

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification Responsible Party

Responsible Party: BP America Production Co	OGRID: 778	BGT Closure Remediation
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # (assigned by OCD) NCS1916949750	
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

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.

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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: _____	
<u>OCD Only</u>	
Received by: _____ Date: _____	

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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?	<u>>100</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?	<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 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

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Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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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.

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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: 5/6/2020


email: steven.moskal@bpx.com

Telephone: (505) 330-9179

OCD Only

Received by: OCD Date: 5/6/2020

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: 8/17/2020

Printed Name: Cory Smith Title: Environmental Specialist

Variance Request: Gallegos Canyon Unit 505

API #30-045-28235; (P) Sec. 17, T29N, R12W

NMOCD Incident nCS1916949750

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. This location sits high on a mesa covered with large river cobbles and is non-inhabited by the community or wildlife.

Two thirds of the area is covered with native vegetation. Removal of this healthy, native vegetation on a high mesa would be very difficult for reestablishment. The removal and lack of vegetation would increase soil erosion and increase sediment load in stormwater flows, increasing the likelihood of sediment pollution and slope destabilization.

Further, based on the vegetation growth and density, it is apparent that the chloride serves no impact to plant vigor. The excavation and continued delineation would be detrimental to the area than to leave in place. This area has no potential for agricultural or landscaping. 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.

The attached siting criteria demonstrates the site topography, estimated depth to groundwater and proximity to surface water.

Siting 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.

