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	NRM2032858637
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Simcoe LLC operated by BP America Production Co	OGRID: 329736	INITIAL & FINAL
Contact Name: Steve Moskal	Contact Telephone: (505) 330-9179	
Contact email: steven.moskal@bpx.com	Incident # *(assigned by OCD)*	
Contact mailing address: 1199 Main St., Suite 101, Durango CO, 81301		

Location of Release Source

Latitude: 36.721295° Longitude: -107.669461°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: GALLEGOS CANYON UNIT 13 SWD #001	Site Type: Salt Water Disposal Well - Flowline
Date Release Discovered: October 22, 2020	API#: 30-045-28601

Unit Letter	Section	Township	Range	County
J	13	T29N	13W	San Juan

NOT ACCEPTED

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls): **13.7**	Volume Recovered (bbls): **0**
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls):	Volume Recovered (bbls):
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:
Release of condensate and produced water caused from a flowline integrity failure.

BP confirmed a reportable release of produced water associated with a flowline repair on 10/22/20. BP reported the findings via email and requested guidance of the release in the attached. The accompanying documentation demonstrates no significant impact to groundwater (demonstrated to be >100' deep) with minimal lateral extents (4'x'6 base of excavation).

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032858637
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature:  Date: 11/10/2020

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

OCD Only

Received by: Ramona Marcus Date: 11/23/2020

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032858637
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?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☒ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032858637
District RP	
Facility ID	
Application ID	

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

Printed Name: Steve Moskal Title: Environmental Coordinator

Signature:  Date: 11/10/2020

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

OCD Only

Received by: Ramona Marcus Date: 11/23/2020

Incident ID	NRM2032858637
District RP	
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Application ID	

Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2032858637
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: 11/10/2020

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

OCD Only

Received by: Ramona Marcus Date: 11/23/2020

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: _____

Printed Name: _____ Title: _____

GALLEGOS CANYON UNIT 13 SWD #001

API 30-045-28601
J-13-29N-13W
Excavation: 36.723454°, -108.156466°

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Summary of Laboratory Analysis
Results in mg/Kg

GCU 13 SWD #001 Waterline
Pipeline Release
11/3/2020

Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8015 MRO	Method 8021 Benzene	Method 8021 BTEX	Method 300.0 Chloride
NMOCD Guidelines				**100**	**100**		**10 ppm**	**50 ppm**	**600 ppm**
10/23/2020	9:37AM	SS01 Sidewalls @ 3.5'	3.5	<20.0	<25.0	<50.0	<0.025	0.187	590
10/23/2020	9:40AM	SS02 Base @ 4.5'	4.5	<10.0	49.5	<10.0	0.167	<0.150	**1990**
10/23/2020	9:45AM	SS03 Spoils Pile	Surface	<10.0	50.1	<10.0	<0.025	<0.150	**1330**

During a flowline repair begining on 10/22/2020, the excavation was sampled to determine lateral and vertical extents. Samples were collected on 10/23/2020, from the release point at the sidewalls and at the base of the excavation. The excavated soil was stockpiled on site and sampled to determine if off site disposal was necessarry. The stockpile material was hauled off site and disposed of at a NMOCD approved facility; attached is a C-138 documenting the disposal.

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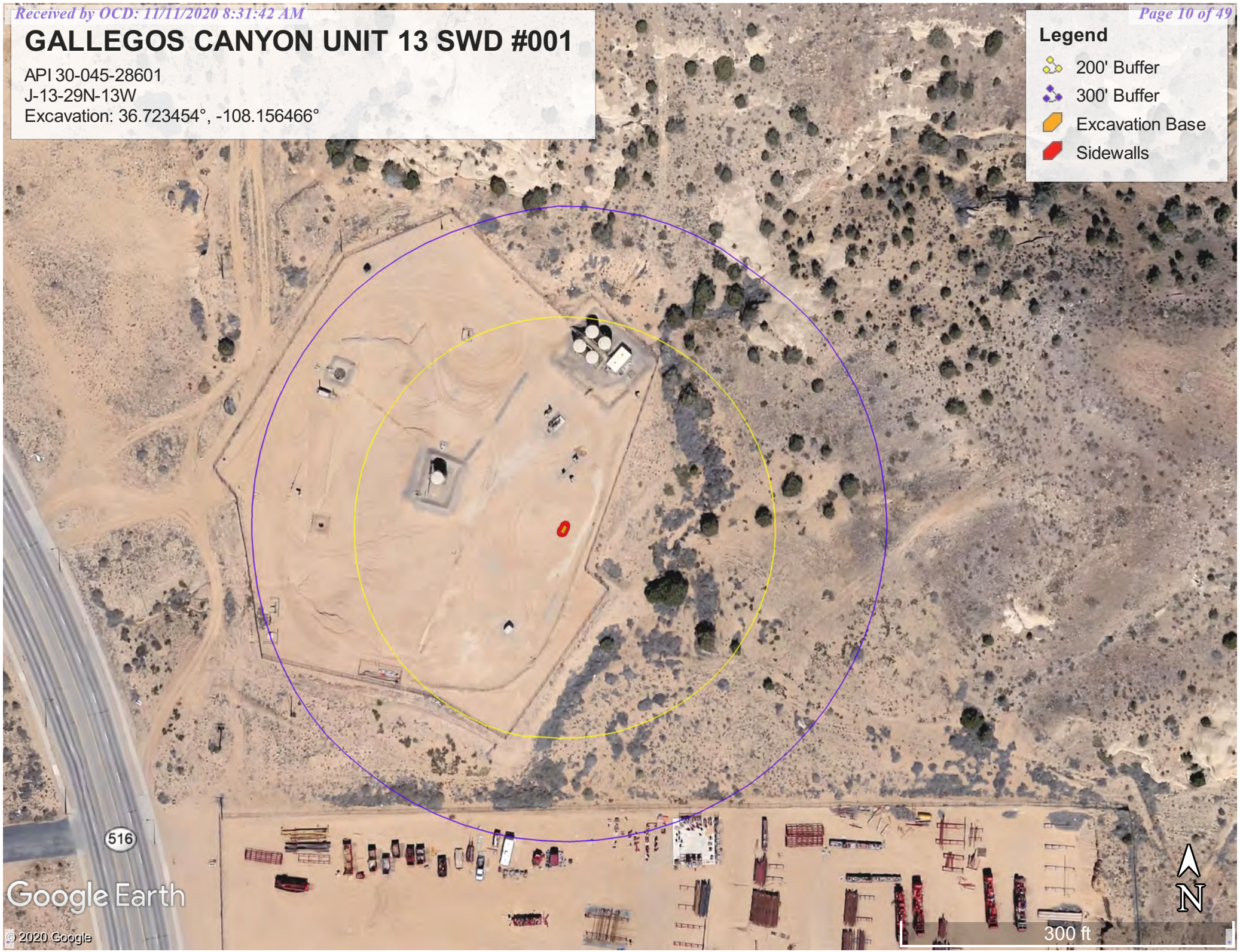
Excavation sample points; Red – Sidewalls; Orange – Base
Left hand of photo is north end of excavation.

Excavation sample points; Red – Sidewalls; Orange – Base
Left hand of photo is west end of excavation.

