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-144
Revised June 6, 2013

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

12071

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action:
- ☐ Below grade tank registration
- ☒ Permit of a pit or proposed alternative method
- ☐ Closure of a pit, below-grade tank, or proposed alternative method
- ☐ Modification to an existing permit/or registration
- ☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: Oxy USA INC. OGRID #: 16696 OIL CONS. DIV DIST. 3
Address: PO Box 4294, Houston,TX 77210
Facility or well name: Bravo Dome Unit 1933 272 K JUL 25 2014
API Number: 30-021-20636 OCD Permit Number:
U/L or Qtr/Qtr K Section 27 Township 19N Range 33E County: HARDING
Center of Proposed Design: Latitude 35 50 44.74 Longitude 103 25 18 49 NAD: ☒ 1927 ☐ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☒ yes ☐ no
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other Volume: 4,600 bbl Dimensions: L 75 x W 75 x D 4.5

3.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

DENIED
BY: Cory Smith
DATE: 7/28/14 (505) 334-6178 Ext. 115

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*
☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*
☒ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate. Please specify

22

6.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

7.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.16.8 NMAC

8.

Variances and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - ☒ NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☒ Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. **(Does not apply to below grade tanks)** - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☒ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11.

Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ A List of wells with approved application for permit to drill associated with the pit.
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☒ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method

14.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

16.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- ☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): L. Kiki Lockett Title: Regulatory Specialist

Signature: L Lockett Date: ~~4/25/2014~~ e 7/21/14

e-mail address: kiki_lockett@oxy.com Telephone: 713-215-7643

18.
OCD Approval: ☐ Permit App ly) ☐ OCD Conditions (see attachment)

DENIED

OCD Representative Signature: *Incomplete Closure Plan* **Approval Date:**

BY: Cory Smith

Title: DATE: 7/28/14 (505) 334-6178 Ext. 115 **) Permit Number:**

19.
Closure Report (required within 60 days of closure completion): 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:**

20.
Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

21.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Proof of Closure Notice (surface owner and division)
- ☐ Proof of Deed Notice (required for on-site closure for private land only)
- ☐ Plot Plan (for on-site closures and temporary pits)
- ☐ Confirmation Sampling Analytical Results (if applicable)
- ☐ Waste Material Sampling Analytical Results (required for on-site closure)
- ☐ Disposal Facility Name and Permit Number
- ☐ Soil Backfilling and Cover Installation
- ☐ Re-vegetation Application Rates and Seeding Technique
- ☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

District I
1625 N French Dr, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 South First, 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) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

[ ] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	96010	BRAVO DOME CARBON DIOXIDE GAS 640

[4] Property Code	[5] Property Name	[6] Well Number
27111	BRAVO DOME CARBON DIOXIDE GAS UNIT	272