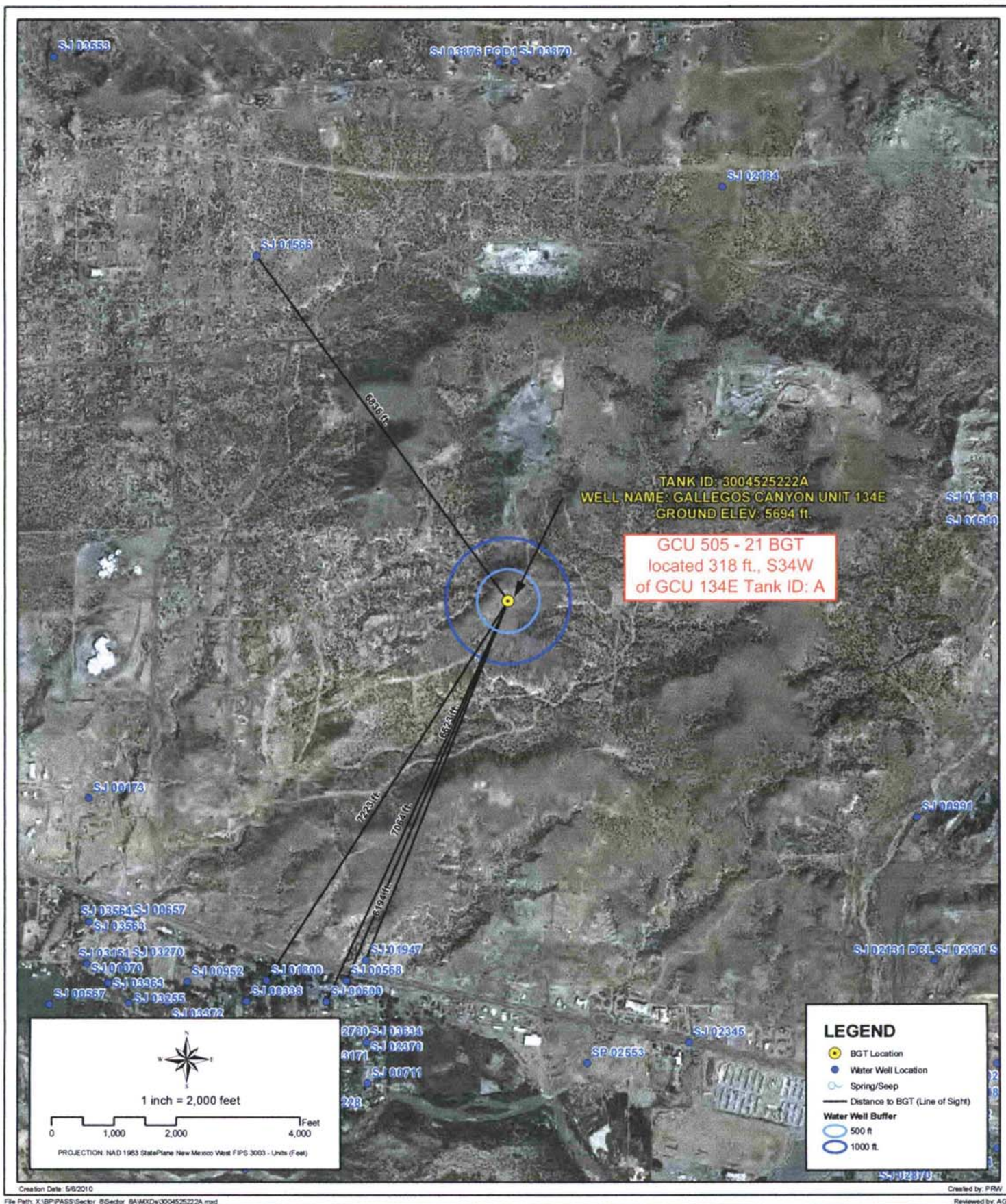
Regional Geology and Hydrology

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 ft²/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



