December 16, 2020 Vertex Project #: 20E-00141-002

Spill Closure Report: Gaucho Unit 6H
Unit P, Section 17, Township 22 South, Range 34 East
County: Lea
API: 30-025-34789
Incident Tracking Number: NAB1914858909

Prepared For: Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210

New Mexico Oil Conservation Division – District 1 – Hobbs
1625 North French Drive
Hobbs, New Mexico 88240

Devon Energy Production Company (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a spill assessment and liner inspection following a release that occurred on August 12, 2018, at Gaucho Unit 6H (hereafter referred to as "Gaucho"). Devon provided immediate notification of the release to New Mexico Oil Conservation Division (NM OCD) District 1 and the Bureau of Land Management (BLM), who own the land, on August 12, 2018. The initial C-141 Release Notification was submitted on August 14, 2018 (Attachment 1). The NM OCD incident tracking number assigned to this release is NAB1914858909.

This letter provides a description of the spill assessment and liner inspection, and demonstrates that closure criteria established in 19.15.29.12 *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) have been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NM OCD and the BLM for closure of this release.

Incident Description

On August 12, 2018, a release occurred at Devon's Gaucho site when a water pump malfunctioned, causing the water tank to overflow. This incident resulted in the release of approximately 124 barrels (bbls) of produced water and 5 bbls of oil into the lined secondary containment. Upon discovery of the release, the pump was repaired to stop the overflow and a hydrovac truck was dispatched to site to recover free liquids. Approximately 124 bbls of produced water and 5 bbls of oil were recovered from the secondary containment and removed for disposal off-site. All fluids were contained within the lined Spill Prevention Control and Countermeasures containment; no oil was released into undisturbed areas or waterways.

Site Characterization

The release at Gaucho occurred on state-owned land, N 32.3862648, W 103.4856415, approximately 40 miles east of Carlsbad, New Mexico. The legal description for the site is Unit P, Section 17, Township 22 South, Range 34 East, Lea County, New Mexico. This location is within the Permian Basin in southeast New Mexico and has historically been used

for oil and gas exploration and production, and rangeland. An aerial photograph and site schematic are included in Attachment 2.

Gaucho is typical of oil and gas exploration and production sites in the western portion of the Permian Basin, and is currently used for oil and gas production, and storage. The following sections specifically describe the area surrounding the release site.

The surrounding landscape is associated with sand dunes or hillslope landforms generally found on plains at elevations between 3,000 and 4,400 feet above sea level. The climate is semi-arid, with average annual precipitation ranging between 10 and 15 inches. The historic plant community is a mixture of grasses, shrubs and forbs, with tall grasses dominating in aspect. Sand bluestem and giant dropseed are the dominant grass species, and sand shinnery oak and soapweed yucca are the dominant shrubs. Grass cover is variable due to shifting sands and large, irregular dunes; while grass cover is not continuous, it is fairly uniform across the more stable areas. Large natural bare areas or blowouts are a common feature in the less stable areas (United States Department of Agriculture, Natural Resources Conservation Service, 2020). Limited to no vegetation is allowed to grow on the compacted wellpad.

The Geological Map of New Mexico indicates the surface geology at Gaucho is comprised primarily of Qep – interlaid eolian sands and piedmont-slope deposits (Holocene to middle Pleistocene; New Mexico Bureau of Geology and Mineral Resources, 2020). The National Resources Conservation Service (NRCS) Web Soil Survey characterizes the soil at the site as Kermit soils and dune land, distinguished by deep layers of fine sand with steeper than average slope. This type of soil tends to be excessively drained with very low runoff and low available moisture levels in the soil profile (United States Department of Agriculture, Natural Resources Conservation Service, 2020). There is low potential for karst geology to be present near Gaucho, though some erosional karst is possible (United States Department of the Interior, United States Geological Survey, 2020).

There is no surface water located at Gaucho. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream approximately 1 mile southeast of the release site (United States Fish and Wildlife Service, 2020). At Gaucho, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

The nearest recent groundwater well to the site is a New Mexico Office of the State Engineer well from 2014 located 1 mile due west of the site. Data for that well show a depth to groundwater at 613 feet below ground surface (bgs; New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System, 2020). Documentation pertaining to site characterization and depth to groundwater determination is included in Attachment 3.

Closure Criteria Determination

Using site characterization information, a closure criteria determination worksheet (Attachment 3) was completed to determine if the release at Gaucho would be subject to any of the special case scenarios outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC, if the release had escaped secondary containment.

Based on data included in the closure criteria determination worksheet, the release at Gaucho would not be subject to

the requirements of Paragraph (4) of Subsection C of 19.15.29.12 NMAC and the closure criteria for the site would be determined to be associated with depth to groundwater. As the nearest groundwater well is further than 0.5 miles from the release site, the depth to groundwater at Gaucho cannot be accurately determined. The closure criteria for the site would then be determined to be associated with the following constituent concentration limits.

Table 1. Closure Criteria for Soils Impacted by a Release

Depth to Groundwater	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH[1] (GRO + DRO + MRO)	100 mg/kg
	BTEX[2]	50 mg/kg
	Benzene	10 mg/kg

[1]Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)
[2]Benzene, toluene, ethylbenzene and xylenes (BTEX)

Liner Inspection

On December 7, 2020, Vertex provided 48-hour notification of the liner inspection to NM OCD and the BLM, as required by Subparagraph (a) of Paragraph (5) of Subsection A 19.15.29.11 NMAC (Attachment 4). On December 9, 2020, Vertex conducted a visual inspection of the production equipment secondary containment liner for cracks, tears, cuts and other signs of damage to verify that the liner remained intact and had the ability to contain the release. The Daily Field Report (DFR) associated with the inspection is included in Attachment 5.

Closure Request

Vertex recommends no remediation action to address the release at Gaucho. The secondary containment liner appeared to be intact and had the ability to contain the release in question, as shown in the inspection photographs included with the DFR (Attachment 5). There are no anticipated risks to human, ecological or hydrological receptors associated with the release site.

Vertex requests that incident NAB1914858909 be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Devon certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NM OCD requirements to obtain closure on the August 12, 2018, release at Gaucho.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 505.506.0040 or ngordon@vertex.ca.

Sincerely,

Natalie Gordon
PROJECT MANAGER

Attachments

Attachment 1. NM OCD Initial C-141 Report
Attachment 2. Site Schematic
Attachment 3. Site Characterization Research Documentation
Attachment 4. Required 48-hr Notification of Liner Inspection to Regulatory Agencies
Attachment 5. Daily Field Report(s) with Photographs

References

New Mexico Bureau of Geology and Mineral Resources. (2020). *Interactive Geologic Map.* Retrieved from http://geoinfo.nmt.edu.

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2020). *Water Column/Average Depth to Water Report*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html

New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2020). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

United States Department of the Interior, United States Geological Survey. (2020). *Caves and Karst in the U.S. National Park Service*. Retrieved from https://www.arcgis.com/home/webmap/viewer.html?webmap=14675403c37948129acb758138f2dd1e

United States Fish and Wildlife Service. (2020). *National Wetlands Inventory*. Retrieved from https://www.fws.gov/wetlands/data/Mapper.html

Limitations

This report has been prepared for the sole benefit of Devon Energy Production Company (Devon). This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division, without the express written consent of Vertex Resource Services Inc. (Vertex) and Devon. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

ATTACHMENT 1

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	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) 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		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ 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: _____ Title: _____

Signature: Kendra DeHoyos Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Angelica Bustamante Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAB1914858909
District RP	1RP-5507
Facility ID	
Application ID	pAB1914858690

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?	< 50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- NA Field data
- NA 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
- NA Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- NA 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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAB1914858909
District RP	1RP-5507
Facility ID	
Application ID	pAB1914858690

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: Lupe Carrasco Title: Environmental Representative

Signature: Lupe Carrasco Date: 2/2/21

email: Lupe.Carrasco@dvn.com Telephone: (575) 748-0176

OCD Only

Received by: _____ Date: _____

Incident ID	NAB1914858909
District RP	1RP-5507
Facility ID	
Application ID	pAB1914858690

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.***

[X] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[X] 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)

[NA] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[X] 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: Lupe Carrasco Title: Environmental Representative

Signature: Lupe Carrasco Date: 2/2/21

email: Lupe.Carrasco@dvn.com Telephone: (575) 748-0176

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2

Approximate Lease Boundary

Approximate Spill Extent (~ 3,280 sq.ft.)