[7] OGRID No.	[8] Operator Name	[9] Elevation
16696	OXY USA INC.	4835.2

[10] Surface Location

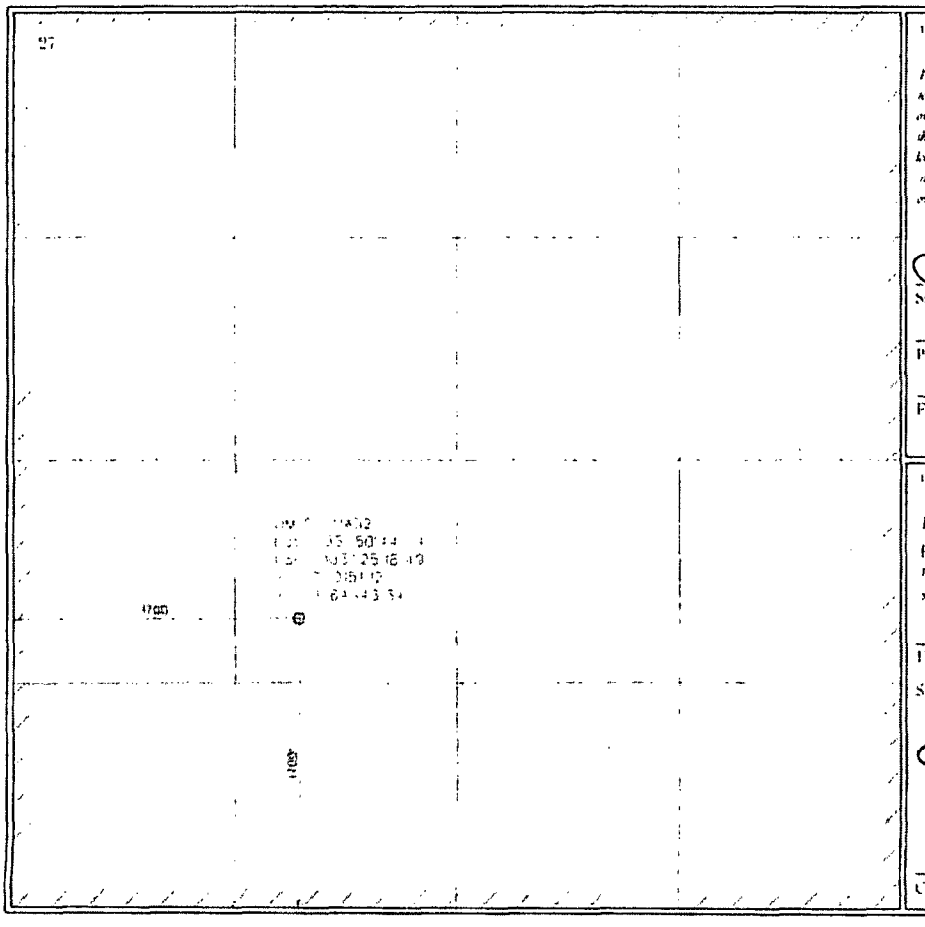
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
K	27	19 N	33 E		1700'	SOUTH	1700'	WEST	HARDING

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



[16] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that the organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

L. Lockett 6/1/2014
Signature Date

L. Kiki Lockett
Printed Name

Regulatory Compliance Analyst
E-mail Address

[17] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

June 5, 2014
Date of Survey

Signature and Seal of Professional Surveyor:

