: **5,693'**  
1) **21 BGT (SW/DB)** GPS COORD.: **36.722916 X 108.116599** DISTANCE/BEARING FROM W.H.: **181', N87.5E**  
2) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_  
3) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_  
4) \_\_\_\_\_ GPS COORD.: \_\_\_\_\_ DISTANCE/BEARING FROM W.H.: \_\_\_\_\_

**SAMPLING DATA:** CHAIN OF CUSTODY RECORD(S) # OR LAB USED: **HALL** OVM READING (ppm) **NA**  
1) SAMPLE ID: **5PC - TB @ 3'-4' (21)** SAMPLE DATE: **03/06/19** SAMPLE TIME: **1020** LAB ANALYSIS: **8015B/8021B/300.0 (CI)**  
2) SAMPLE ID: \_\_\_\_\_ SAMPLE DATE: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_ LAB ANALYSIS: \_\_\_\_\_  
3) SAMPLE ID: \_\_\_\_\_ SAMPLE DATE: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_ LAB ANALYSIS: \_\_\_\_\_  
4) SAMPLE ID: \_\_\_\_\_ SAMPLE DATE: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_ LAB ANALYSIS: \_\_\_\_\_  
5) SAMPLE ID: \_\_\_\_\_ SAMPLE DATE: \_\_\_\_\_ SAMPLE TIME: \_\_\_\_\_ LAB ANALYSIS: \_\_\_\_\_

**SOIL DESCRIPTION:** SOIL TYPE:  **SAND** / SILTY SAND / SILT / SILTY CLAY / CLAY  **GRAVEL** / OTHER \_\_\_\_\_  
SOIL COLOR: **DARK YELLOWISH ORANGE** PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC  
COHESION (ALL OTHERS):  **NON COHESIVE** / SLIGHTLY COHESIVE / COHESIVE / HIGHLY COHESIVE DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD  
CONSISTENCY (NON COHESIVE SOILS):  **LOOSE** /  **FIRM** / DENSE / VERY DENSE HC ODOR DETECTED: YES  **NO** EXPLANATION - \_\_\_\_\_  
MOISTURE: DRY  **SLIGHTLY MOIST** / MOIST / WET / SATURATED / SUPER SATURATED  
SAMPLE TYPE: GRAB  **COMPOSITE** # OF PTS. **5** ANY AREAS DISPLAYING WETNESS: YES  **NO** EXPLANATION - \_\_\_\_\_  
DISCOLORATION/STAINING OBSERVED: YES  **NO** EXPLANATION - \_\_\_\_\_

**SITE OBSERVATIONS:** LOST INTEGRITY OF EQUIPMENT: YES  **NO** EXPLANATION - \_\_\_\_\_  
APPARENT EVIDENCE OF A RELEASE OBSERVED AND/OR OCCURRED: YES  **NO** EXPLANATION: \_\_\_\_\_  
EQUIPMENT SET OVER RECLAIMED AREA:  **YES** /  **NO** EXPLANATION - **45 BBL ABOVE-GRADE TANK (AGT) SET ATOP BGT LOCATION.**  
OTHER: **NMOCOD OR BLM REPS. NOT PRESENT TO WITNESS CONFIRMATION SAMPLING. 45 BBL AGT WAS REMOVED PRIOR TO TEST HOLE ADVANCE - MENT. 21 BBL BGT BOTTOM WAS APPROXIMATELY 3 FT. BELOW GRADE DURING ITS EXISTENCE.**  
EXCAVATION DIMENSION ESTIMATION: \_\_\_\_\_ ft. X \_\_\_\_\_ ft. X \_\_\_\_\_ ft. EXCAVATION ESTIMATION (Cubic Yards): \_\_\_\_\_  
DEPTH TO GROUNDWATER: **> 100'** NEAREST WATER SOURCE: **> 1,000'** NEAREST SURFACE WATER: **> 1,000'** NMOCOD TPH CLOSURE STD: **2,500** ppm



OVM CALIB. READ. = **NA** ppm RF=1.00  
OVM CALIB. GAS = **NA** ppm  
TIME: **NA** am/pm DATE: **NA**

**MISCELL. NOTES**  
PO #: **4301062122**  
REF #:  
VID:  
PJ #:  
Permit date(s): **02/13/19**  
OCD Appr. date(s): **02/22/19**  
Tank ID: **A** OVM = Organic Vapor Meter ppm = parts per million  
BGT Sidewalls Visible: **Y / (N)**  
BGT Sidewalls Visible: **Y / N**  
BGT Sidewalls Visible: **Y / N**  
Magnetic declination: **10° E**