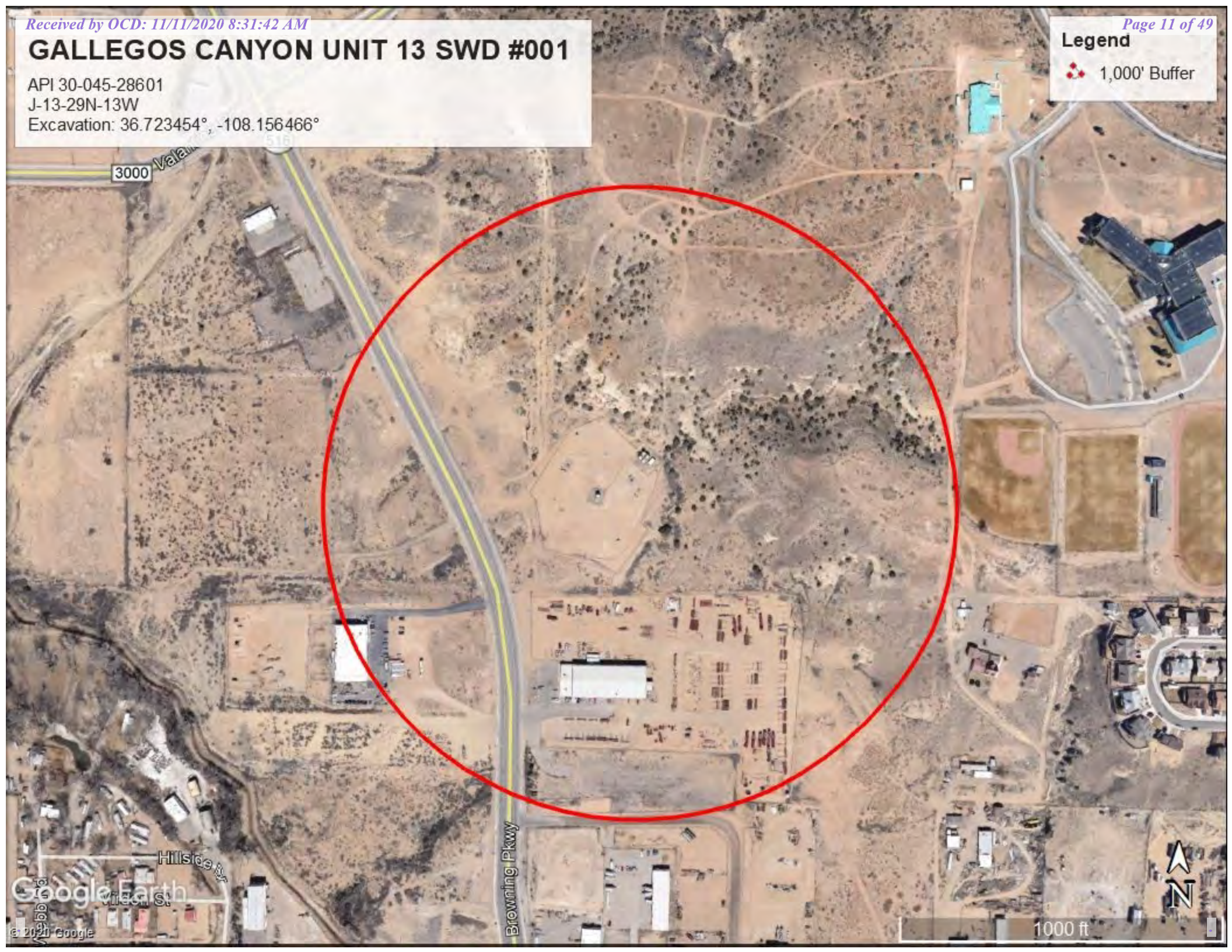
GALLEGOS CANYON UNIT 13 SWD #001

API 30-045-28601
J-13-29N-13W
Excavation: 36.723454°, -108.156466°



GALLEGOS CANYON UNIT 13 SWD #001

API 30-045-28601
J-13-29N-13W
Excavation: 36.723454°, -108.156466°



SITING AND HYDRO-GEOLOGICAL REPORT FOR GALLEGOS CANYON UNIT 13 SWD 001

Siting Criteria 19.15.17.10 NMAC

Depth to groundwater at the site is estimated to be greater than 100 feet. 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 (OSE, Figure 1). Local topography and proximity to adjacent water features are also considered. A topographic map of the site is provided as Figure 2 and demonstrates that the below grade tank (BGT) is not within 300 feet of any continuously flowing watercourse or within 200 feet of any other significant watercourse, lakebed, sinkhole or playa lake as measured from the ordinary high water mark. Figure 3 demonstrates that the BGT is not within 300 feet of a permanent residence, school, hospital, institution or church. Figure 4 demonstrates, based on a search of the OSE database and USGS topographic maps, that there are no freshwater wells or springs within 1000 feet of the BGT. Figure 5 demonstrates, based on a search of the OSE database and USGS topographic maps, that the BGT is within a municipal boundary or a defined municipal freshwater well field. Figure 6 demonstrates that the BGT is not within 500 feet of a wetland. Figure 7 demonstrates that the BGT is not in an area overlying a subsurface mine. The BGT is not located in an unstable area. Figure 8 demonstrates that the BGT is not within the mapped FEMA 100-year floodplain.

The BGT subject to the attached application for a permit under 19.15.17 NMAC (New Mexico Administrative Code) was in existence prior to promulgation of 19.15.17 NMAC. A review of the best available data and a visual inspection of the siting criteria of 19.15.17 NMAC specific to the BGT in question demonstrate that the BGT does not appear to pose an imminent threat to public health and the environment.

Local Geology and Hydrology

This particular site is located within the Ojo Alamo Sandstone southwest of Crouch Mesa between the Animas and San Juan rivers. The site is located at the base of the mesa approximately 1 mile away from the Animas and San Juan rivers and 120 feet lower in elevation. Although the BGT site is located within the municipal boundary ordinance, the tank is isolated and stable therefore creating no imminent threat to local groundwater or human health, safety and welfare.

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

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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/Ojo Alamo Sandstone to the west. The Ojo Alamo Sandstone consists of sandstone and conglomeritic sandstone and overlies the Kirtland Shale. The thickness of the Ojo Alamo ranges from 72 to 313 feet (Stone et al., 1983). The predominant aquifer within the Ojo Alamo Sandstone occurs from near the surface to over 200 feet in depth. The aquifer is widely used as a domestic and stock water source.

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

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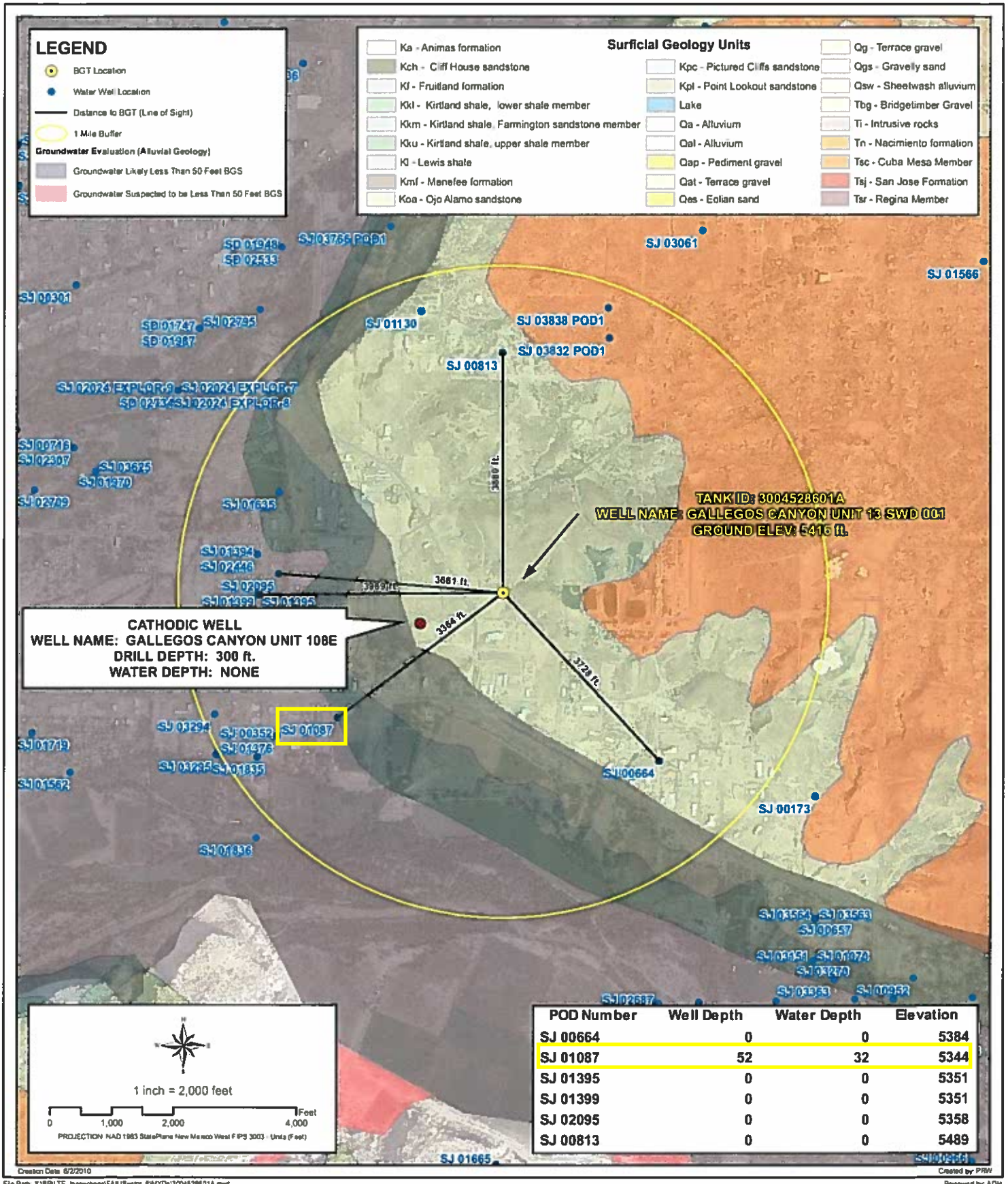

POD Number	Well Depth	Water Depth	Elevation
SJ 00664	0	0	5384
SJ 01087	52	32	5344
SJ 01395	0	0	5351
SJ 01399	0	0	5351
SJ 02095	0	0	5358
SJ 00813	0	0	5489

Creation Date: 6/2/2010 Created by: PRW
File Path: X:\BPLTE_Inspections\FAIL\Sector_6\MXDs\3004528601A.mxd Reviewed by: AGH

GROUNDWATER LESS THAN 50 FT.