NEW MEXICO TERRY J. ASEL 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

Terry Asel 6/10/2014

Terry Asel
Certificate Number 15079

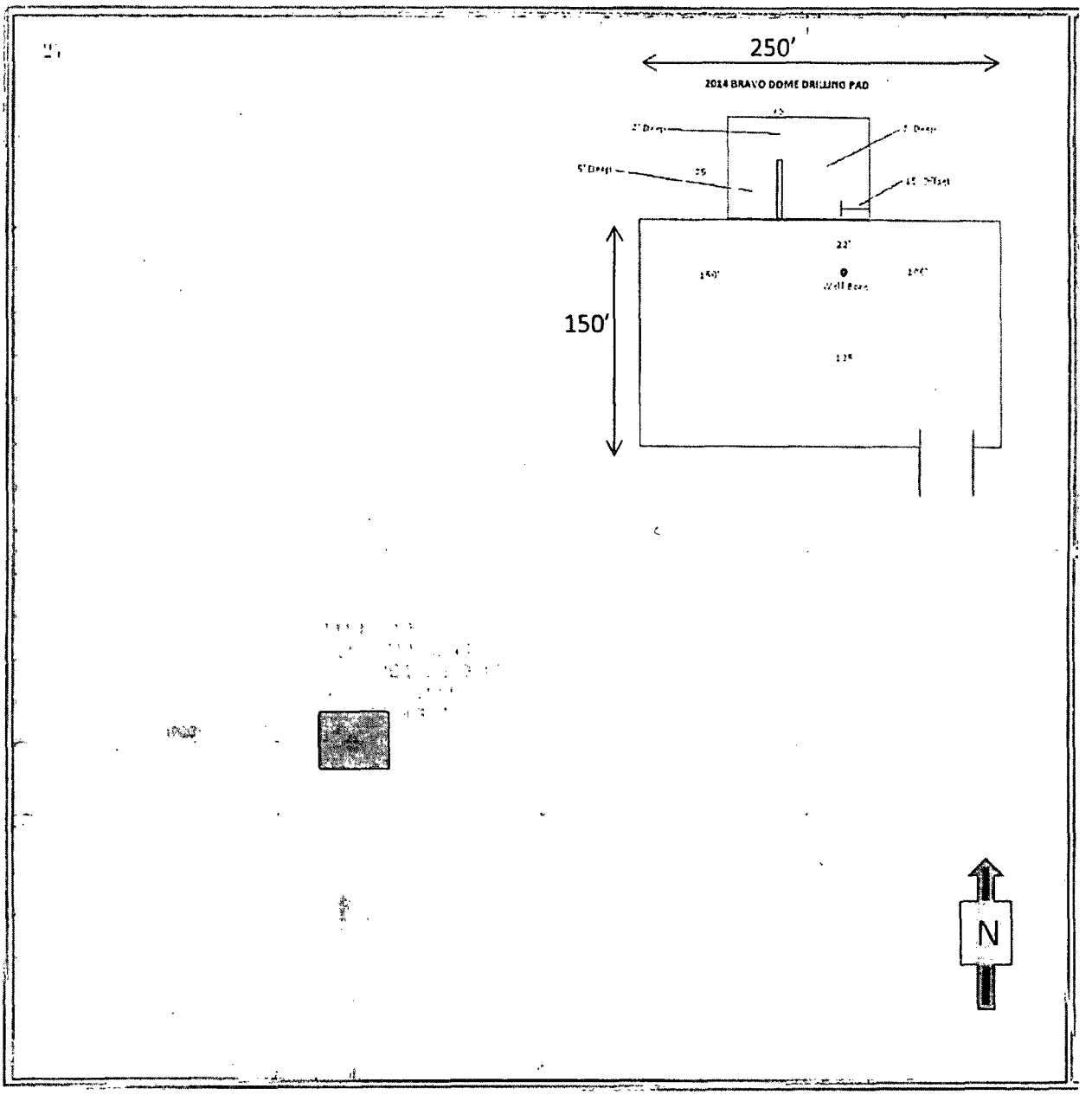
OCD FORM C – 144 SUPPORTING DATA

PIT LOCATION

OXY USA INC.

BDCDGU 19 33 27 2 K

T-19N, R-33E, SECTION 27 NMPM



WELL NAME: BDCDGU 19 33 27 2 K

- **SURFACE HYDROLOGY:** The local surface consists of flat ranching land with a shallow slope to the south. Elevation of wells within 1 mile either east or west is within 10 feet of the proposed pit location . To the south the elevation difference to the next offset 1 mile away is 15 feet.
- **GROUND WATER HYDROLOGY:** The proposed pit is located at the boundary of the Clayton-9/25/2005 and Tucumcari-11/14/1998 Declared Underground Basins. A research through the New Mexico Water Rights Reporting System, using the "Water Column/ Avg Depth to Water Report feature covering the 8 sections surrounding section 27 shows only 6 water source wells (Figure 1), with the closest approximately 800 meters to the southeast (Figure 2). No data is available for average depth to water.

- **FIGURE 1**

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twws	Rng	X	Y	Depth Well	Depth Water	Water Column
TU 00571			HA	3	1	3	35	19N	33E	643654	3966383*	150		
TU 00572			HA	2	1	2	34	19N	33E	643034	3967375*	150		
TU 00573			HA	3	3	3	28	19N	33E	640402	3967529*	200		
TU 00574			HA	3	3	3	28	19N	33E	640402	3967529*	200		
TU 00575			HA	3	3	3	28	19N	33E	640402	3967529*	200		
TU 00577			HA	2	2	3	22	19N	33E	642593	3969789*	80		

Average Depth to Water: --
Minimum Depth: --
Maximum Depth: --

Record Count: 6

PLSS Search:

Section(s): 21, 22, 23, 26, 27, 28, 33, 34, 35 Township: 19N Range: 33E

WELL NAME: BDCDGU 19 33 27 2 K

- **FIGURE 2**

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 Code	Sub-basin	County	Q Q Q 64 16 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
TU 00572			HA	2 1 2	34	19N	33E	643034	3967375*	801	150		

Average Depth to Water: –

Minimum Depth: –

Maximum Depth: –

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 642521.33 Northing (Y): 3967990.95 Radius: 1000

*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

7/11/14 7:32 AM

WATER COLUMN/AVERAGE DEPTH TO WATER

On site inspection , indicates that water source wells are located to the south and at a minimum distance of 800 meters(2,626 ft). A caliche pit is also located just north of the pit location giving evidence that depth to water is more than 25 feet.