Containment

VERTEX

0 15 30 60 ft

Map Center:
Lat/Long: 32.38615, -103.48577

NAD 1983 UTM Zone 13N
Date: Oct 16/20

N

Site Schematic
Gaucho Unit #006

FIGURE:
1

devon

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

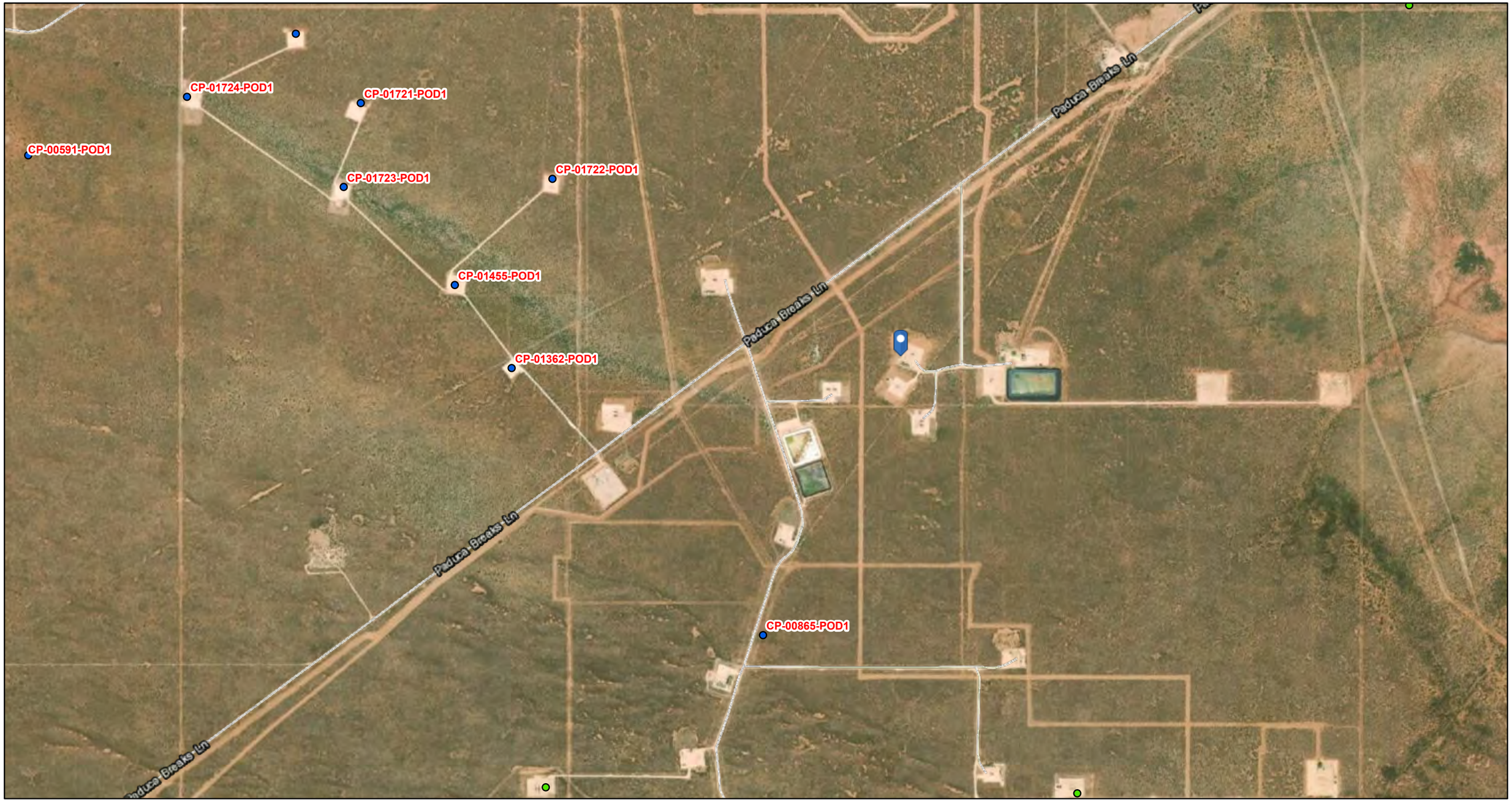
Note: Imagery from ESRI, 2018.

VERSATILITY. EXPERTISE.

ATTACHMENT 3

Closure Criteria Determination Worksheet			
Gaucho Unit 6			
Spill Coordinates:		X: 32.386225	Y: -103.486245
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	**605**	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	5,397	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	1,653	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,325	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or**	1,293	feet
	ii) Within 1000 feet of any fresh water well or spring		feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	8,244	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)		Critical High Medium Low
10	Within a 100-year Floodplain	undetermined	year
NMAC 19.15.29.12 E (Table 1) Closure Criteria		<50'	<50' 51-100' >100'

Gaucho Unit 6 - Nearest Well



12/7/2020, 3:54:59 PM

GIS WATERS PODs

- Active
- Pending
- OSE District Boundary
- SiteBoundaries

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

USDA FSA, GeoEye, Maxar, Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC

OSE POD Locations

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	Twsp	Rng	X	Y
	CP 00865 POD1	2	2	3	20	22S	34E	641845	3583118

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE

Driller Name: GLENN, CLARK A."CORKY" (LD)

Drill Start Date:	08/22/1997	**Drill Finish Date:**	08/29/1997	**Plug Date:**	
Log File Date:	09/04/1997	**PCW Rcv Date:**	10/18/2013	**Source:**	Shallow
Pump Type:	SUBMER	**Pipe Discharge Size:**	2.875	**Estimated Yield:**	50 GPM
Casing Size:	6.63	**Depth Well:**	885 feet	**Depth Water:**	605 feet

Water Bearing Stratifications:	Top	Bottom	Description
	738	870	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	734	885

Meter Number:	800	**Meter Make:**	SEAMETRICS
Meter Serial Number:	062018004760	**Meter Multiplier:**	100.0000
Number of Dials:	9	**Meter Type:**	Diversion
Unit of Measure:	Barrels 42 gal.	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
08/27/1999	1999	12170	A	fm		0	
09/27/1999	1999	18665	A	fm		1.993	
07/10/2000	2000	23573	A	mb	Initial reading Trn# 184947	0	
09/01/2000	2000	792	A	mb	Initial reading Trn# 189706	0	