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 1

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New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: SJ 01087 **Subbasin:** SJM2 **Cross Reference:** -

Primary Purpose: IRR IRRIGATION

Primary Status: DCL DECLARATION

Total Acres: 3 **Subfile:** - **Header:** -

Total Diversion: 9 **Cause/Case:** -

Owner: RAYMOND W. NEIDIGH

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	223042	DCL	1979-11-13	DCL	PRC	SJ 01087	T	3	9	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
SJ 01087		Shallow	1	1	1	24	29N	13W	217280	4068292*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	
04/08/1981	DCL	3	9	SJ 01087	Shallow

Place of Use

Q 256	Q 64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
	1	1	1	24	29N	13W	3	9		IRR	12/31/1964	DCL	
	3	1	1	24	29N	13W	0	0		IRR	12/31/1964	DCL	SEE PREVIOUS SCREEN FOR ACRES & DIV

Source

Acres	Diversion	CU	Use	Priority	Source	Description
3	9		IRR	04/08/1981	GW	

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.

10/30/20 1:30 PM

WATER RIGHT SUMMARY

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 01087	1	1	1	24	29N	13W	217280	4068292*

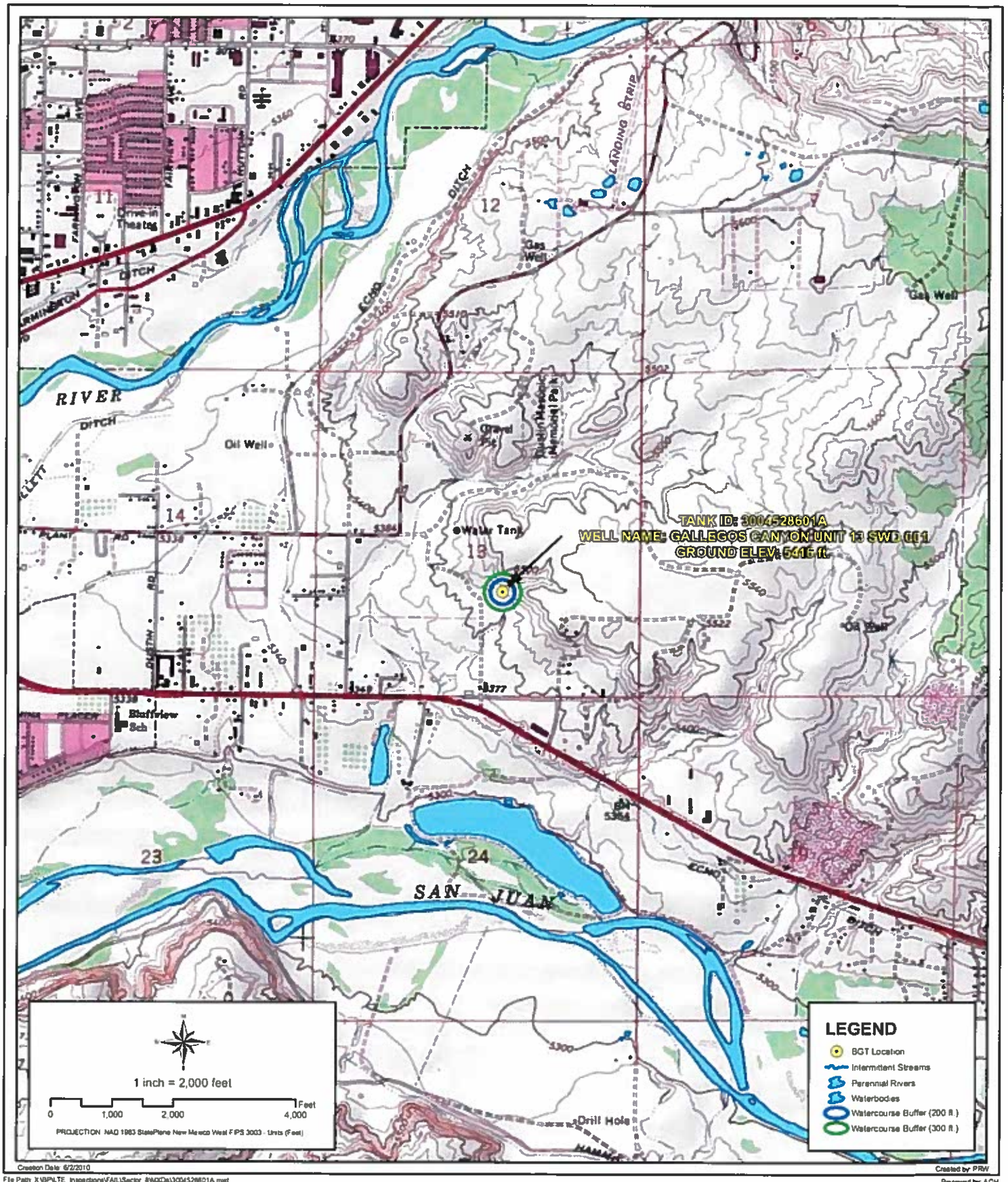
Driller License: **Driller Company:**

Driller Name: UNKNOWN

Drill Start Date:		**Drill Finish Date:**	04/08/1981	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	52 feet	**Depth Water:**	32 feet

***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.



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bp

PROXIMITY TO WATERCOURSES

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 2

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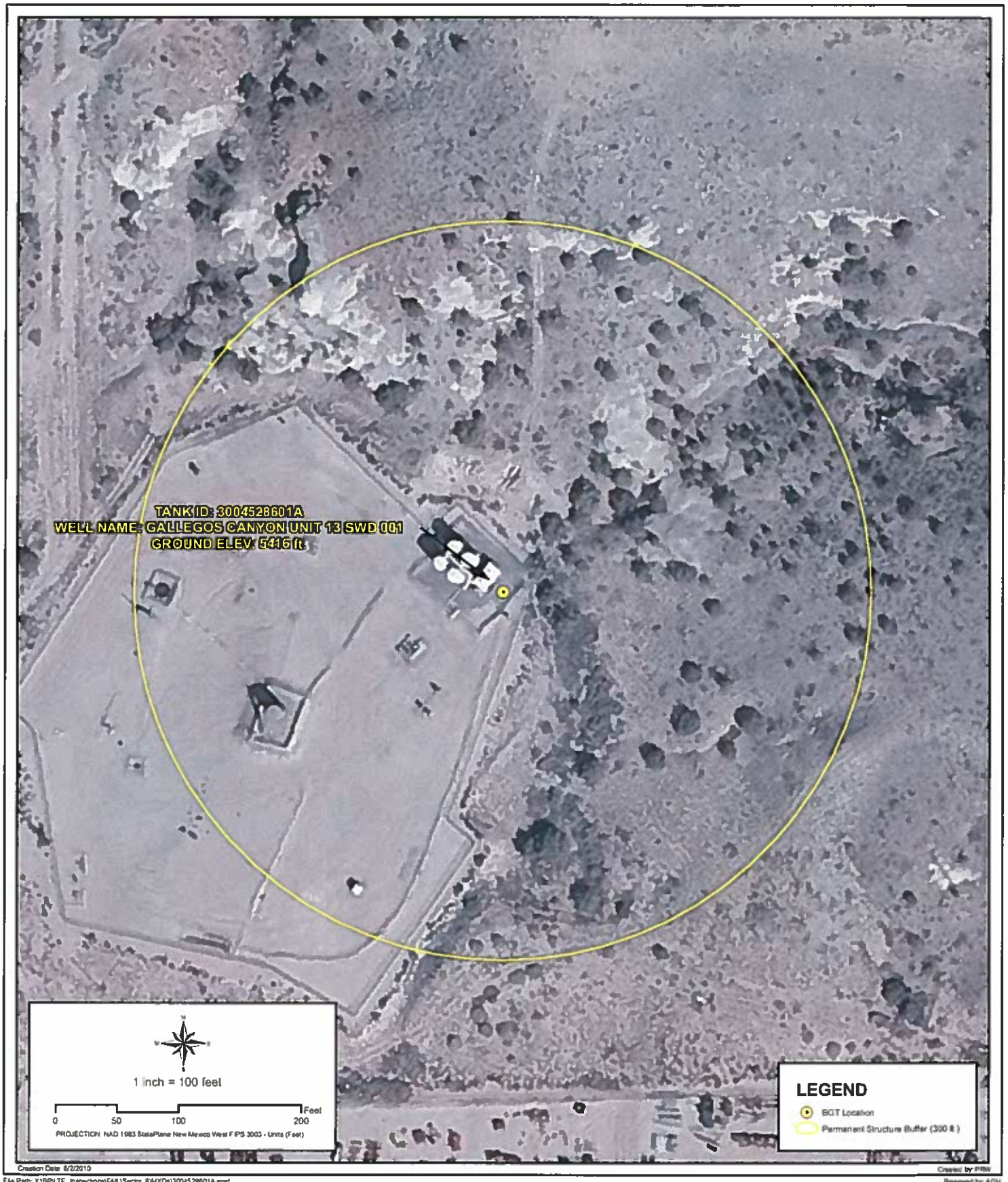