PROXIMITY TO WATER WELLS

WELL NAME: GALLEGOS CANYON UNIT 134E

API NUMBER: 3004525222 TANK ID: 3004525222A

SECTION 17, TOWNSHIP 29.0N, RANGE 12W, P.M. NM23

FIGURE
1

FIGURE 1A

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

200 ft. radius
from 21 BGT center

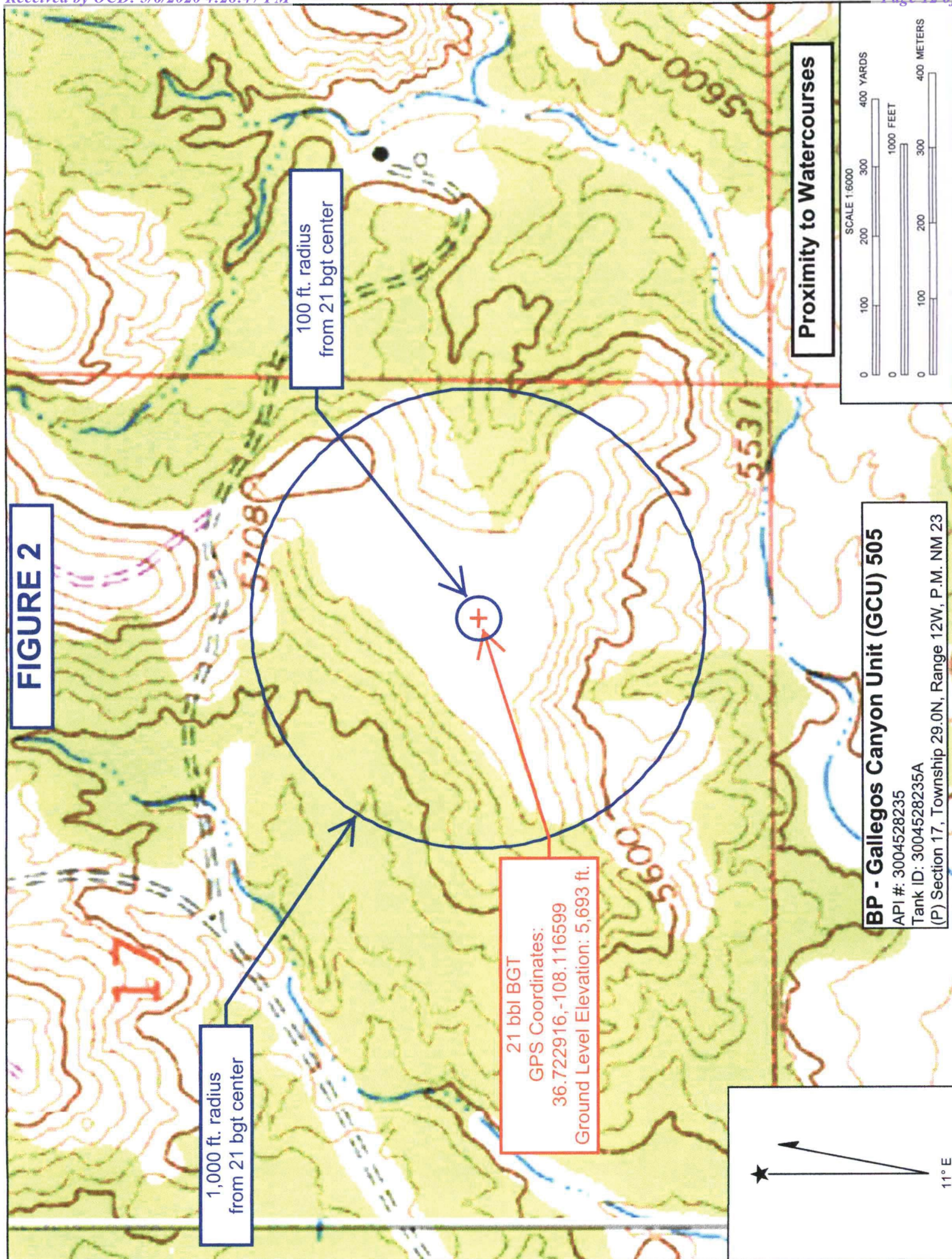
21 BGT

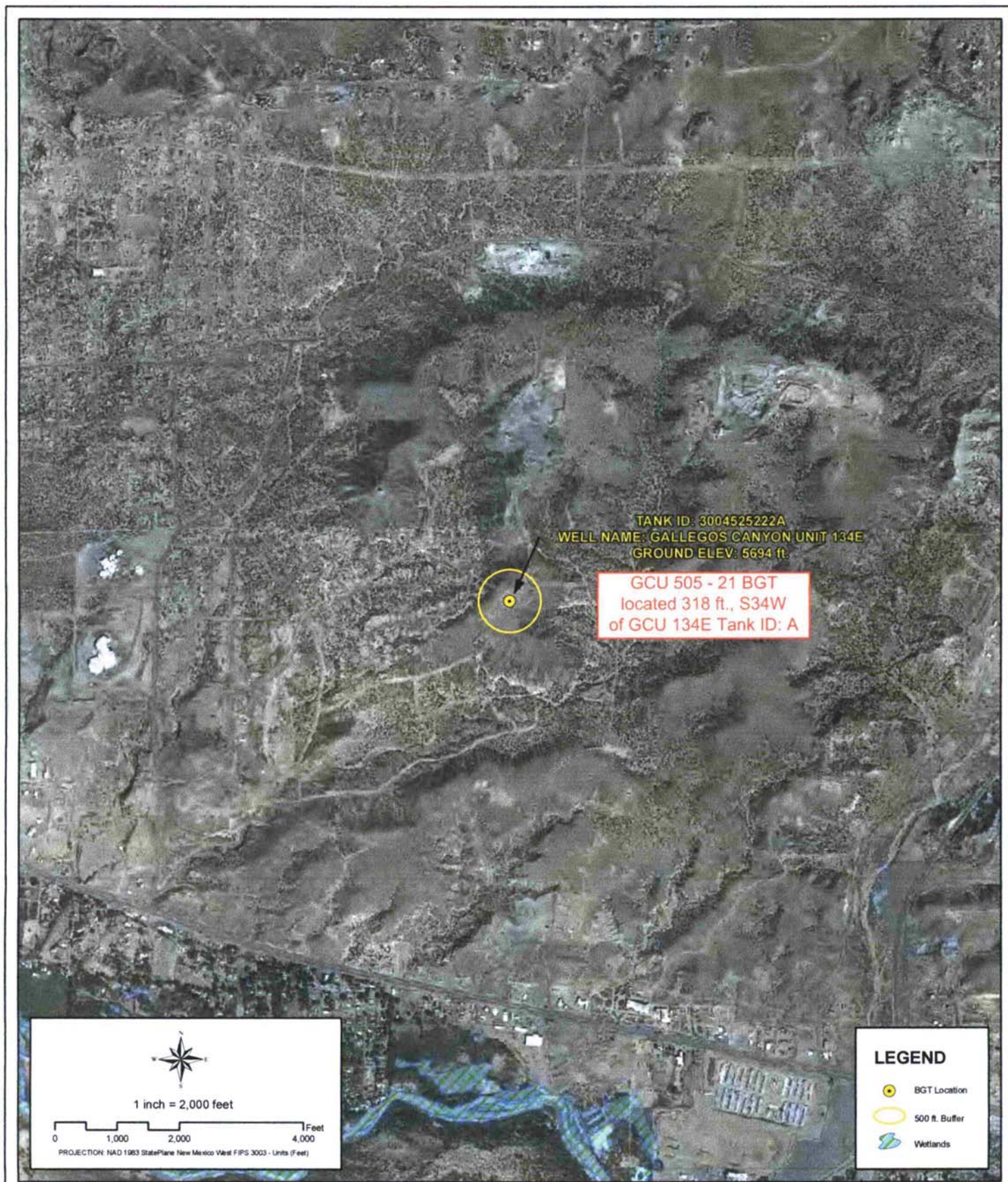
WH

Google Earth

© 2018 Google

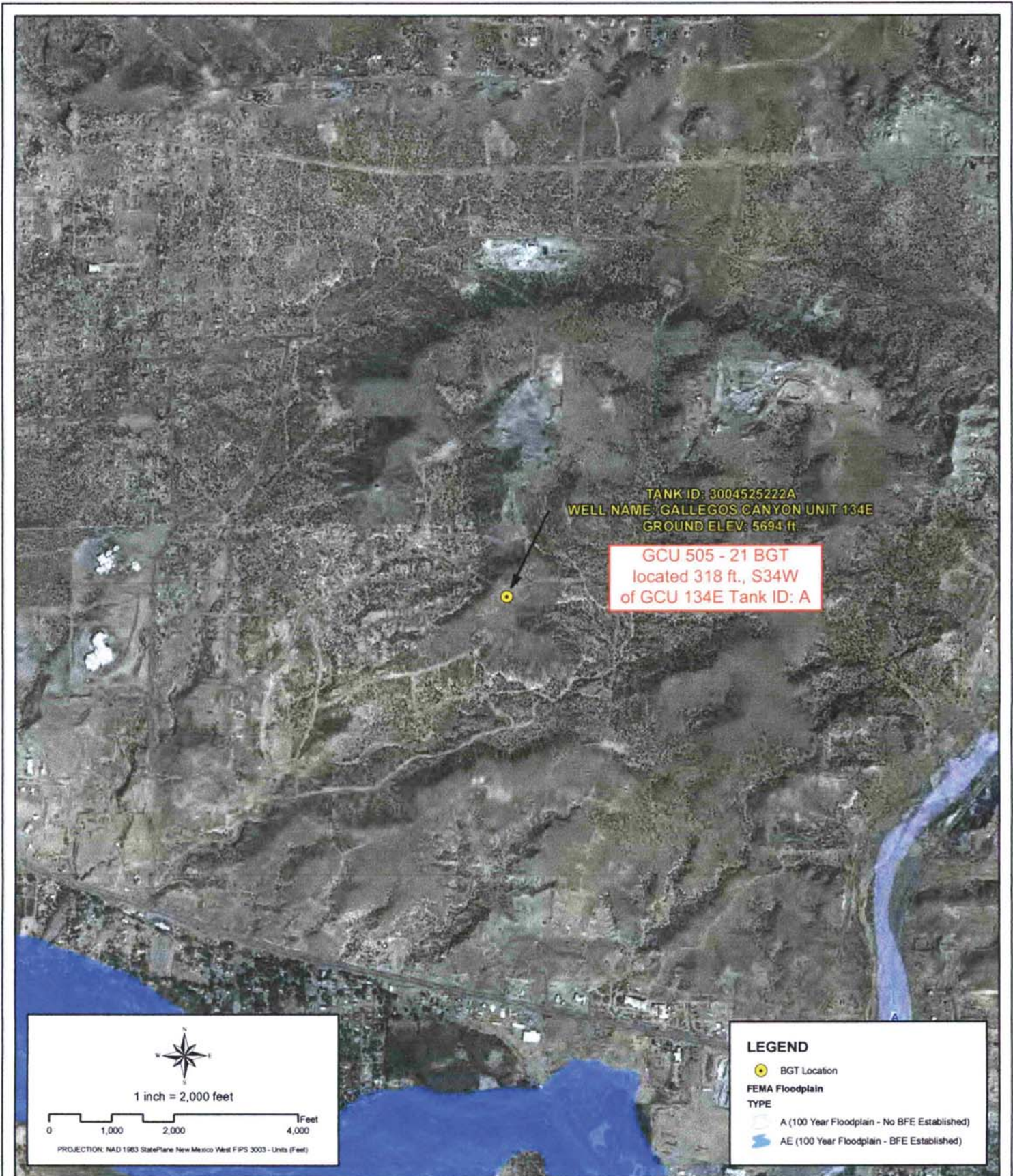
200 ft





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



File Path: X:\BP\PASS\Sector_8\Sector_8A\MOXD\3004525222A.mxd



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

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



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

Basin/County Search:

Basin: San Juan

UTMNA83 Radius Search (in meters):

Easting (X): 221648.82

Northing (Y): 4068664.72

Radius: 1609.3

No wells found.

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

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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.



New Mexico Office of the State Engineer Point of Diversion with Meter Attached