10/09/2000	2000	3703	A	mb	Final reading Trn# 189706	0.893
11/02/2000	2000	33323	A	mb	Final reading Trn# 184947	2.992
07/23/2001	2001	35004	A	jw		9.606
08/14/2001	2001	35550	A	jw		0.168
09/16/2003	2004	44365	A	RPT		0
02/13/2004	2004	54105	A	RPT		2.989
05/28/2013	2013	301812	A	RPT	Initial reading	0
10/07/2013	2013	494174	A	RPT		24.794
11/11/2013	2013	627789	A	RPT		17.222
01/01/2014	2014	775387	A	ap		1902.439
04/01/2014	2014	1150295	A	ap		4832.312
10/01/2014	2014	1395310	A	ap		3158.078
01/01/2015	2015	2252908	A	ap		11053.861
03/31/2015	2015	2496573	A	ap		3140.678
06/01/2015	2015	2602349	A	ap		1363.381
06/30/2015	2015	2632913	A	ap		393.949
07/28/2015	2015	2657713	A	ap		319.655
08/31/2015	2015	2675935	A	ap		234.869
09/30/2015	2015	2685784	A	ap		126.947
10/30/2015	2015	2777793	A	ap		1185.934
11/30/2015	2015	2813732	A	ap		463.230
04/30/2016	2015	2902402	A	ap		1142.897
06/01/2016	2016	2949111	A	ap		602.048
07/30/2016	2016	3039470	A	ap		1164.667
09/01/2016	2016	3112223	A	ap		937.737
09/30/2016	2016	3233850	A	ap		1567.690
10/31/2016	2016	3310726	A	ap		990.880
12/01/2016	2016	3400370	A	ap		1155.451
12/31/2016	2016	3504124	A	ap		1337.319
02/01/2017	2017	3505049	A	ap		11.923
03/02/2017	2017	3549664	A	ap		575.057
03/31/2017	2017	3670149	A	ap		1552.971
05/01/2017	2017	3799022	A	ap		1661.086
05/31/2017	2017	3857500	A	ap		753.742
07/31/2017	2017	3902575	A	ap		580.986

10/31/2017	2017	4063882	A	ap	2079.139
11/30/2017	2017	4191565	A	ap	1645.748
12/30/2017	2017	4326964	A	ap	1745.202
01/30/2018	2018	4423832	A	ap	1248.563
02/28/2018	2018	4511456	A	ap	1129.414
03/30/2018	2018	4547266	A	ap	461.567
04/30/2018	2018	4658071	A	ap	1428.202
06/01/2018	2018	4766177	A	ap	1393.414
06/29/2018	2018	4790998	A	ap	319.926
07/31/2018	2018	4790998	A	ap	0
08/13/2018	2018	4791140	A	ap	1.830
08/13/2018	2018	0	A	ap	0
08/30/2018	2018	73947	A	ap	953.127
09/30/2018	2018	201617	A	ap	1645.580
11/30/2018	2018	443361	A	ap	3115.917
03/01/2019	2019	778813	A	ap	4323.751
04/01/2019	2019	800506	A	ap	279.608
05/01/2019	2019	918001	A	ap	1514.431
05/31/2019	2019	944476	A	ap	341.245
06/30/2019	2019	949128	A	ap	59.961
06/01/2020	2020	1488098	A	RPT	6946.961

x

**YTD Meter Amounts:	Year	Amount
	1999	1.993
	2000	3.885
	2001	9.774
	2004	2.989
	2013	42.016
	2014	9892.829
	2015	19425.401
	2016	7755.792
	2017	10605.854
	2018	11697.540
	2019	6518.996
	2020	6946.961

x

Meter Number:	806	**Meter Make:**	MASTER
Meter Serial Number:	1746627	**Meter Multiplier:**	100.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
01/01/1999	1999	12165	A	fm		0	
01/15/1999	1999	21665	A	fm		2.915	

**YTD Meter Amounts:	Year	Amount
	1999	2.915

Meter Number:	807	**Meter Make:**	MASTER
Meter Serial Number:	1746627	**Meter Multiplier:**	100.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
11/14/1999	1999	19858	A	fm		0	
12/14/1999	1999	21411	A	fm		0.477	

**YTD Meter Amounts:	Year	Amount
	1999	0.477

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	Twss	Rng	X	Y
	CP 01362 POD1	3	4	4	18	22S	34E	640809	3584182

Driller License:	421	**Driller Company:**	GLENN'S WATER WELL SERVICE		
Driller Name:	CORKY GLEN				
Drill Start Date:	10/29/2014	**Drill Finish Date:**	11/04/2014	**Plug Date:**	
Log File Date:	11/19/2014	**PCW Rcv Date:**	04/27/2017	**Source:**	Artesian
Pump Type:	SUBMER	**Pipe Discharge Size:**	3	**Estimated Yield:**	125 GPM
Casing Size:	6.50	**Depth Well:**	1032 feet	**Depth Water:**	613 feet

Water Bearing Stratifications:	Top	Bottom	Description
	742	980	Sandstone/Gravel/Conglomerate
	980	1022	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	502	1032

Meter Number:	18279	**Meter Make:**	SEAMETRICS4"
Meter Serial Number:	042018001323	**Meter Multiplier:**	100.0000
Number of Dials:	9	**Meter Type:**	Diversion
Unit of Measure:	Barrels 42 gal.	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
11/09/2014	2014	0	A	ap	new meter	0	
11/19/2014	2014	53043	A	ap		683.689	
06/03/2015	2015	531649	A	ap		6168.909	

06/30/2015	2015	531649	A	ap		0
07/31/2015	2015	531649	A	ap		0
08/31/2015	2015	531649	A	ap		0
09/30/2015	2015	531649	A	ap		0
10/30/2015	2015	642323	A	ap		1426.513
11/30/2015	2015	695483	A	ap		685.197
04/30/2016	2016	887950	A	ap		2480.770
06/30/2016	2016	973844	A	ap		1107.116
07/20/2016	2016	1065023	A	ap		1175.236
09/01/2016	2016	1159438	A	ap		1216.946
09/30/2016	2016	1262668	A	ap		1330.565
10/31/2016	2016	1379949	A	ap		1511.673
11/29/2016	2016	1484616	A	ap		1349.087
12/31/2016	2016	1615365	A	ap		1685.267
02/01/2017	2017	1658609	A	ap		557.386
03/01/2017	2017	1727062	A	ap		882.313
03/31/2017	2017	1831676	A	ap		1348.404
05/01/2017	2017	1941253	A	ap		1412.374
05/31/2017	2017	1986282	A	ap		580.394
07/31/2017	2017	2096716	A	ap		1423.420
10/31/2017	2017	2299575	A	ap		2614.716
11/30/2017	2017	2427541	A	ap		1649.396
12/30/2017	2017	2519745	A	ap		1188.448
01/30/2018	2018	2662378	A	ap		1838.443
02/28/2018	2018	2781666	A	ap		1537.542
03/30/2018	2018	2816011	A	ap		442.684
04/30/2018	2018	2943499	A	ap		1643.235
06/01/2018	2018	3066345	A	ap		1583.402
06/29/2018	2018	3121989	A	ap		717.214
07/31/2018	2018	3121989	A	ap		0
08/13/2018	2018	3124995	A	ap		38.745
08/13/2018	2018	0	A	ap	NEW METER	0
08/30/2018	2018	78036	A	ap		1005.832
09/30/2018	2018	210631	A	ap		1709.060
11/30/2018	2018	457418	A	ap		3180.918