bp

PROXIMITY TO PERMANENT STRUCTURE

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 3

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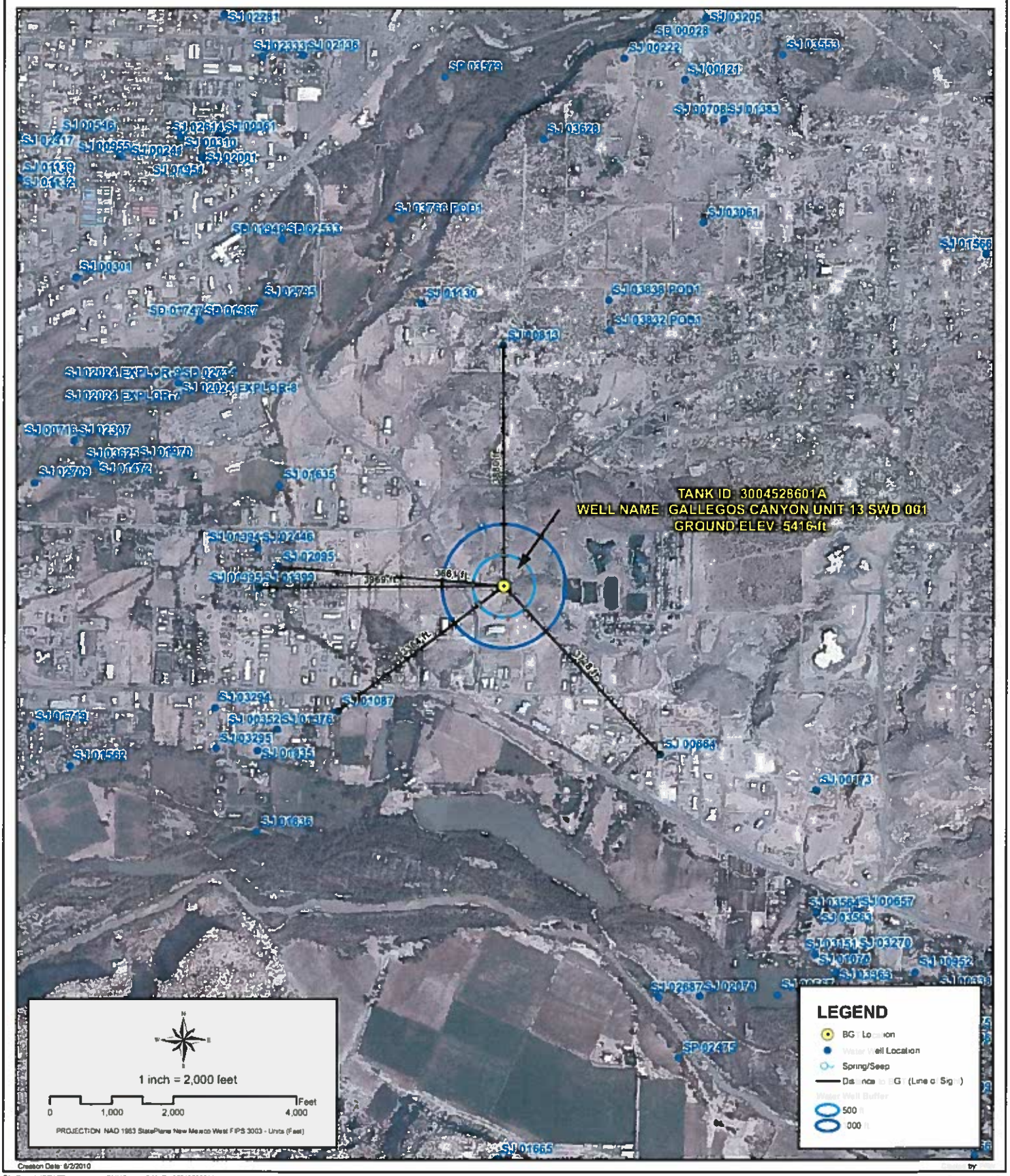

Creation Date: 8/2/2010

File Path: X:\BP\LTE_Inspections\FAK\Sector_6\MXDs\3004528601A.mxd

PROXIMITY TO WATER WELLS

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 4

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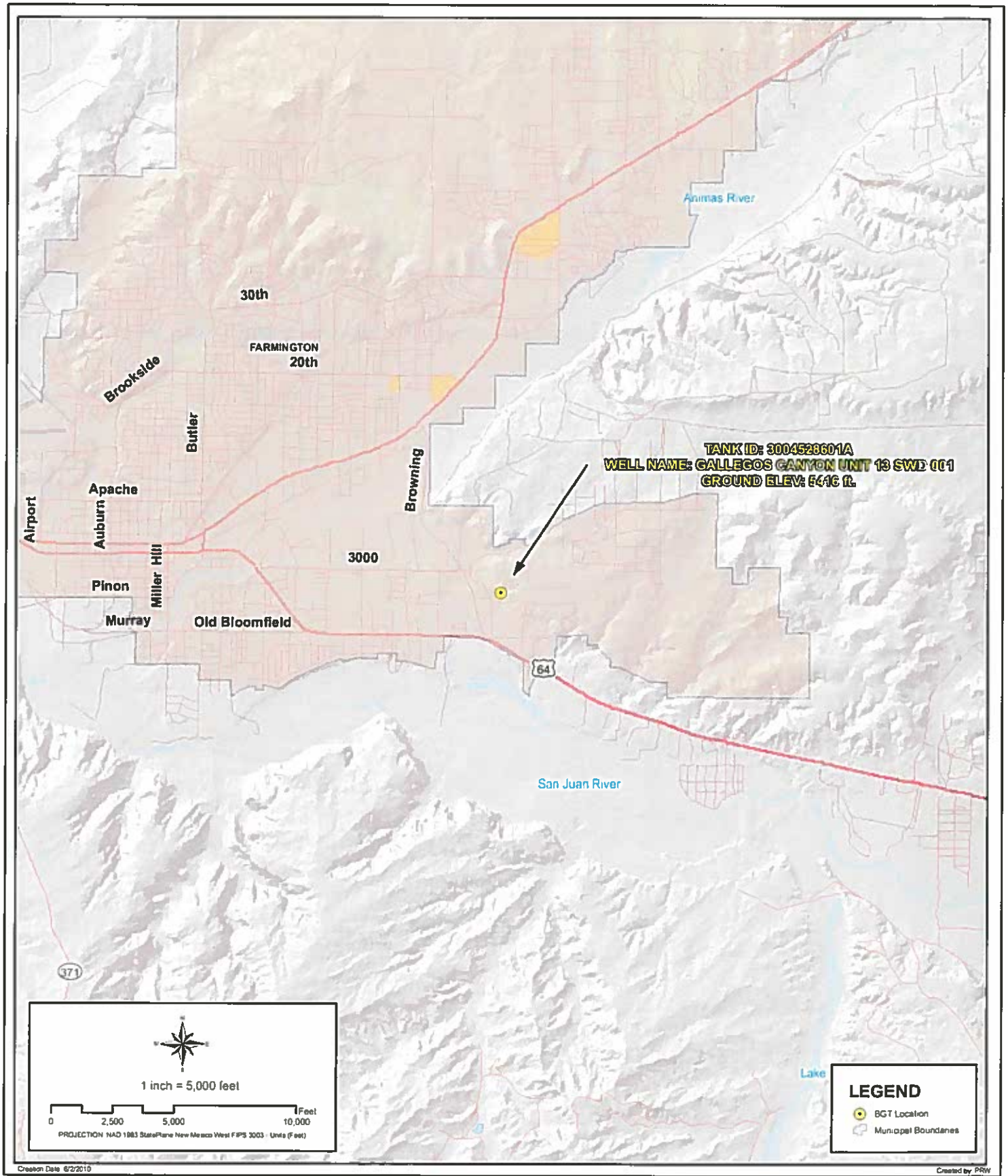