No PODs 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.

2/12/19 2:46 PM

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POINT OF DIVERSION WITH METER ATTACHED



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 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 01566			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

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
SJ 01566		3 1 3 08 29N 12W	220538	4070446* 

Driller License: 527 **Driller Company:** THOMPSON WELL DRILLING
Driller Name: THOMPSON, LEON

Drill Start Date: 04/20/1983 **Drill Finish Date:** 04/25/1983 **Plug Date:**
Log File Date: 05/13/1983 **PCW Rcv Date:** **Source:** Shallow
Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 5 GPM
Casing Size: 5.00 **Depth Well:** 105 feet **Depth Water:** 60 feet

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

Casing Perforations:	Top	Bottom
	75	105

*UTM location was derived from PLSS - see Help

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.

Remediation & Deliniation Activities

BP America
GCU 505
(P) Sec 17 – T29N – R12W
San Juan County, New Mexico
API: 30-045-28235
NMOCD Incident: NCS1916949750

Summary Record of Impact Remediation and Investigation

February 22, 2019 Closure plan for a 21 barrel BGT approved by the New Mexico Oil Conservation Division (NMOCD).

Pursuant to the plan, the site closure standard was determined at 1,000/2,500 ppm TPH; 20,000 ppm Chlorides (below 4' depth); 50 ppm total BTEX and 10 ppm Benzene based on:

Depth to groundwater based on water well information: > 100 feet (0 points)

Distance to nearest water well based on radius search: > 1,000 feet (0 points)

Distance to nearest dry wash > 1,000' based on site inspection, Google Earth and USGS topomap measurements (0 points)

Total Site Ranking: 0

March 6, 2019 Conduct closure sampling for the 21 BGT. At an unknown prior date the BGT had been removed and replaced with a 45 barrel above grade tank at the same location. The 45 AGT was set aside and soil samples were collected at the prior bedding depth of the 21 BGT (3' below grade). During this sampling there was no visual evidence of impacts to the soil.

March 8, 2019 Receive final laboratory analytical report on 21 BGT closure sampling. Hydrocarbons (TPH and BTEX) all reported non-detect. Chlorides reported at 1,900 mg/Kg.