NOTES: **GOOGLE EARTH IMAGERY DATE: 3/15/2015.** ONSITE: **03/06/19**

## Analytical Report

Lab Order 1903282

Date Reported: 3/8/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Blagg Engineering

Client Sample ID: 5PC-TB @ 3' &amp; 4' (21)

Project: GCU 505

Collection Date: 3/6/2019 10:20:00 AM

Lab ID: 1903282-001

Matrix: SOIL

Received Date: 3/7/2019 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	1900	60		mg/Kg	20	3/7/2019 12:17:24 PM	43555
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>Irm</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/7/2019 11:04:23 AM	43552
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/7/2019 11:04:23 AM	43552
Surr: DNOP	93.5	70-130		%Rec	1	3/7/2019 11:04:23 AM	43552
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	3/7/2019 9:28:57 AM	43530
Surr: BFB	93.4	73.8-119		%Rec	1	3/7/2019 9:28:57 AM	43530
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	3/7/2019 9:28:57 AM	43530
Toluene	ND	0.038		mg/Kg	1	3/7/2019 9:28:57 AM	43530
Ethylbenzene	ND	0.038		mg/Kg	1	3/7/2019 9:28:57 AM	43530
Xylenes, Total	ND	0.077		mg/Kg	1	3/7/2019 9:28:57 AM	43530
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	3/7/2019 9:28:57 AM	43530

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903282

08-Mar-19

Client: Blagg Engineering

Project: GCU 505

Sample ID: <b>MB-43555</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>43555</b>	RunNo: <b>58187</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952520</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-43555</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>43555</b>	RunNo: <b>58187</b>								
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1952521</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903282

08-Mar-19

**Client:** Blagg Engineering  
**Project:** GCU 505

Sample ID: <b>LCS-43552</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>43552</b>		RunNo: <b>58182</b>							
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/7/2019</b>		SeqNo: <b>1951337</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.8	63.9	124			
Surr: DNOP	4.3		5.000		86.0	70	130			

Sample ID: <b>MB-43552</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>43552</b>		RunNo: <b>58182</b>							
Prep Date: <b>3/7/2019</b>	Analysis Date: <b>3/7/2019</b>		SeqNo: <b>1951338</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.2	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1903282

08-Mar-19

**Client:** Blagg Engineering

**Project:** GCU 505

Sample ID: <b>LCS-43530</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>43530</b>	RunNo: <b>58169</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1950867</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	80.1	123			
Surr: BFB	1100		1000		107	73.8	119			

Sample ID: <b>MB-43530</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>43530</b>	RunNo: <b>58169</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1950899</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.6	73.8	119			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1903282

08-Mar-19

**Client:** Blagg Engineering

**Project:** GCU 505

Sample ID: <b>LCS-43530</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>43530</b>	RunNo: <b>58169</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1950868</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	80	120			
Toluene	0.98	0.050	1.000	0	98.3	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.9	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	80	120			

Sample ID: <b>MB-43530</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>43530</b>	RunNo: <b>58169</b>								
Prep Date: <b>3/6/2019</b>	Analysis Date: <b>3/7/2019</b>	SeqNo: <b>1950900</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: **BLAGG**

Work Order Number: **1903282**

RcptNo: **1**

Received By: **Anne Thorne** <sup>CD</sup> 3/7/2019 7:10:00 AM

*Anne Thorne*

Completed By: **Anne Thorne** 3/7/2019 7:23:49 AM

*Anne Thorne*

Reviewed By: **SO** 3/2/19  
*Labeled hi AT 03/07/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present   
 2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
 5. Sample(s) in proper container(s)? Yes  No   
 6. Sufficient sample volume for indicated test(s)? Yes  No   
 7. Are samples (except VOA and ONG) properly preserved? Yes  No   
 8. Was preservative added to bottles? Yes  No  NA   
 9. VOA vials have zero headspace? Yes  No  No VOA Vials   
 10. Were any sample containers received broken? Yes  No   
 11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody? Yes  No   
 13. Is it clear what analyses were requested? Yes  No   
 14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:                       
 (<2 or >12 unless noted)  
 Adjusted?                       
 Checked by:                     