PROXIMITY TO MUNICIPAL BOUNDARY

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 5

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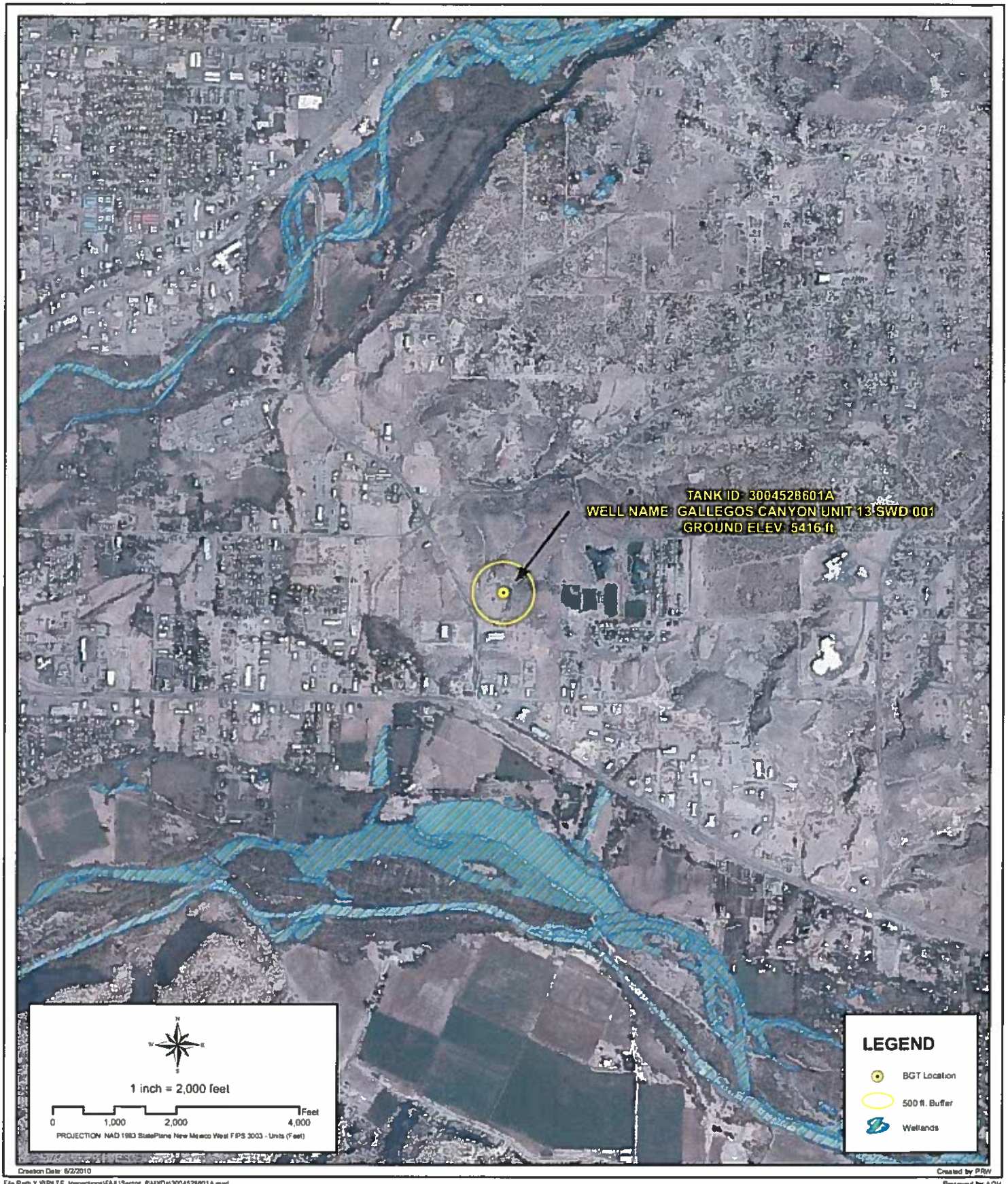

bp

PROXIMITY TO WETLANDS

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 6

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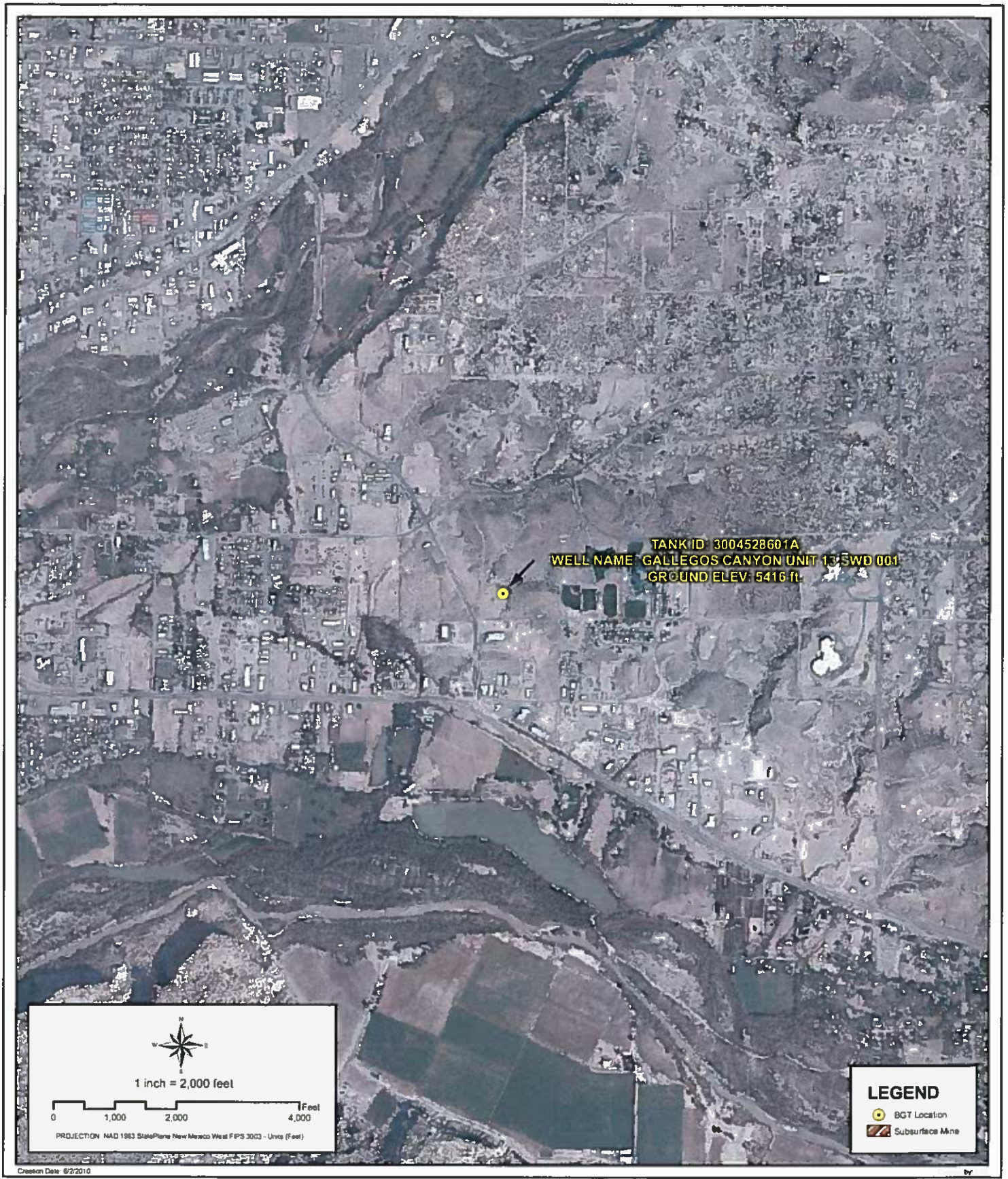

bp

PROXIMITY TO SUBSURFACE MINES

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M.NM23

FIGURE 7

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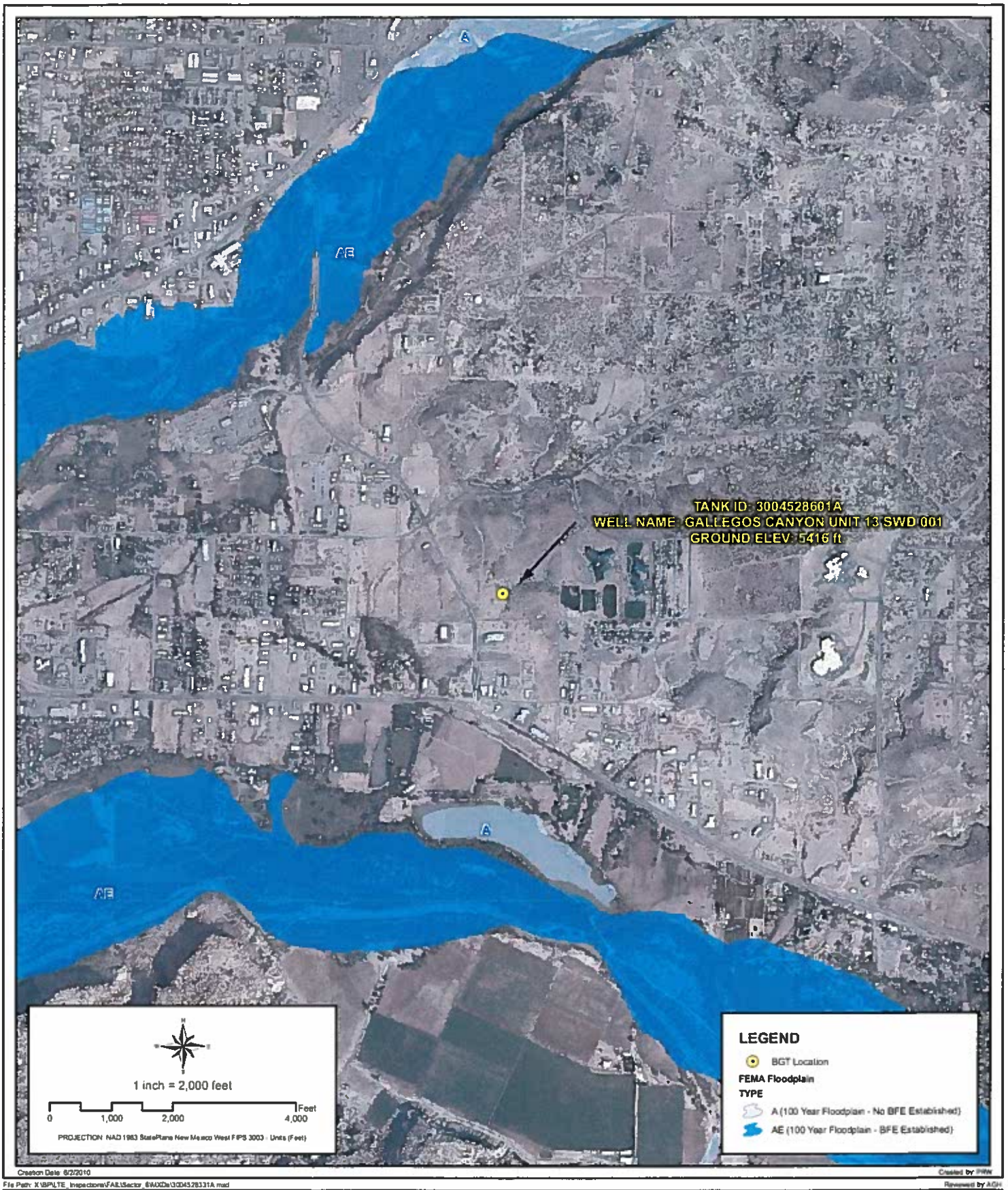

bp

PROXIMITY TO FLOODPLAIN

WELL NAME: GALLEGOS CANYON UNIT 13 SWD 001

API NUMBER: 3004528601 TANK ID: 3004528601A

SECTION 13, TOWNSHIP 29.0N, RANGE 13W, P.M. NM23

FIGURE 8

Received by OCD: 11/11/2020 8:31:42 AM

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SOUTHERN SAN JUAN BASIN (SSJB)

Figure Citation List

March 2010

Figure 1: Groundwater Less Than 50 ft.