03/01/2019	2019	778900	A	ap	4143.687
04/01/2019	2019	800946	A	ap	284.158
05/01/2019	2019	952419	A	ap	1952.385
05/31/2019	2019	979340	A	ap	346.994
06/30/2019	2019	984763	A	ap	69.899
10/31/2019	2019	1424151	A	ap	5663.416
06/01/2020	2020	1616011	A	RPT	2472.946

x

**YTD Meter Amounts:	Year	Amount
	2014	683.689
	2015	8280.619
	2016	11856.660
	2017	11656.851
	2018	13697.075
	2019	12460.539
	2020	2472.946

x

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-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00865 POD1	CP	LE	2	2	3	20	22S	34E	641845	3583118	1293	885	605	280
CP 01722 POD1	CP	LE	4	4	2	18	22S	34E	640964	3584949	1634	1122	785	337
CP 01362 POD1	CP	LE	3	4	4	18	22S	34E	640809	3584182	1640	1032	613	419
CP 01455 POD1	CP	LE	4	1	4	18	22S	34E	640574	3584515	1890	1033	615	418
CP 01723 POD1	CP	LE	4	4	1	18	22S	34E	640117	3584905	2416	1140	785	355
CP 01721 POD1	CP	LE	4	2	1	18	22S	34E	640181	3585244	2469	1108	820	288
CP 01720 POD1	CP	LE	1	3	2	08	22S	34E	642003	3586723	2498	1190	824	366
CP 00597 POD1	CP	LE		2	2	08	22S	34E	642410	3587074*	2810	35		
CP 01725 POD1	CP	LE	1	2	1	18	22S	34E	639914	3585521	2828	1137	800	337
CP 00744	CP	LE		1	2	09	22S	34E	643618	3587091*	3059	460		
CP 00704	CP	LE		2	4	22	22S	34E	645681	3583097*	3437	600		
CP 00592 POD1	CP	ED		3	2	13	22S	33E	638834	3585015*	3690	427		
CP 01740 POD1	CP	LE	1	1	1	34	22S	34E	644402	3580765	4007	600	560	40
CP 01705 POD1	CP	LE	4	4	2	32	22S	34E	642588	3580179	4087	700	305	395
CP 00598 POD1	CP	LE		4	1	23	22S	34E	646480	3583511*	4102	70		
CP 01683 POD1	CP	LE	2	3	2	23	22S	34E	646949	3583562	4556	300		
CP 00944 POD1	CP	LE		3	1	03	22S	34E	644531	3588351	4587	109	70	39
CP 01684 POD1	CP	LE	2	1	4	23	22S	34E	646932	3583129	4626	300		
CP 01682 POD1	CP	LE	1	2	2	23	22S	34E	647164	3583992	4723	294	42	252
CP 00622	CP	LE	3	4	2	14	22S	34E	647164	3585030*	4778			

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

Average Depth to Water: **568 feet**

Minimum Depth: **42 feet**

Maximum Depth: **824 feet**

Record Count: 20

UTMNAD83 Radius Search (in meters):

Easting (X): 642447.31 **Northing (Y):** 3584263.91 **Radius:** 5000

New Mexico Office of the State Engineer

Wells with Well Log Information

(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-basin Code	County	Source	q 6416	q 4	q	Sec	Tws	Rng	X	Y	Distance	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
CP 00865 POD1	CP	LE	Shallow	2	2	3	20	22S	34E	641845	3583118	1293	08/22/1997	08/29/1997	09/04/1997	885	605	GLENN, CLARK A."CORKY" (LD)	421
CP 01722 POD1	CP	LE	Artesian	4	4	2	18	22S	34E	640964	3584949	1634	03/23/2019	03/29/2019	04/26/2019	1122	785	CORKY GLENN	421
CP 01362 POD1	CP	LE	Artesian	3	4	4	18	22S	34E	640809	3584182	1640	10/29/2014	11/04/2014	11/19/2014	1032	613	CORKY GLEN	421
CP 01455 POD1	CP	LE	Artesian	4	1	4	18	22S	34E	640574	3584515	1890	01/16/2015	01/22/2015	02/17/2015	1033	615	GLENN, CLARK A."CORKY"	421
CP 01723 POD1	CP	LE	Artesian	4	4	1	18	22S	34E	640117	3584905	2416	03/31/2019	04/05/2019	05/03/2019	1140	785	GLENN, CLARK A."CORKY"	421
CP 01721 POD1	CP	LE	Artesian	4	2	1	18	22S	34E	640181	3585244	2469	04/07/2019	04/11/2019	05/13/2019	1108	820	CORKY GLENN	421
CP 01720 POD1	CP	LE	Artesian	1	3	2	08	22S	34E	642003	3586723	2498	05/02/2019	05/07/2019	06/05/2019	1190	824	CORKY GLENN	421
CP 01725 POD1	CP	LE	Artesian	1	2	1	18	22S	34E	639914	3585521	2828	04/24/2019	04/28/2019	05/28/2019	1137	800	GLENN, CLARK A."CORKY", CE	421
CP 00744	CP	LE	Shallow		1	2	09	22S	34E	643618	3587091*	3059	10/06/1989	10/06/1989	10/17/1989	460		GLENN, CLARK A."CORKY" (LD)	421
CP 00704	CP	LE			2	4	22	22S	34E	645681	3583097*	3437	12/15/1986	12/17/1986	01/15/1988	600		DUBOSE, BILL M. JR.	1107
CP 01740 POD1	CP	LE	Artesian	1	1	1	34	22S	34E	644402	3580765	4007	03/15/2019	09/26/2019	10/17/2019	600	560	BRYCE WALLCE	1706
CP 01705 POD1	CP	LE	Shallow	4	4	2	32	22S	34E	642588	3580179	4087	04/02/2018	05/01/2018	05/23/2018	700	305	KEY, CASEY	1058
CP 00944 POD1	CP	LE	Shallow		3	1	03	22S	34E	644531	3588351	4587	03/05/2007	03/05/2007	03/22/2007	109	70	WHITE, JOHN W	1456
CP 01682 POD1	CP	LE	Shallow	1	2	2	23	22S	34E	647164	3583992	4723	09/10/2019	09/13/2019	09/19/2019	294	42	CORKY GLENN	421

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

Record Count: 14

UTMNAD83 Radius Search (in meters):

Easting (X): 642447.31 **Northing (Y):** 3584263.91 **Radius:** 5000

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q q q 6416 4	Sec	Tws	Rng	X	Y	Distance
CP 00865	CP	COM	100	MERCHANT LIVESTOCK CO	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01046	CP	PRO	0	YATES PETROLEUM	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01047	CP	PRO	0	NOVA MUD	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01048	CP	PRO	0	GLENN'S WATER WELL SERVICE	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01085	CP	PRO	0	GLENN'S WATER WELL SRVC., INC.	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01086	CP	PRO	0	TD WATER SERVICES	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01087	CP	PRO	0	TONYA'S PERMIT SERVICE	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01291	CP	COM	100	ATKINS ENGR ASSOC INC	LE	CP 00865 POD1				Shallow	2 2 3	20	22S	34E	641845	3583118	1293
CP 01722	CP	EXP	0	ATKINS ENGR ASSOC INC	LE	CP 01722 POD1	NA			Artesian	4 4 2	18	22S	34E	640963	3584949	1634
CP 01362	CP	EXP	0	MERCHANT LIVESTOCK CO	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01363	CP	COM	100	MERCHANT LIVESTOCK CO	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01453	CP	COM	100	ATKINS ENGR ASSOC INC	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01456	CP	PRO	0	COG OPERATING	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01457	CP	PRO	0	COG OPERATING	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01458	CP	PRO	0	COG OPERATING	LE	CP 01362 POD1				Artesian	3 4 4	18	22S	34E	640808	3584182	1640
CP 01454	CP	COM	200	ATKINS ENGR ASSOC INC	LE	CP 01455 POD1				Artesian	4 1 4	18	22S	34E	640574	3584515	1890
CP 01455	CP	EXP	0	MERCHANT LIVESTOCK CO	LE	CP 01455 POD1				Artesian	4 1 4	18	22S	34E	640574	3584515	1890
CP 01494	CP	PRO	0	COG OPERATING	LE	CP 01455 POD1				Artesian	4 1 4	18	22S	34E	640574	3584515	1890