*A 03/07/19*

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



# **SITE RANKING CRITERIA**

## **SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT 505**

### **Siting Criteria 19.15.17.10 NMAC**

Depth to groundwater at the site is estimated to be greater than 100 feet (ft.) below grade (b.g.). This estimation is based on data from Stone and others (1983) and depth to groundwater data obtained from water wells permitted by the New Mexico State Engineer's Office (NMOSE). Local topography and proximity to adjacent water features were also considered. Figure 1, utilized from the adjacent well site's (GCU 134E) 95 barrel bgt permit, and an aerial map provided as Figure 1A, demonstrates that there are no freshwater wells or springs within 200 ft. of the below-grade tank (BGT). A topographic map (Figure 2) demonstrates that the BGT is not within 100 ft. of any continuously flowing watercourse or any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3, also utilized from the GCU 134E bgt permit, demonstrates that the BGT is not within 500 ft. of a wetland. Figure 4, once again utilized from the GCU 134E bgt permit, demonstrates that the BGT is not within the mapped FEMA 100-year floodplain. The BGT locations from both the GCU 134E and GCU 505 are within 320 ft. of each other.

### **Local Geology and Hydrology**

This particular site is located on a mesa top, north of the San Juan River within the Nacimiento Formation between the Animas and San Juan Rivers. The nearest water well found is POD SJ01566 (attached) and located in NW/4 SW/4, Section 8, T29.0N, R12W, 1.3 miles, north of the GCU 505 well site (ground elevation – 5,693 ft.). POD SJ01566 had recorded depth to water at 60 ft. b.g. and its current ground elevation is approximately 5,635 ft.; resulting in depth to water elevation of 5,575 ft. The San Juan River is south of the site, approximately 1.5 miles away and 300 ft. lower in elevation.