June 19, 2019 Conduct limited remediation of source areas soils using a backhoe. Remove impacted soils in a 15' x 11' x 4.5' deep remedial excavation. Field screening for chlorides indicates residual impacts in the 0' – 4' interval may exceed the regulatory closure standard of 600 mg/Kg. Submit delineation samples to laboratory to estimate impact dimensions. Additionally, a sample was collected at the impact center at -11' below grade. Sample analytical result tests 230 mg/Kg, demonstrating a minimum 10' vertical separation of impacts.

June 20, 2019 Receive laboratory test reports. Initial analysis indicates limited impacts outside of existing remedial excavation.

June 21, 2019 Continue remedial excavation using trackhoe. Complete excavation at approximate dimensions of 60' x 48' x 4.5' deep. Field chloride screening indicates impacts may exceed excavation limits. Collect closure sampling of excavation sidewalls.

June 24, 2019 Receive rush analytical test results from laboratory. Excavation closure samples reported as follows:

Table 1
Remedial Excavation
Closure Analytical Test Results
June 21, 2019

Sample ID	Number Composites	Sampling Depths	Chlorides (mg/Kg)
West Wall	10	1'-4'	1,810
North Wall	10	1'-4'	1,370
East Wall	10	1'-4'	503
South Wall	10	1'-4'	1,020

Conduct delineation sampling outside of excavation. Complete excavation backfilling. Remediation suspended pending further evaluation.

July 2, 2019 Receive delineation analytical test results from laboratory. Test results as follows:

Table 2
Delineation Samples
June 24, 2019

Sample ID	Number Composites	Sampling Depths	Chlorides (mg/Kg)
Test Hole A (70' NE)	5	1'-4'	1,210
Test Hole B (35' East)	5	1'-4'	983
Test Hole C (35' South)	5	1'-4'	827
Test Hole D (35' West)	5	1'-4'	875
Test Hole E (30' NW)	5	1'-4'	731
Test Hole F (100' East)	5	1'-4'	113

Site photo's, figures and laboratory test reports attached.

GCU 505
Initial Remedial Excavation
June 19, 2019

40 ft

GCU 505

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

June 19, 2019

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

11' Depth
CL-: Field Test = 684 ppm,
Lab Test = 230 mg/kg

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

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







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, appearing to read 'Walter Hinchman', is written over a light pink rectangular background.

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

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

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

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

Blank (1925040-BLK1)

Prepared: 06/21/19 0 Analyzed: 06/21/19 1

Chloride	ND	20.0	mg/kg							
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LCS (1925040-BS1)

Prepared: 06/21/19 0 Analyzed: 06/21/19 1

Chloride	252	20.0	mg/kg	250		101	90-110			
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Matrix Spike (1925040-MS1)

Source: P906094-01

Prepared: 06/21/19 0 Analyzed: 06/21/19 1

Chloride	263	20.0	mg/kg	250	ND	105	80-120			
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Matrix Spike Dup (1925040-MSD1)

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	
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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	Reported:
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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envirotech
Analytical Laboratory

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

Page 6 of 6



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, appearing to read 'Walter Hinchman', is written over a light pink rectangular background.

Date: 6/21/19

Walter Hinchman, Laboratory Director



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Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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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

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	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/21/19 11:35

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	1340	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	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/21/19 11:35

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

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

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

Blank (1925028-BLK1)

Prepared: 06/19/19 1 Analyzed: 06/20/19 0

Chloride	ND	20.0	mg/kg							
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LCS (1925028-BS1)

Prepared: 06/19/19 1 Analyzed: 06/20/19 0

Chloride	268	20.0	mg/kg	250		107	90-110			
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Matrix Spike (1925028-MS1)

Source: P906086-01

Prepared: 06/19/19 1 Analyzed: 06/20/19 1

Chloride	265	20.0	mg/kg	250	ND	106	80-120			
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Matrix Spike Dup (1925028-MSD1)

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	
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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	Reported:
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.