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code Grant	Source	q 6416	q 4	Sec	Tws	Rng	X	Y	Distance
CP 01495	CP	PRO	0	COG OPERATING	LE	CP 01455 POD1			Artesian	4 1	4	18	22S	34E	640574	3584515	1890
CP 01496	CP	PRO	0	COG OPERATING	LE	CP 01455 POD1			Artesian	4 1	4	18	22S	34E	640574	3584515	1890
CP 01630	CP	EXP	0	S2W CONTRACTING, LLC	LE	CP 01630 POD2				3 4	3	21	22S	34E	643130	3582496	1894
					LE	CP 01631 POD1				4 4	4	19	22S	34E	640970	3582491	2307
CP 01631	CP	COM	13.5	S2W CONTRACTING, LLC.	LE	CP 01631 POD1				4 4	4	19	22S	34E	640970	3582491	2307
CP 01723	CP	EXP	0	MERCHANT LIVESTOCK CO/GWWS INC	LE	CP 01723 POD1	NA		Artesian	4 4	1	18	22S	34E	640117	3584905	2416
CP 01721	CP	EXP	0	ATKINS ENGR ASSOC INC	LE	CP 01721 POD1	NA		Artesian	4 2	1	18	22S	34E	640181	3585244	2469
CP 01720	CP	EXP	0	GLENNS WATER WELL SERVICE INC	LE	CP 01720 POD1	NA		Artesian	1 3	2	08	22S	34E	642003	3586723	2498
CP 00597	CP	PLS	3	THE MERCHANT LIVESTOCK COMPANY	LE	CP 00597 POD1			Shallow	2	2	08	22S	34E	642410	3587074*	2810
CP 01725	CP	EXP	0	ATKINS ENGR ASSOC INC	LE	CP 01725 POD1	NA		Artesian	1 2	1	18	22S	34E	639914	3585521	2828
CP 00864	CP	PRO	0	SANTA FE ENERGY RESOURCES	LE	CP 00864				2	3	29	22S	34E	641676	3581433*	2934
CP 00744	CP	PRO	0	ORYX ENERGY	LE	CP 00744			Shallow	1	2	09	22S	34E	643618	3587091*	3059
CP 01724	CP	EXP	0	MERCHANT LIVESTOCK CO/GWWS INC	LE	CP 01724 POD1	NA			3 1	1	18	22S	34E	639475	3585260	3134
CP 00704	CP	PRO	0	APACHE CORPORATION	LE	CP 00704				2	4	22	22S	34E	645681	3583097*	3437
CP 00591	CP	PLS	3	THE MERCHANT LIVESTOCK COMPANY	LE	CP 00591 POD1				3	2	13	22S	33E	638834	3585015*	3690
CP 00592	CP	PLS	3	THE MERCHANT LIVESTOCK COMPANY	ED	CP 00592 POD1			Shallow	3	2	13	22S	33E	638834	3585015*	3690
CP 01624	CP	EXP	0	LIMESTONE LIVESTOCK LLC	LE	CP 01624 POD1				4 2	2	32	22S	34E	642669	3580494	3776
CP 01686	CP	COM	100	LIMESTONE BASIN PROPERTIES	LE	CP 01686 POD1	NA			4 2	2	32	22S	34E	642669	3580494	3776
CP 01803	CP	STK	3	LIMESTONE BASIN PROPERTIES	LE	CP 01803 POD1	22473			1 1	1	34	22S	34E	644356	3580786	3967
CP 01826	CP	EXP	0	LIMESTONE BASIN PROPERTIES	LE	CP 01826 POD1	NA			1 1	1	34	22S	34E	644379	3580778	3985
CP 01740	CP	EXP	0	LIMESTONE BASIN PROPERTIES	LE	CP 01740 POD1	NA		Artesian	1 1	1	34	22S	34E	644401	3580765	4007
CP 01706	CP	EXP	0	LIMESTONE BASIN PROPERTIES	LE	CP 01706 POD1	NA			4 4	2	32	22S	34E	642603	3580185	4081

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

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 6416	q 4	q 2	Sec	Tws	Rng	X	Y	Distance
CP 01686	CP	COM	100	LIMESTONE BASIN PROPERTIES	LE	CP 01705 POD1	NA			Shallow	4	4	2	32	22S	34E	642587	3580179	4087
CP 01705	CP	EXP	0	ATKINS ENGR ASSOC INC	LE	CP 01705 POD1	NA			Shallow	4	4	2	32	22S	34E	642587	3580179	4087
CP 00598	CP	PLS	3	THE MERCHANT LIVESTOCK COMPANY	LE	CP 00598 POD1				Shallow		4	1	23	22S	34E	646480	3583511*	4102
CP 01683	CP	STK	3	MERCHANT LIVESTOCK CO	LE	CP 01683 POD1	2062B				2	3	2	23	22S	34E	646949	3583562	4556
CP 00944	CP	EXP	0	ENSTOR GRAMA RIDGE STORAGE	LE	CP 00944 POD1				Shallow		3	1	03	22S	34E	644530	3588351	4587
CP 00964	CP	SAN	1	ENSTOR GRAMA RIDGE TRANSPORATION AND STORAGE LLC	LE	CP 00944 POD1				Shallow		3	1	03	22S	34E	644530	3588351	4587
CP 01684	CP	STK	3	MERCHANT LIVESTOCK CO	LE	CP 01684 POD1	2062C				2	1	4	23	22S	34E	646932	3583129	4626
CP 01682	CP	STK	3	MERCHANT LIVESTOCK CO	LE	CP 01682 POD1	2062A			Shallow	1	2	2	23	22S	34E	647163	3583992	4723
CP 01685	CP	STK	3	MERCHANT LIVESTOCK CO	LE	CP 01685 POD1	2062D				1	2	2	23	22S	34E	647172	3584092	4728
CP 00622	CP	PRO	0	POGO PRODUCING CO.	LE	CP 00622					3	4	2	14	22S	34E	647164	3585030*	4778
CP 01073	CP	COM	85	LIMESTONE BASIN PROPERTIES	LE	CP 01073 POD1						3	3	33	22S	34E	643327	3579453	4890

Record Count: 51

UTMNAD83 Radius Search (in meters):

Easting (X): 642447.31 **Northing (Y):** 3584263.91 **Radius:** 5000

Sorted by: Distance

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

U.S. Fish and Wildlife Service
National Wetlands Inventory

Gaucho Unit 6: Flowing Water 5,397 ft

January 18, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

Gaucho Unit 6: Freshwater Pond 1,653 ft

January 18, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Gaucho Unit 6: Wetland 8,244 ft