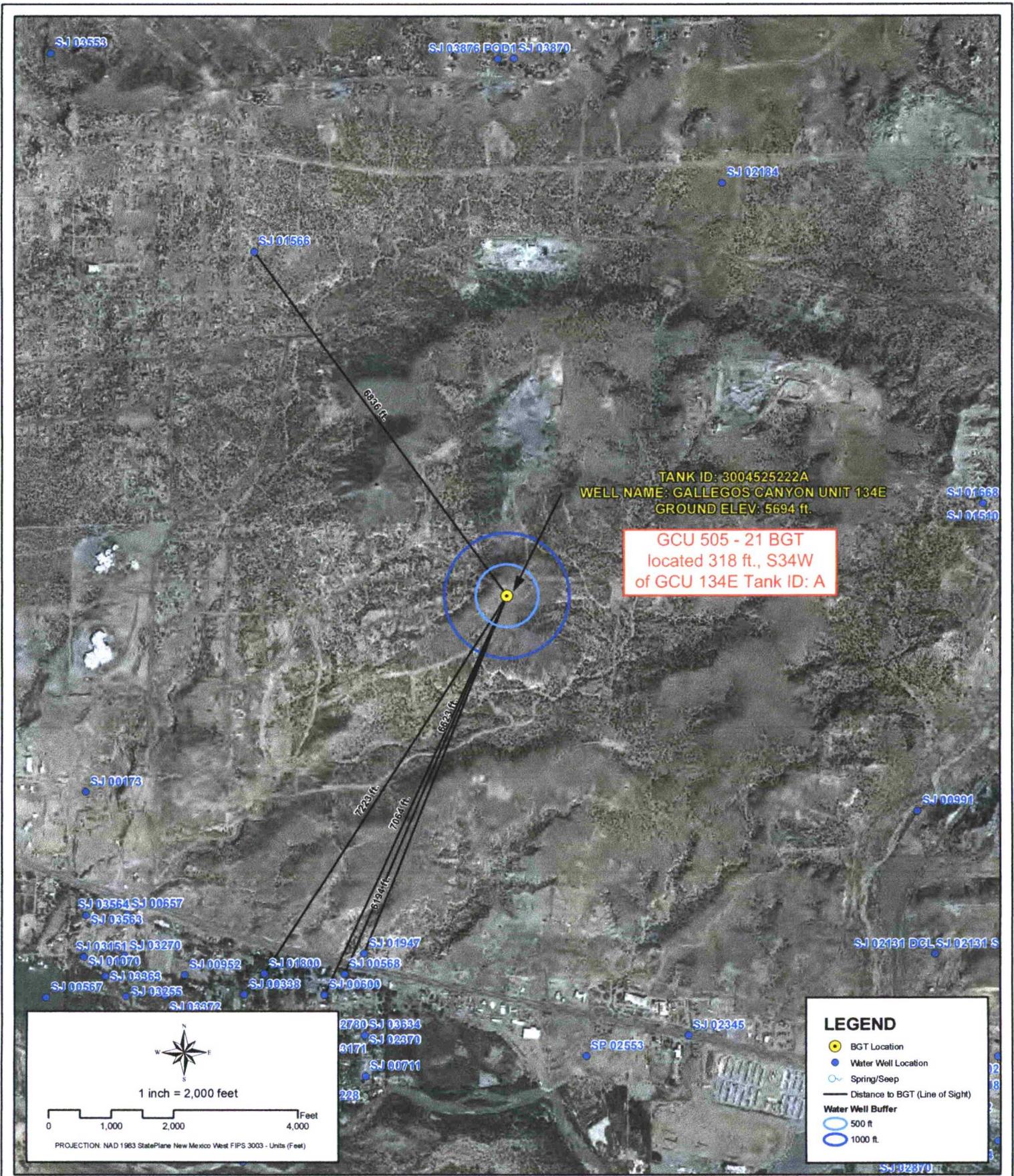
### **Regional Geology and Hydrology**

The San Juan Basin is situated in the Navajo section of the Colorado Plateau and is characterized by broad open valleys, mesas, buttes and hogbacks. Away from major valleys and canyons topographic relief is generally low. Native vegetation is sparse and shrubby. Drainage is mainly by the San Juan River, the only permanent stream in the Navajo Section of the Colorado Plateau. The San Juan River is a tributary of the Colorado River. Major tributaries include the Animas, Chaco and La Plata Rivers. Flow of the San Juan River across the basin is regulated by the Navajo Dam, located about 30 miles northeast of Farmington, New Mexico. The climate is arid to semiarid with an average annual precipitation of 8 to 10 inches. Soils within the basin consist of weathered parent rock derived from predominantly physical means mostly from eolian depositional system with fluvial having a lesser impact.

Cretaceous and Tertiary sandstones, as well as Quaternary Alluvial deposits, serve as the primary aquifers in the San Juan Basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface and grades into the Animas Formation to the west. The lower part of the Nacimiento Formation is composed of interbedded black, carbonaceous mudstones and white coarse-grained sandstones. The upper part is comprised of mudstone and sandstone. It is generally slope-forming, even within the sandstone units. Thickness of the Nacimiento ranges from 418 to 2,232 ft. (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1,000 ft. deep in this section of the basin. Wells within these bodies flow from 16 to 100 gallons per minute (gpm), and transmissivities are expected to be 100 ft<sup>2</sup>/d (Stone et al., 1983). Groundwater within these aquifers flows toward the San Juan River.

### **References**

- Circular 154—Guidebook to coal geology of northwest New Mexico By E. C. Beaumont, J. W. Shomaker, W. J. Stone, and others, 1976
- Stone, et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico, Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p



	<p align="center"><b>PROXIMITY TO WATER WELLS</b></p> <p align="center"><b>WELL NAME: GALLEGOS CANYON UNIT 134E</b></p> <p align="center">API NUMBER: 3004525222 TANK ID: 3004525222A</p> <p align="center"><b>SECTION 17, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23</b></p>	<p align="center"><b>FIGURE</b></p> <p align="center"><b>1</b></p>
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# BPX - GCU 505

BP(P) Section 17, T29N, R12W  
API #: 3004528235

Imagery date: 3/15/2015  
WH GPS Coord.: 36.722894,-108.117216  
21 BGT GPS Coord.: 36.722916,-108.116599