Layers:

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters_db_index.html.

Cathodic Wells: **Tierra Corrosion Control, Inc. (Aug. 2008)**

Tierra Corrosion Control, Inc. 1700 Schofield Ln. Farmington, NM 87401. Driller's Data Log. (Data collected: All data are associated with cathodic protection wells installed at BP facilities between 2008-2009. Data received: 05/06/2010).

Hydrogeological Evaluation: **Wright Water Engineers, Inc. (2008)**

Evaluation completed by Wright Water Engineers, Inc. Durango Office. Data created using digital statewide geology at 1:500,000 from USGS in combination with 10m Digital Elevation Model (DEM) from NRCS. (Data compiled: 2008.)

Results: Spatial Polygons representing "Groundwater likely to be less than 50 ft." and "Groundwater suspected to be less than 50 ft.".

Surficial Geology: **USGS (1963/1987)**

Data digitized and rectified by Geospatial Consultants. (Data digitized: 03/23/ 2010). Original hard copy maps sourced from United States Geological Survey (USGS). Data available from: http://pubs.er.usgs.gov/.

Geology, Structure and Uranium Deposits of the Shiprock Quadrangle, New Mexico and Arizonia. 1:250,000. I - 345. Compiled by Robert B. O'Sullivan and Helen M. Beikman. 1963.

Geologic Map of the Aztec 1 x 2 Quadrangle, Northwestern New Mexico and Southern Colorado. 1:250,000. I - 1730. Compiled by Kim Manley, Glenn R. Scott, and Reinhard A. Wobus. 1987.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

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Figure 2: Proximity to Watercourses

Layers:

Perennial Streams: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Intermittent Streams: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital Representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Water Bodies: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

USGS Topographic Maps: **USGS (2007)**

USGS 24k Topographic map series. 1:24000. Maps are seamless, scanned images of USGS paper topographic maps. Data available from: http://store.usgs.gov.

Figure 3: Proximity to Permanent Structure

Layers:

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

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Figure 4: Proximity to Water Wells

Layers:

Water Wells: **iWaters Database: NMOSE/ISC (Dec. 2009)**

New Mexico Office of the State Engineer (OSE) /ISC iWaters database. (Data updated: 12/2009. Data received: 03/09/2010). Data available from: http://www.ose.state.nm.us/waters_db_index.html.

Springs/Seeps: **NHD, USGS (2010)**

National Hydrography Dataset (NHD). U.S. Geological Survey. (Data last updated: 02/19/2010. Data received: 03/09/2010). High-resolution: 1:24,000. Digital representation of USGS 24k Topographic map series with field updates as required. Data available from: http://nhd.usgs.gov/.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name: NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 5: Proximity to Municipal Boundary

Layers:

Municipal Boundary: **San Juan County, New Mexico (2010)**

Data provided by San Juan County GIS Division. (Data received: 03/25/2010).

Shaded Relief: **NED, USGS (1999)**

National Elevation Dataset (NED). U.S. Geological Survey, EROS Data Center. (Data created: 1999. Data downloaded: April, 2010). Resolution: 10 meter (1/3 arc-second). Data available from: http://ned.usgs.gov/.

StreetMap North America: **Tele Atlas North America, Inc., ESRI (2008)**

Data derived from Tele Atlas Dynamap/Transportation North America, version 5.2. (Data updated: annually. Data series issue: 2008).

Received by OCD: 11/11/2020 8:31:42 AM

Figure 6: Proximity to Wetlands

Layers:

Wetlands: **NWI (2010)**

National Wetlands Inventory (NWI). U.S Fish and Wildlife Service. (Data last updated: 09/25/2009. Data received: 03/21/2010). Data available from: http://www.fws.gov/wetlands/.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Figure 7: Proximity to Subsurface Mine

Layers:

Subsurface Mine: **NM Mining and Minerals Division (2010)**

New Mexico Mining and Minerals Division. (Data received: 03/12/2010). Contact: Susan Lucas Kamat, Geologist. Provided PLSS NM locations (Sections) for the two subsurface mines located in San Juan and Rio Arriba counties.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

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Figure 8: Proximity to FEMA Floodplain

Layers:

FEMA Floodplain: **FEMA (varying years)**

Data digitized and rectified by Wright Water Engineers, Inc. (Data digitized: August 2008). Digitized from hard copy Flood Insurance Rate Maps (FIRMs) (varying years) of San Juan County.

Aerial Imagery: **Conoco (Summer 2009)**

ConocoPhillips Company. (Flown: Summer 2009). 12 in. High Resolution Orthoimagery. Projected coordinate system name:
NAD_1983_StatePlane_New_Mexico_West_FIPS_3003_Feet.

Provided as tiled .tiff images and indexed using polygon index layer.

Received by OCD: 11/11/2020 8:31:42 AM

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**
Simcoe LLC operated by BP America Production Co. 1199 Main Street, Suite 101, Durango, CO 81301

2. **Originating Site:**
Gallegos Canyon Unit 13 SWD #001
Don Buller will approve.

3. **Location of Material (Street Address, City, State or ULSTR):**
J-13-29N-13W

4. **Source and Description of Waste:** Hydrocarbon and chloride impacted soil associated with flowline remediation.

Estimated Volume 10 ☒ yd³ / ☐ bbls Known Volume (to be entered by the operator at the end of the haul) 10 ☒ yd³ / ☐ bbls

5. **GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS**

I, Steve Moskal, representative or authorized agent for BP America Production Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other Laboratory Analysis provided.

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

Steve Moskal
I, _____, representative for BP America Production Company authorize IEI/JFJ to complete the required testing/sign the Generator Waste Testing Certification.

I, Betty Pruden, representative for IET, do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. **Transporter:**
Kelley

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **JFJ Landfarm/Industrial Ecosystems, Inc. *Permit#: NM01-0010B**

Address of Facility: **# 49 CR 3150 Aztec, NM 87410**

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Roger Tingley TITLE: Team Coord DATE: 11/3/20

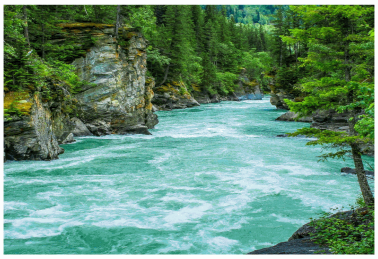
SIGNATURE: _____ TELEPHONE NO.: 505 632 1782

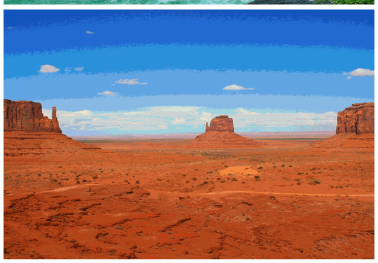
Surface Waste Management Facility Authorized Agent

11/2

Received by OCD: 11/11/2020 8:31:42 AM

Report to:
Steve Moskal
PO Box 22024
Tulsa, OK 74121-2024





5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

NELAP ACCREDITED TNI LABORATORY

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

BP America Production Co.

Project Name:	GCU 13-1
Work Order:	E010119
Job Number:	03143-0424
Received:	10/23/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/29/20

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted 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, holds the Utah TNI certification NM009792018-1 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 10/29/20

Steve Moskal
PO Box 22024
Tulsa, OK 74121-2024

Project Name: GCU 13-1
Workorder: E010119
Date Received: 10/23/2020 10:07:00AM

Steve Moskal,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/23/2020 10:07:00AM, under the Project Name: GCU 13-1.

The analytical test results summarized in this report with the Project Name: GCU 13-1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Lopez
Laboratory Administrator
Office: 505-632-1881
rlopez@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

BP America Production Co.	Project Name:	GCU 13-1	**Reported:**
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/20 15:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 Sidewalls @3.5'	E010119-01A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.
SS02 Base @4.5'	E010119-02A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.
SS03 Spoils	E010119-03A	Soil	10/23/20	10/23/20	Glass Jar, 4 oz.