January 18, 2020

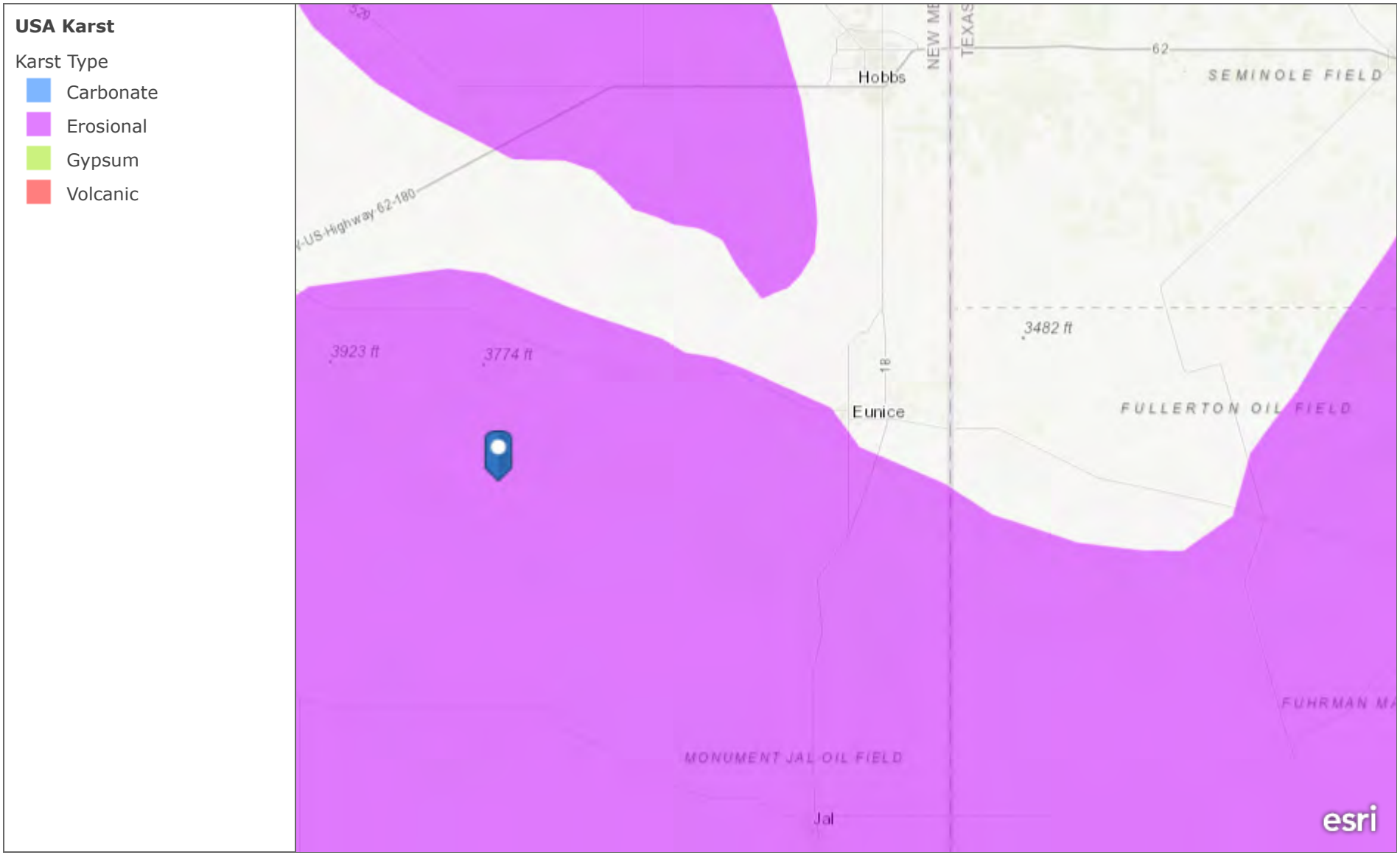
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

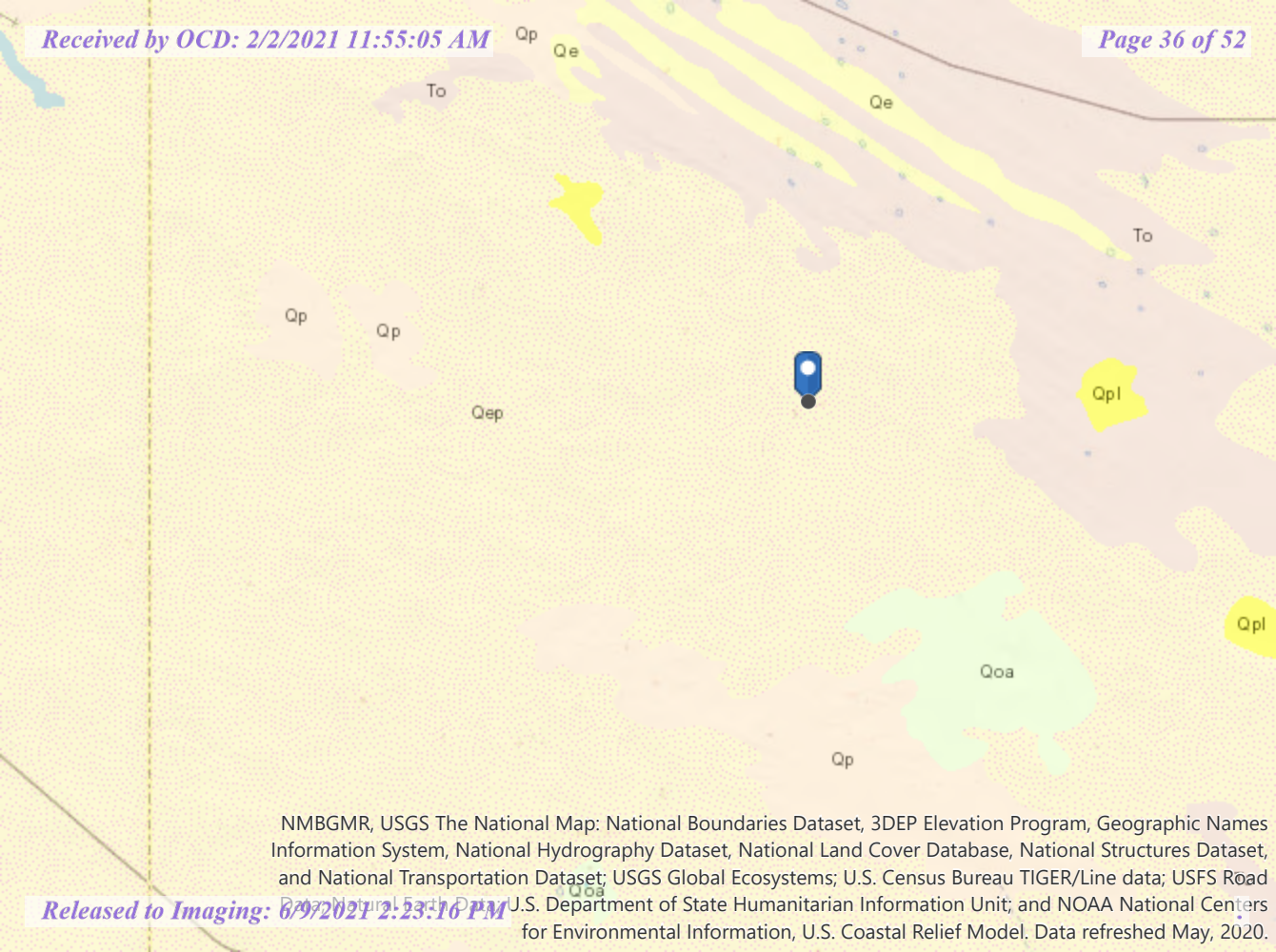
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