## FIGURE 1A

200 ft. radius  
from 21 BGT center

21 BGT

WH



**FIGURE 2**

1,000 ft. radius  
from 21 bgt center

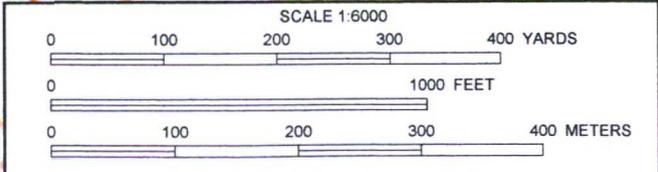
100 ft. radius  
from 21 bgt center

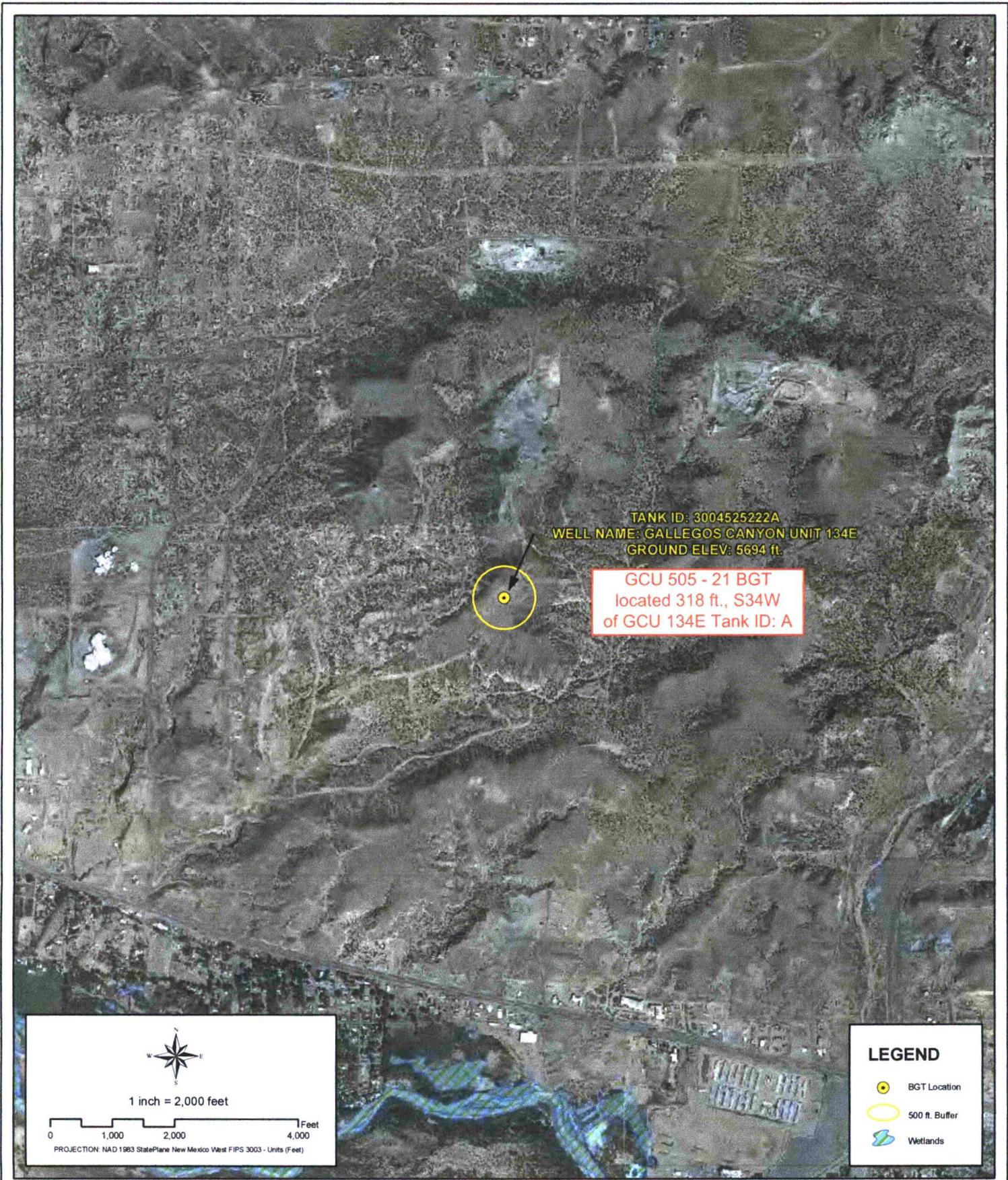
21 bbl BGT  
GPS Coordinates:  
36.722916, -108.116599  
Ground Level Elevation: 5,693 ft.