Sample Data

BP America Production Co.	Project Name:	GCU 13-1	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

SS01 Sidewalls @3.5'

E010119-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	ND	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*95.5 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*95.5 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2044008
Diesel Range Organics (C10-C28)	ND	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane		*84.1 %*	*50-200*	*10/27/20*	*10/27/20*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: NE			Batch: 2044010
Chloride	**590**	20.0	1	10/27/20	10/27/20	

Sample Data

BP America Production Co.	Project Name:	GCU 13-1	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

SS02 Base @4.5'

E010119-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	**0.167**	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*111 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*96.5 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*111 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*96.5 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2044008
Diesel Range Organics (C10-C28)	**49.5**	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane		*90.6 %*	*50-200*	*10/27/20*	*10/27/20*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: NE			Batch: 2044010
Chloride	**1990**	20.0	1	10/27/20	10/27/20	

Sample Data

BP America Production Co.	Project Name:	GCU 13-1	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

SS03 Spoils

E010119-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Benzene	ND	0.0250	1	10/26/20	10/28/20	
Toluene	ND	0.0250	1	10/26/20	10/28/20	
Ethylbenzene	ND	0.0250	1	10/26/20	10/28/20	
p,m-Xylene	ND	0.0500	1	10/26/20	10/28/20	
o-Xylene	ND	0.0250	1	10/26/20	10/28/20	
Total Xylenes	ND	0.0250	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*96.1 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*97.1 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2044001
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/26/20	10/28/20	
Surrogate: 1,2-Dichloroethane-d4		*96.1 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*10/26/20*	*10/28/20*	
Surrogate: Bromofluorobenzene		*97.1 %*	*70-130*	*10/26/20*	*10/28/20*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2044008
Diesel Range Organics (C10-C28)	**50.1**	25.0	1	10/27/20	10/27/20	
Oil Range Organics (C28-C35)	ND	50.0	1	10/27/20	10/27/20	
Surrogate: n-Nonane		*91.9 %*	*50-200*	*10/27/20*	*10/27/20*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: NE			Batch: 2044010
Chloride	**1330**	20.0	1	10/27/20	10/27/20	

envirotech Inc.

QC Summary Data

BP America Production Co.	Project Name:	GCU 13-1	**Reported:**
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2044001-BLK1)									Prepared: 10/26/20 Analyzed: 10/27/20
Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 1,2-Dichloroethane-d4	*0.500*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.517*		*0.500*		*103*	*70-130*			
Surrogate: Bromofluorobenzene	*0.495*		*0.500*		*98.9*	*70-130*			
LCS (2044001-BS1)									Prepared: 10/26/20 Analyzed: 10/27/20
Benzene	2.24	0.0250	2.50		89.7	70-130			
Toluene	2.35	0.0250	2.50		94.2	70-130			
Ethylbenzene	2.46	0.0250	2.50		98.4	70-130			
p,m-Xylene	4.90	0.0500	5.00		98.0	70-130			
o-Xylene	2.48	0.0250	2.50		99.2	70-130			
Total Xylenes	7.38	0.0250	7.50		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.509*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.519*		*0.500*		*104*	*70-130*			
Surrogate: Bromofluorobenzene	*0.508*		*0.500*		*102*	*70-130*			
Matrix Spike (2044001-MS1)				**Source: E010117-01**					Prepared: 10/26/20 Analyzed: 10/27/20
Benzene	2.31	0.0250	2.50	ND	92.2	48-131			
Toluene	2.37	0.0250	2.50	ND	94.8	48-130			
Ethylbenzene	2.48	0.0250	2.50	ND	99.3	45-135			
p,m-Xylene	4.99	0.0500	5.00	ND	99.7	43-135			
o-Xylene	2.52	0.0250	2.50	ND	101	43-135			
Total Xylenes	7.51	0.0250	7.50	ND	100	43-135			
Surrogate: 1,2-Dichloroethane-d4	*0.516*		*0.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*0.523*		*0.500*		*105*	*70-130*			
Surrogate: Bromofluorobenzene	*0.510*		*0.500*		*102*	*70-130*			
Matrix Spike Dup (2044001-MSD1)				**Source: E010117-01**					Prepared: 10/26/20 Analyzed: 10/27/20
Benzene	2.23	0.0250	2.50	ND	89.3	48-131	3.22	23	
Toluene	2.31	0.0250	2.50	ND	92.4	48-130	2.63	24	
Ethylbenzene	2.42	0.0250	2.50	ND	97.0	45-135	2.36	27	
p,m-Xylene	4.85	0.0500	5.00	ND	97.0	43-135	2.77	27	
o-Xylene	2.45	0.0250	2.50	ND	97.8	43-135	3.02	27	
Total Xylenes	7.29	0.0250	7.50	ND	97.3	43-135	2.85	27	
Surrogate: 1,2-Dichloroethane-d4	*0.511*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.513*		*0.500*		*103*	*70-130*			
Surrogate: Bromofluorobenzene	*0.512*		*0.500*		*102*	*70-130*			

QC Summary Data

BP America Production Co.	Project Name:	GCU 13-1	**Reported:**
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2044001-BLK1)									Prepared: 10/26/20 Analyzed: 10/27/20
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1,2-Dichloroethane-d4	*0.500*		*0.500*		*100*	*70-130*			
Surrogate: Toluene-d8	*0.517*		*0.500*		*103*	*70-130*			
Surrogate: Bromofluorobenzene	*0.495*		*0.500*		*98.9*	*70-130*			
Matrix Spike (2044001-MS2)				**Source: E010117-01**					Prepared: 10/26/20 Analyzed: 10/27/20
Gasoline Range Organics (C6-C10)	52.8	20.0	50.0	ND	106	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.508*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.526*		*0.500*		*105*	*70-130*			
Surrogate: Bromofluorobenzene	*0.497*		*0.500*		*99.4*	*70-130*			
Matrix Spike Dup (2044001-MSD2)				**Source: E010117-01**					Prepared: 10/26/20 Analyzed: 10/27/20
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0	ND	87.9	70-130	18.3	20	
Surrogate: 1,2-Dichloroethane-d4	*0.513*		*0.500*		*103*	*70-130*			
Surrogate: Toluene-d8	*0.514*		*0.500*		*103*	*70-130*			
Surrogate: Bromofluorobenzene	*0.503*		*0.500*		*101*	*70-130*			

QC Summary Data

BP America Production Co.	Project Name:	GCU 13-1	**Reported:**
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2044008-BLK1)									Prepared: 10/27/20 Analyzed: 10/27/20
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	*44.6*		*50.0*		*89.3*	*50-200*			
LCS (2044008-BS1)									Prepared: 10/27/20 Analyzed: 10/27/20
Diesel Range Organics (C10-C28)	418	25.0	500		83.6	38-132			
Surrogate: n-Nonane	*43.3*		*50.0*		*86.5*	*50-200*			
Matrix Spike (2044008-MS1)				**Source: E010119-01**					Prepared: 10/27/20 Analyzed: 10/27/20
Diesel Range Organics (C10-C28)	473	25.0	500	ND	94.7	38-132			
Surrogate: n-Nonane	*48.5*		*50.0*		*96.9*	*50-200*			
Matrix Spike Dup (2044008-MSD1)				**Source: E010119-01**					Prepared: 10/27/20 Analyzed: 10/27/20
Diesel Range Organics (C10-C28)	423	25.0	500	ND	84.6	38-132	11.2	20	
Surrogate: n-Nonane	*43.9*		*50.0*		*87.9*	*50-200*			

QC Summary Data

BP America Production Co.	Project Name:	GCU 13-1	**Reported:**
PO Box 22024	Project Number:	03143-0424	
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/2020 3:16:29PM

Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2044010-BLK1)									Prepared: 10/27/20 Analyzed: 10/27/20
Chloride	ND	20.0							
LCS (2044010-BS1)									Prepared: 10/27/20 Analyzed: 10/27/20
Chloride	258	20.0	250		103	90-110			
Matrix Spike (2044010-MS1)				**Source: E010119-01**					Prepared: 10/27/20 Analyzed: 10/27/20
Chloride	725	20.0	250	590	54.1	80-120			M2
Matrix Spike Dup (2044010-MSD1)				**Source: E010119-01**					Prepared: 10/27/20 Analyzed: 10/27/20
Chloride	872	20.0	250	590	113	80-120	18.4	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.

Definitions and Notes

BP America Production Co.	Project Name:	GCU 13-1	
PO Box 22024	Project Number:	03143-0424	**Reported:**
Tulsa OK, 74121-2024	Project Manager:	Steve Moskal	10/29/20 15:16

M2	Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Received by OCD: 11/11/2020 8:31:42 AM

NM

Client: BP Production

Project: GCU 13-1

Sampler: Steve Moskal

Phone: (505) 330-9179

Email(s): Steven.Moska@bpx.com

Project Manager: Steve Moskal

RUSH? ☐ 1d ☐ 3d

Lab Use Only	
Lab WO#	
E0109119	
Job Number	
03143-0424	

Page 1 of 1

Sample ID	Sample Date	Sample Time	Matrix	Containers QTY - Vol/TYPE/Preservative	GRO/DRO by 8015	BTEX by 8021	TPH by 418.1	Chloride by 300.0	Lab Number	Correct Cont/Prsrv (s) Y/N
SS01 Sidewalls @ 3.5'	10/23/20	9:37	soil	4oz x 1	X	X		X	1	
SS02 Base @ 4.5'	↓	9:40	↓	↓	↓	↓		↓	2	
SS03 Spoils	↓	9:45	↓	↓	↓	↓		↓	3	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	10/23/20	10:06		10/23/20	10:07
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
**Received on Ice Y / N
T1 20.1 T2 17.9 T3 17.4
AVG Temp °C 18.4

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

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

**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.

☐ Sample(s) dropped off after hours to a secure drop off area.