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Project Information				Chain of Custody				Report Attention				Lab Use Only				EPA Program			
Client: BPX				Report due by: 6/20/2019				Lab WO# P906087				Job Number 03143-0424				TAT 1D 3D			
Project Manager: Steve Moskal				Attention: Jeff Blagg / Steve Moskal				Lab WO# P906087				Job Number 03143-0424				RCRA CWA SDWA			
Address:				Address:				Analysis and Method				State				Remarks			
City, State, Zip				City, State, Zip				DRO/DRO by 8015				VOC by 8260				Metals 6010			
Phone:				Phone:				GRO/DRO by 8015				BTEX by 8021				Chloride 300.0			
Email:				Email:				Lab Number				TPH 418.1				NM CO UT AZ			
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number														
1403	6/19/2019	Soil	1	12' South of Fence (2'-4')	1														
1425	6/19/2019	Soil	1	12' East of Fence (2'-4')	2														
1502	6/19/2019	Soil	1	20' South of Fence (2'-4')	3														
1513	6/19/2019	Soil	1	2' North of Fence (2'-4')	4														
Additional Instructions: Bill BPX P.O. to be Prepared																			

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) Jeff Blagg Date 6/19/19 Time 1637

Relinquished by: (Signature) Jeff Blagg Date 6/19/19 Time 1637

Received by: (Signature) Jeff Blagg Date 6/19/19 Time 16:37

Received by: (Signature) Jeff Blagg Date 6/19/19 Time 16:37

Lab Use Only

Received on ice: Y/N

AVG Temp °C T1 T2 T3

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

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

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.

GCU 505
Extended Remediation
&
Site Delineation
June 24, 2019

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

June 21 - 24, 2019















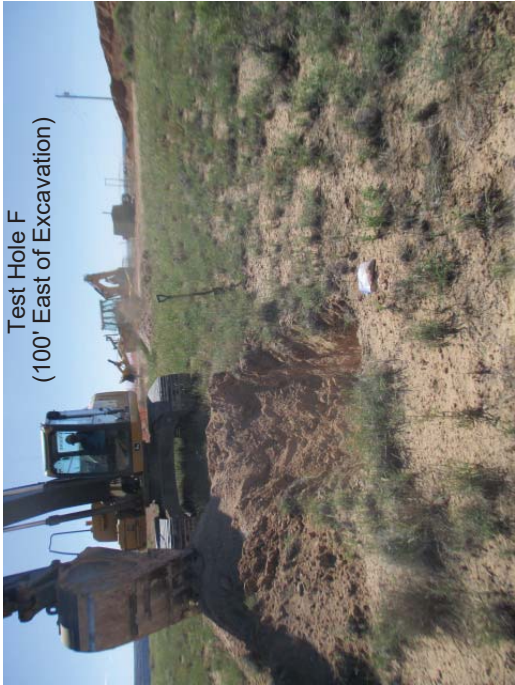




Test Hole D
(35' West of Excavation)



Test Hole E
(30' NW of Excavation)





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, appearing to read 'Walter Hinchman', is written over a light pink rectangular background.

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

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	1810	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	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/25/19 14:55

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	1370	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	Reported:
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	503	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	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/25/19 14:55

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	1020	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	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	06/25/19 14:55

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

LCS (1926001-BS1)

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

Chloride 251 20.0 mg/kg 250 100 90-110

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

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

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	Reported: 06/25/19 14:55
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	

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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 **envirotech**
Analytical Laboratory



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, appearing to read 'Walter Hinchman', is written over a light pink rectangular background.

Date: 7/2/19

Walter Hinchman, Laboratory Director



Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
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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

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	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	07/02/19 09:43

TH-A (70' NE)
P906111-01 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	1210	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	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	07/02/19 09:43

TH-B (35' East)

P906111-02 (Solid)

Reporting									
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Anions by 300.0/9056A

Chloride	983	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	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	07/02/19 09:43

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

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	
PO Box 22024	Project Number:	03143-0424	Reported:
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	07/02/19 09:43

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

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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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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PO Box 22024	Project Number:	03143-0424	Reported:
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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envirotech
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