**Proximity to Watercourses**



**BP - Gallegos Canyon Unit (GCU) 505**  
API #: 3004528235  
Tank ID: 3004528235A  
(P) Section 17, Township 29.0N, Range 12W, P.M. NM 23



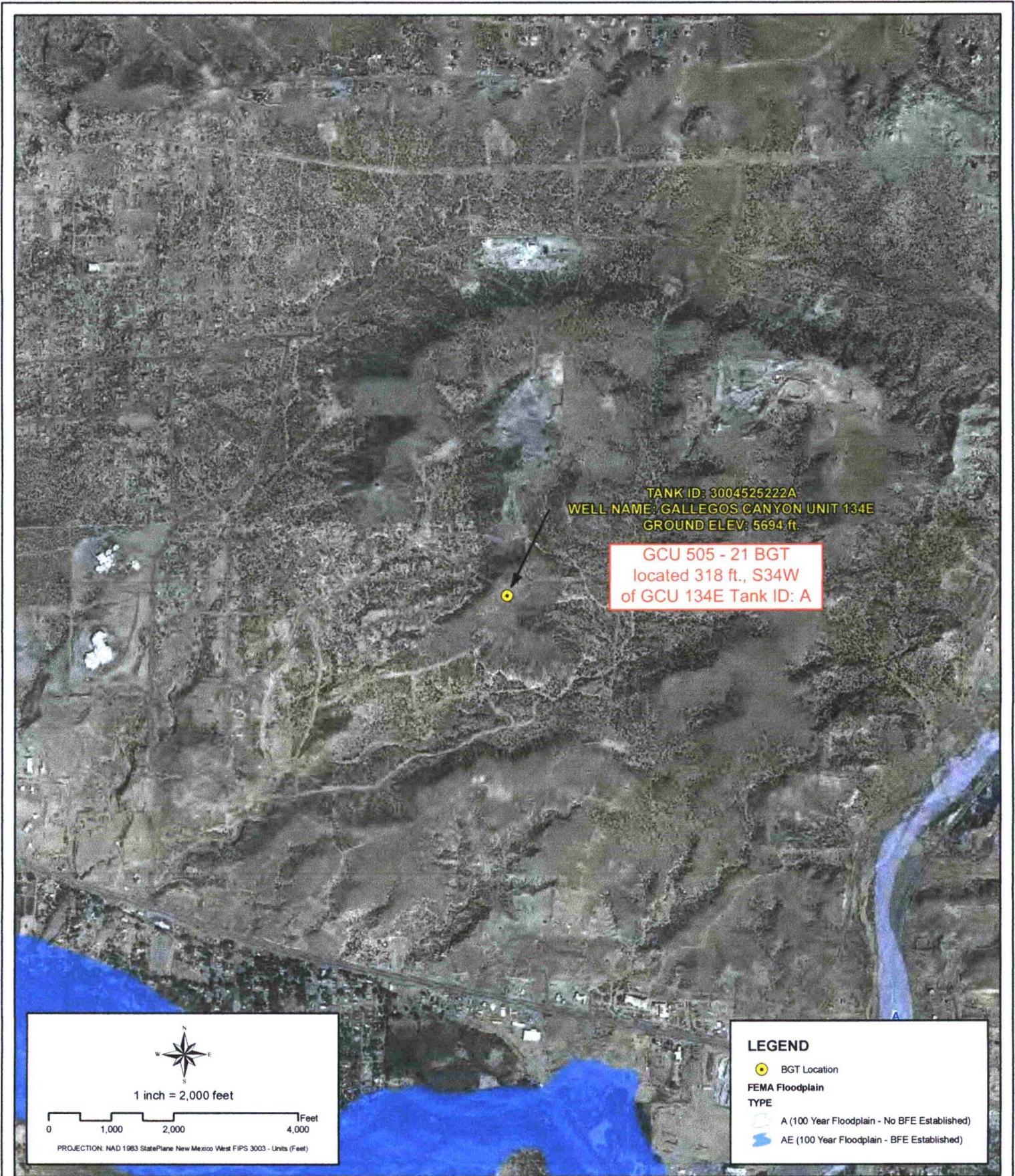


File Path: X:\BPPASS\Sector\_8\Sector\_8\AMXD\3004525222A.mxd



**PROXIMITY TO WETLANDS**  
**WELL NAME: GALLEGOS CANYON UNIT 134E**  
 API NUMBER: 3004525222 TANK ID: 3004525222A  
 SECTION 17, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