Chain of Custody

Notes/Billing info:
Use NM Spill 2H 2020 PO

envirotech Analytical Laboratory
5796 US Highway 64, Farmington, NM 87401 Ph (505) 632-0615 Fx (505) 632-1865
Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301 Ph (970) 259-0615 Fr (800) 362-1879
envirotech-inc.com laboratory@envirotech-inc.com

Envirotech Analytical Laboratory

Printed: 10/23/2020 3:47:49PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	BP America Production Co.	Date Received:	10/23/20 10:07	Work Order ID:	E010119
Phone:	(505) 330-9179	Date Logged In:	10/23/20 14:52	Logged In By:	Alexa Michaels
Email:	steven.moskal@bpx.com	Due Date:	10/30/20 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Steve Moskal
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	No

Sample Cooler

7. Was a sample cooler received?	No
8. If yes, was cooler received in good condition?	NA
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	No
13. If no visible ice, record the temperature. Actual sample temperature: 18.4°C	

Sample Container

14. Are aqueous VOC samples present?	No
15. Are VOC samples collected in VOA Vials?	NA
16. Is the head space less than 6-8 mm (pea sized or less)?	NA
17. Was a trip blank (TB) included for VOC analyses?	NA
18. Are non-VOC samples collected in the correct containers?	Yes
19. Is the appropriate volume/weight or number of sample containers collected?	Yes

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	No
22. Are sample(s) correctly preserved?	NA
24. Is lab filteration required and/or requested for dissolved metals?	No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

Steven Moskal

From: Steven Moskal
Sent: Tuesday, November 3, 2020 3:08 PM
To: Smith, Cory, EMNRD
Cc: Powell, Brandon, EMNRD; Jonathan Divine
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1
Attachments: GCU 13 SWD 1 Excavation Sampling Doc.pdf

Cory,

Please find the attached document providing a description of brief activities, sampling information and results, siting criteria and soil disposal documentation. AS discussed, the upper four feet of the excavation was backfilled with imported , clean soil. The vertical extent of the chlorides has not been determined.

Please review and provide guidance for closure.

Thank you,

Steve Moskal
Environmental Coordinator
BP America Production Co.
bpx energy - WBU
1199 Main Ave. | Suite 101
Durango | CO | 81301

Direct: 505.330.9179
steven.moskal@bpx.com

bpx energy

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From: Steven Moskal
Sent: Monday, October 26, 2020 4:23 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Cory,

I will start off with asking for forgiveness, my apologies. The purpose of my call on Friday was to provide notification and obtain permission. Since I was not able to contact you, I made the decision to proceed with sampling as the line was already charged for leak testing and need to be backfilled.

The overall dimensions of the excavation at the surface was 13'x9'x4.5' deep. The pipeline is approximately 4' deep. I collected sidewall samples as a single 4 point composite (N,E, S, W), just above the point of release at 3.5' deep (~160 sq feet in surface area). The base of the excavation measured 6.5'x 4' (~26 sq feet in surface area); I collected a 2 point composite from the base at ~4.5'. I also collected a five point composite from the spoils pile (approx. 18 yards) to determine if the soil needs to be disposed of offsite. I will provide a sampling diagram, photos of the sampling points and lab results.

The released produced water coming into the facility is filtered and separated, the pumped to the injection line where the release point occurred. I do not see a significant risk in the contaminants and made the decision to proceed with sampling. I know this is not typical protocol. The lab results will determine if there is any significant threat.

Steve Moskal
Environmental Coordinator
BP America Production Co.
bpx energy - WBU
1199 Main Ave. | Suite 101
Durango | CO | 81301

Direct: 505.330.9179
steven.moskal@bpx.com

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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, October 26, 2020 3:17 PM
To: Steven Moskal <Steven.Moskal@BPX.COM>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Cc: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Lior Azulai <LIOR.AZULAI@BPX.COM>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Julie Best <Julie.Best@bpx.com>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Steve,

Sorry I missed your phone call on Friday, I did just check my voice mail and I must have missed it. If the release is going to be reportable per your calculations please make sure to fill out a C-141, and provide proper sampling notices for confirmation closure samples per 19.15.29 NMAC.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115

cory.smith@state.nm.us

From: Steven Moskal <Steven.Moskal@BPX.COM>
Sent: Monday, October 26, 2020 1:16 PM
To: Jonathan Divine <JONATHAN.DIVINE@BPX.COM>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Lior Azulai <LIOR.AZULAI@BPX.COM>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Julie Best <Julie.Best@bpx.com>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Cory,

The water release at the subject site is calculated below:

Depth: 4.5'
Diameter: 6'

Volume of a cone:
$V=\pi*r^2(h/3)$

$V=(3.14)(6'^2)(4.5'/3)$

$V=169.6\ ft^3$

Gallon/cubic foot sand=3.4 gal/ ft^3

1.69.6*3.4 = 5786.64 gal

42 gal/bbl = 13.72 bbls

This will be a reportable release, with the final volume of the release being verified on Thursday, 10/22, once excavated. I had called and left you a voicemail on Friday to discuss.

Samples were collected from the open excavation on Friday, with lab results expected in about 5 business days. There were no hydrocarbons noted in the field observation. The excavation was backfilled following sampling due to the operating pressure of the repaired line. I will get you a C-141 once the final lab results are received in the coming days.

Please contact me with any questions.

Thank you,

Steve Moskal
Environmental Coordinator
BP America Production Co.
bpx energy - WBU
1199 Main Ave. | Suite 101
Durango | CO | 81301

Direct: 505.330.9179
steven.moskal@bpx.com

bpx energy

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From: Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Sent: Monday, October 26, 2020 12:13 PM
To: Steven Moskal <Steven.Moskal@BPX.COM>
Subject: FW: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

FYI

JL Divine
Area Manager
West BU, SJS
BPX Energy
Mobile: 505.787.0795
Jonathan.Divine@Bpx.com

bpx energy

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From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Monday, October 26, 2020 9:30 AM
To: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Cc: Lior Azulai <LIOR.AZULAI@BPX.COM>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Jonathan,

Was the leak a reportable quantity?

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>
Sent: Friday, October 23, 2020 9:30 AM
To: Jonathan Divine <JONATHAN.DIVINE@bpx.com>
Cc: Lior Azulai <LIOR.AZULAI@bpx.com>; Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: Re: [EXT] RE: GCU 107 plugging and GCU 13 SWD #1

Hello JL
Awesome- the well is not being plugged - thank you for the update
Monica

Sent from my iPad

> On Oct 23, 2020, at 9:00 AM, Jonathan Divine <JONATHAN.DIVINE@bpx.com> wrote:
>
> Hi Monica,
>
> The GCU 13-1 line was repaired yesterday. Steve Moskal has soil samples sent to the lab. The injection well is still shut in.
>
> Thanks
>
> **JL Divine**
> Area Manager
> West BU, SJS
> BPX Energy
> Mobile: 505.787.0795
> Jonathan.Divine@Bpx.com
> <image001.jpg>
>
> *This email and any attachments are intended only for the addressee(s) listed above and may contain confidential, proprietary, and/or privileged information. If you are not an intended recipient, please immediately advise the sender by return email, delete this email and any attachments, and destroy any copies of same. Any unauthorized review, use, copying disclosure or distribution of this email and any attachments is prohibited.*

From: Kuehling, Monica, EMNRD <monica.kuehling@state.nm.us>
Sent: Friday, October 23, 2020 7:37 AM
To: Lior Azulai <LIOR.AZULAI@BPX.COM>; Jonathan Divine <JONATHAN.DIVINE@BPX.COM>
Cc: Goetze, Phillip, EMNRD <Phillip.Goetze@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: GCU 107 plugging and GCU 13 SWD #1

Good morning,

I thought I better make sure you have been updated on the GCU 107 plugging. I have not heard from management with BP/Simcoe

Pressure of 4 psi was found on bh after 2 hour shut in before surface plug ran from 120 to surface.

Chad/Drake was instructed to produce bradenhead to flow back tank for 24 hours and then check pressure on bradenhead with a 2 hour shut in. This was to be performed daily for one week.

I do not believe I instructed him to let me know what those readings are.

I want to make sure that you are involved and I would also like to request those readings daily (by text is fine)

Also, I would like an update on what BPs plans are for the 13 1 disposal are. You have had a leak on the production line from that well. The well is shut in. If the decision on the well is a long time in coming you will still need to clean up the spill.

If you have any questions, please let me know.

Monica Kuehling
Deputy Oil and Gas Inspector
New Mexico Oil Conservation Division
District III
Office Phone: 505-334-6178 ext. 123
Cell Phone: 505-320-0243