USA Karst

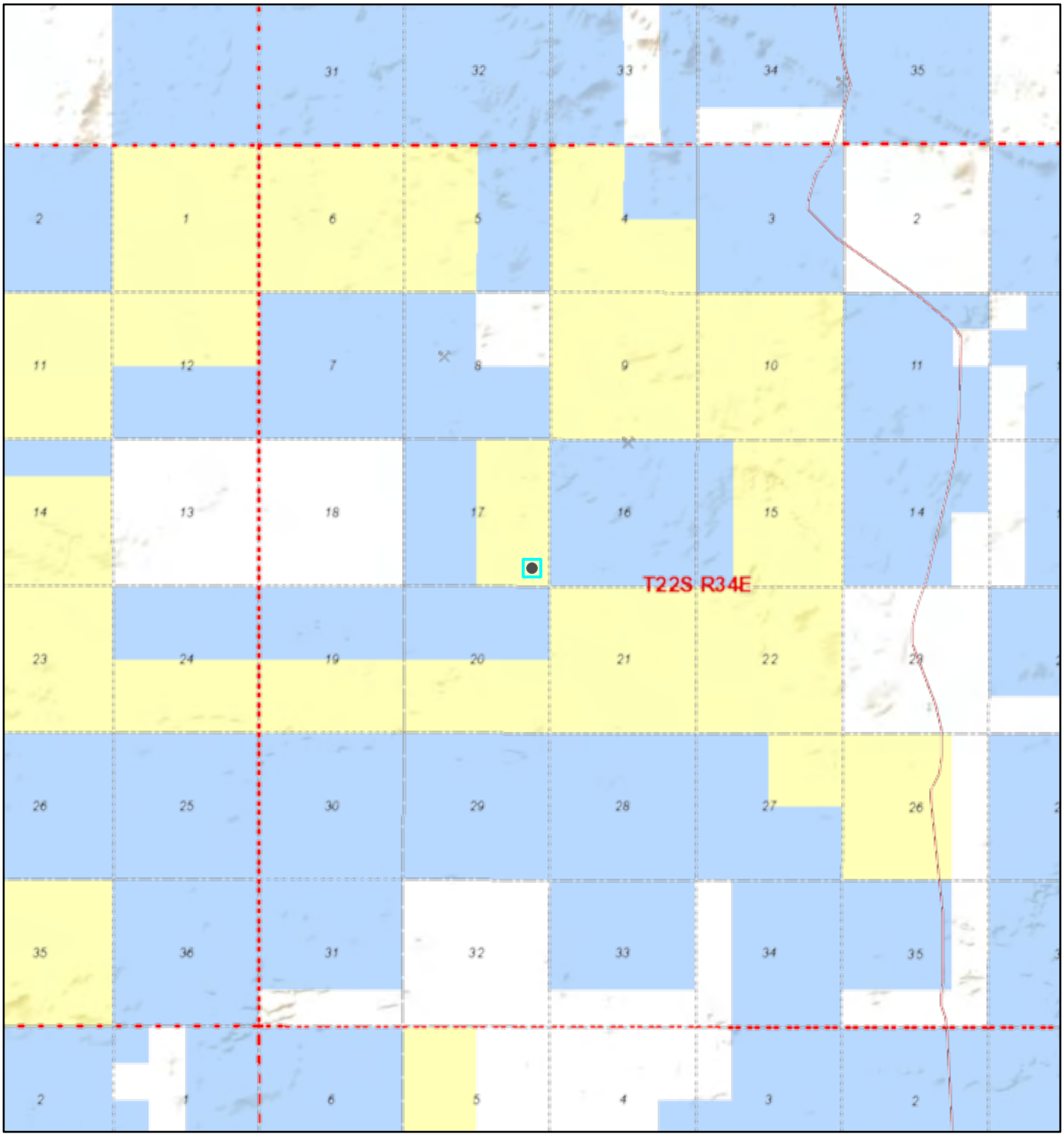


A map showing karst areas in the United States based on the U.S. Geological Survey Open-File Report 2004-1352

Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | U.S. Geological Survey Open-File Report 2004-1352, Caves and Karst in the U.S. National Park Service, AGI Karst Map of the US.



Active Mines near Gaucho Unit 6



1/18/2020, 3:39:34 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

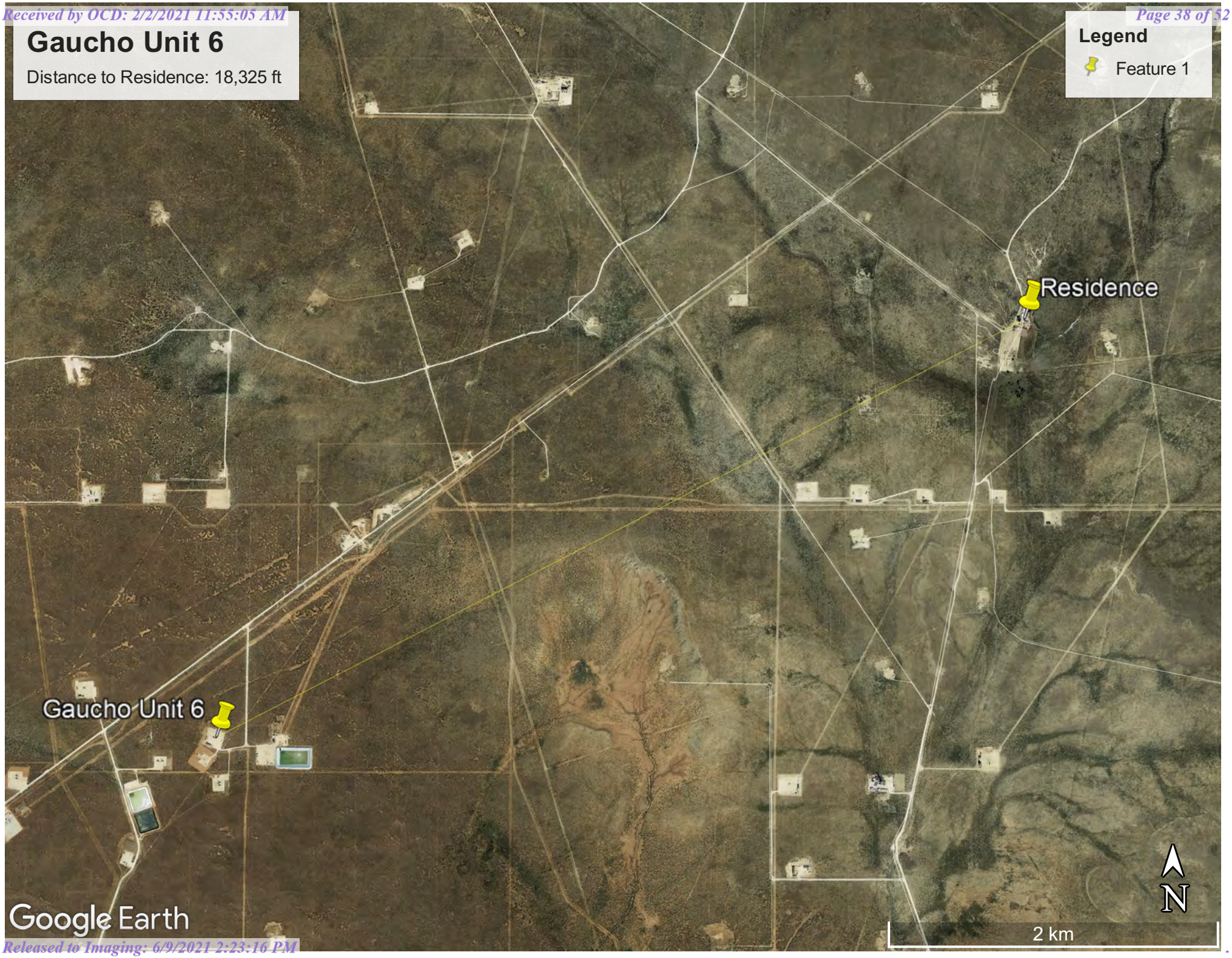
Registered Mines

Aggregate, Stone etc.