**FIGURE**  
**3**



**PROXIMITY TO FLOODPLAIN**  
**WELL NAME: GALLEGOS CANYON UNIT 134E**  
 API NUMBER: 3004525222 TANK ID: 3004525222A  
 SECTION 17, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

**FIGURE**  
**4**

<b>Public Land Survey System (PLSS)</b>			
<input type="radio"/>	Q64: <input type="text"/>	Q16: <input type="text"/>	Q4: <input type="text"/>
	Sec: <input type="text"/>	Tws: <input type="text"/>	Rng: <input type="text"/>
<b>State Plane Coordinate System - NAD27</b>			
<input type="radio"/>	x: 0 <input type="text"/> ft	y: 0 <input type="text"/> ft	Zone: <input type="text"/>
<b>State Plane Coordinate System - NAD83</b>			
<input type="radio"/>	x: 0 <input type="text"/> ft	y: 0 <input type="text"/> ft	Zone: <input type="text"/>
<b>Degrees/Minutes/Seconds</b>			
<input checked="" type="radio"/>	Longitude (X):	Degrees: 108 °	Minutes: 7 ' Seconds: <input type="text"/> "
	Latitude (Y):	Degrees: 36 °	Minutes: 3 ' Seconds: 22.5 "
<b>UTM - NAD27</b>			
<input type="radio"/>	Easting (X): 0 <input type="text"/> mtrs	Northing (Y): 0 <input type="text"/> mtrs	Zone: <input type="text"/>
<b>SUBMIT</b>			
<b>All Conversion Results are displayed as <u>NAD 1983 UTM Zone 13</u></b>			
Easting (X):	<input type="text" value="221648.82"/> mtrs	Northing (Y):	<input type="text" value="4068664.72"/> mtrs
~~ Please keep screen open to copy UTM values for Reports. ~~			



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## New Mexico Office of the State Engineer Wells with Well Log Information

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No wells found.

**Basin/County Search:**

**Basin:** San Juan

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 221648.82

**Northing (Y):** 4068664.72

**Radius:** 1609.3

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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.

2/12/19 2:44 PM

Page 1 of 1

WELLS WITH WELL LOG INFORMATION



# New Mexico Office of the State Engineer

## Wells Without Well Log Information

No wells found.

**Basin/County Search:**

**Basin:** San Juan

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 221648.82

**Northing (Y):** 4068664.72

**Radius:** 1609.3

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.



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## New Mexico Office of the State Engineer

# Point of Diversion with Meter Attached

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No PODs found.

**Basin/County Search:**

**Basin:** San Juan

**UTMNA83 Radius Search (in meters):**

**Easting (X):** 221648.82

**Northing (Y):** 4068664.72

**Radius:** 1609.3

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

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

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-Code	basin	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">SJ 01566</a>			SJ	3	1	3	08	29N	12W	220538	4070446*	105	60	45

**GPS Coordinates**  
**36.738595,-108.129736**

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

**Record Count:** 1

**Basin/County Search:**

**Basin:** San Juan

**PLSS Search:**

**Q64:** SW    **Q16:** NW    **Q4:** SW    **Section(s):** 8    **Township:** 29N    **Range:** 12W

\*UTM location was derived from PLSS - see Help

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# 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)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64 Q16 Q4</b>	<b>Sec Tws Rng</b>	<b>X</b>	<b>Y</b>
	SJ 01566	3 1 3	08 29N 12W	220538	4070446*

<b>Driller License:</b> 527	<b>Driller Company:</b> THOMPSON WELL DRILLING		
<b>Driller Name:</b> THOMPSON, LEON			
<b>Drill Start Date:</b> 04/20/1983	<b>Drill Finish Date:</b> 04/25/1983	<b>Plug Date:</b>	
<b>Log File Date:</b> 05/13/1983	<b>PCW Rcv Date:</b>	<b>Source:</b> Shallow	
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b> 5 GPM	
<b>Casing Size:</b> 5.00	<b>Depth Well:</b> 105 feet	<b>Depth Water:</b> 60 feet	

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	100	105	Sandstone/Gravel/Conglomerate

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	75	105

\*UTM location was derived from PLSS - see Help

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