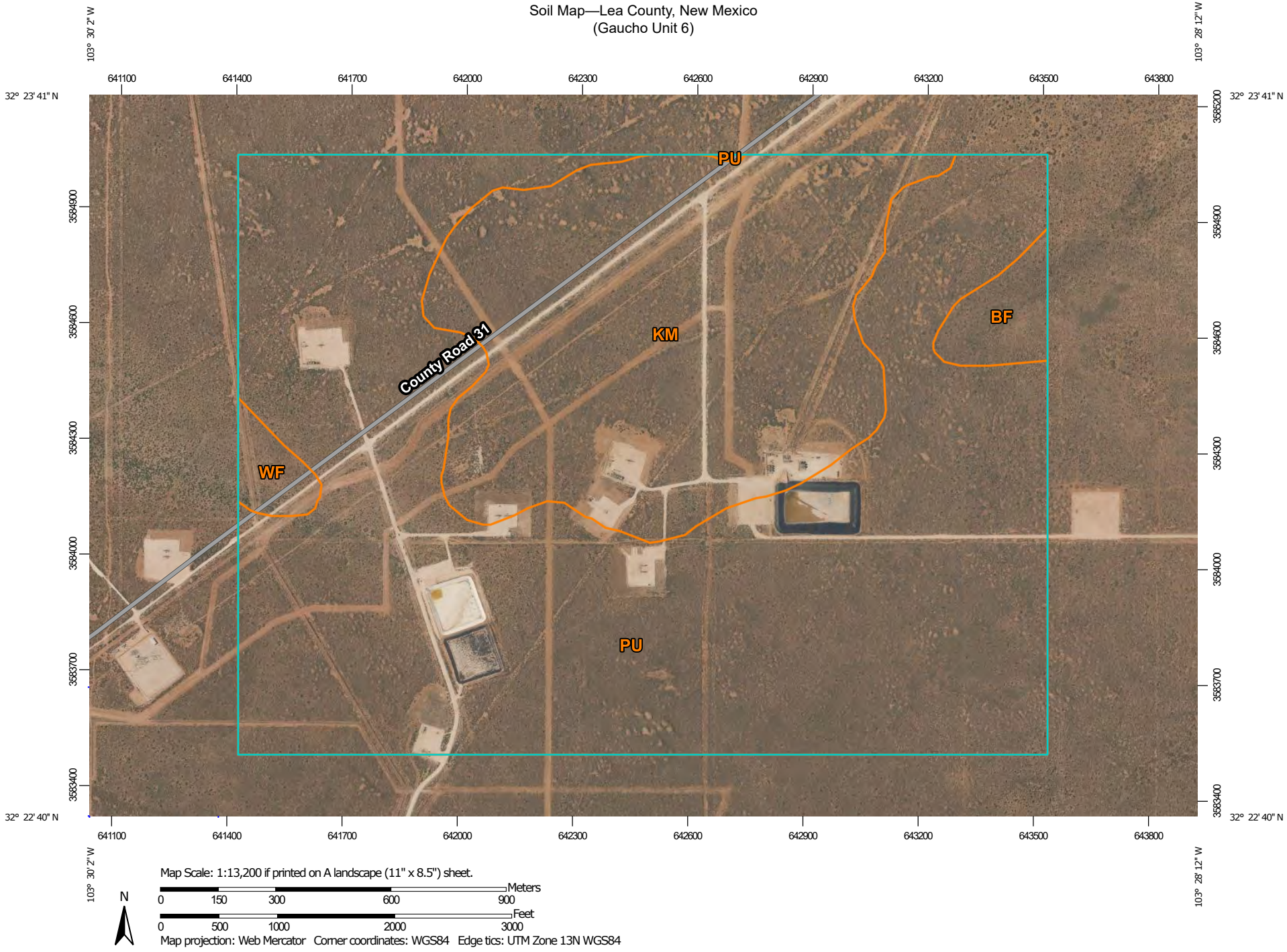
U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

EMNRD MMD GIS Coordinator

New Energy, Mineral and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)


Gaucho Unit 6
Distance to Residence: 18,325 ft
Legend
Feature 1
Residence
Gaucho Unit 6
Google Earth
N
2 km

Soil Map—Lea County, New Mexico
(Gaucho Unit 6)



Soil Map—Lea County, New Mexico
(Gaucho Unit 6)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 17, Jun 8, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BF	Berino-Cacique fine sandy loams association	16.0	2.0%
KM	Kermit soils and Dune land, 0 to 12 percent slopes	245.3	30.2%
PU	Pyote and Maljamar fine sands	541.8	66.6%
WF	Wink fine sand	10.0	1.2%
Totals for Area of Interest		**813.0**	**100.0%**

Lea County, New Mexico

KM—Kermit soils and dune land, 0 to 12 percent slopes

Map Unit Setting

National map unit symbol: dmpx
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 15 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Dune land: 45 percent
Kermit and similar soils: 45 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dune Land

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex

Typical profile

A - 0 to 6 inches: fine sand
C - 6 to 60 inches: fine sand

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8e
Hydrologic Soil Group: A
Hydric soil rating: No

Description of Kermit

Setting

Landform: Dunes
Landform position (two-dimensional): Shoulder, backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear, concave
Across-slope shape: Convex
Parent material: Calcareous sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sand

C - 8 to 60 inches: fine sand

Properties and qualities

Slope: 5 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 3 percent
Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: Sandhills (R042XC022NM)
Hydric soil rating: No

Minor Components

Palomas

Percent of map unit: 3 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Pyote

Percent of map unit: 3 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Maljamar

Percent of map unit: 2 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Wink

Percent of map unit: 2 percent
Ecological site: Loamy Sand (R042XC003NM)
Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 16, Sep 15, 2019

ATTACHMENT 4

Natalie Gordon

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
Sent: Monday, December 7, 2020 6:08 PM
To: Natalie Gordon
Subject: Fwd: Gaucho Unit #006 - 48-hr Notification of Liner Inspection

---------- Forwarded message ---------
From: **Dhugal Hanton** <vertexresourcegroupusa@gmail.com>
Date: Mon, Dec 7, 2020 at 6:08 PM
Subject: Gaucho Unit #006 - 48-hr Notification of Liner Inspection
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>, CFO_Spill, BLM_NM <blm_nm_cfo_spill@blm.gov>, Amos, James A <Jamos@blm.gov>, Kelsey <KWade@blm.gov>
Cc: <amanda.davis@dvn.com>, <tom.bynum@dvn.com>, <wesley.mathews@dvn.com>, <Lupe.Carrasco@dvn.com>

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled a liner inspection to be conducted at Gaucho Unit #006 for the following releases:

NAB1918633605 DOR: 8/12/2018
NAB1914858909 DOR: 8/12/2018
NOY1727243107 DOR: 9/14/2017

This work will be completed on behalf of Devon Energy Production Company.

On Wednesday, December 9, 2020 at approximately 2:00 p.m., Monica Peppin will be onsite to conduct a liner inspection. She can be reached at 575-361-9880. If you need directions to the site, please do not hesitate to contact her. If you have any questions or concerns regarding this notification, please give me a call at 505-506-0040.

Thank you,
Natalie

Natalie Gordon
Project Manager

Vertex Resource Group Ltd.
213 S. Mesa Street
Carlsbad, NM 88220

P 575.725.5001 ext 709
C 505.506.0040
F

www.vertex.ca

ATTACHMENT 5

Daily Site Visit Report

Client:	Devon Energy Corporation	Inspection Date:	12/9/2020
Site Location Name:	Gaucho Unit 006	Report Run Date:	12/15/2020 10:30 PM
Client Contact Name:	Amanda Davis	API #:	30-025-34789
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/9/2020 4:03 PM
Departed Site	12/9/2020 4:10 PM

Field Notes

16:05 Arrive on site.
Complete safety paperwork.
Conduct liner inspection.

16:10 Liner is in good condition.
No tears or punctures.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: North
	
North side of containment	West side of containment
Viewing Direction: East	**Viewing Direction**: East
	
South side of containment	South side of containment

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: East
	
East end of containment	NE corner

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 

Signature

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAB1914858909
District RP	1RP-5507
Facility ID	
Application ID	pAB1914858690

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.***

[X] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[X] 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)

[NA] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[X] 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: Lupe Carrasco Title: Environmental Representative

Signature: Lupe Carrasco Date: 2/2/21

email: Lupe.Carrasco@dvn.com Telephone: (575) 748-0176

OCD Only

Received by: Robert Hamlet Date: 6/9/2021

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: Robert Hamlet Date: 6/9/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 16654

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 16654
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAB1914858909 GAUCHO UNIT #006, thank you. This closure is approved.	6/9/2021