WELL NAME: BDCDGU 19 33 27 2 K

Siting Criteria and Compliance Demonstration

- **1) Depth to groundwater**
  - A review of all water records available for the 19 N Township, 33 E Range in the New Mexico Office of the State Engineer data base, Figure 3, show minimal data on ground water depth, the only known values is for a well in section 31, approximately 3.2 miles to the west and south which shows depth to the water of 138 feet. The caliche pit to the north of the proposed pit also gives further evidence that groundwater depth is greater than 25 feet.
- **2) Distance to watercourse**
  - Field visit and areal picture (Figure 4) show no features which could be described as waterway (watercourse, lakebeds , playa lake) within 200' radius. Nearest playa lake is situated at over 3,000 feet to the south.
- **3) Distance to buildings**
  - As shown in an areal picture, Figure 4, the nearest building is a commercial structure at 2,880 feet from the proposed pit.
- **4) Distance to springs or wells**
  - As per information shown on Figure 2 and Figure 4, nearest water wells is at 2,626 ft from the proposed pit.
- **5) Presence within incorporated area**
  - Location of proposed pit is not near any municipal boundaries or defined fresh water well field. It is located in open ranching lands.
- **6) Distance to wetlands**
  - Only feature under this description could be a playa lake situates 3,000 feet to the south separated form the proposed pit location by state highway 420.
- **7) Location above subsurface mines**
  - The pit will not overlie a mine. There has not been any mining activity in the area underlying the Bravo Dome Unit .
- **8) Presence within unstable area**
  - The proposed pit is located in a very stable area with slopes of less than 15 ft/mile. Overall pad fill is less than one foot.

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Siting Criteria and Compliance Demonstration

- **9) Stockpile material**
  - Stockpile material will be stored at the edge of the new pad. Its location is away from any water feature (+ 3,000 feet from playa lake, no spring present with a mile of location).
- **10) In – place closure**
  - The best evidence of ground water distance to the bottom of the pit is given by the caliche pit just to the north of the proposed pit. Caliche pit is always dry and in regular use, distance from bottom to surface + 25 ft. No surface water feature are present within the section.
- **11) Presence within floodplain**
  - Harding County New Mexico has not been mapped by FEMA. Review of areal maps and topography would indicate that the proposed pit location is not in a flood plain area. Discussion with operation staff with extensive field presence, 25+ years, has also confirmed that the location is not prone to flooding.

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FIGURE 3

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	Code	POD Sub-basin	County	Q Q Q 64 16 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
TU 00508			HA	3 3 1	06	19N	33E	637051	3974753*	50		
TU 00509			HA	4 2 2	31	19N	33E	638588	3967093*	60		
TU 00514			HA	3 1 1	09	19N	33E	637044	3975156*	150		
TU 00516			HA	2 4	10	19N	33E	643250	3972931*	130		
TU 00517			HA	1 1	15	19N	33E	642054	3972104*	137		
TU 00518			HA	1 1	16	19N	33E	640434	3972058*	40		
TU 00519			HA	1 2	10	19N	33E	642835	3973731*	120		
TU 00520			HA	4 4	02	19N	33E	644845	3974187*	138		
TU 00526			HA	1 3 1	30	19N	33E	637153	3968488*	40		
TU 00527			HA	2 2 1	32	19N	33E	639396	3967305*	180		
TU 00528			HA	4 4 2	04	19N	33E	641706	3974818*	150		
TU 00536			HA	1 1 4	03	19N	33E	642723	3974637*	100		
TU 00538			HA	4 4 2	05	19N	33E	640091	3974786*	150		
TU 00539			HA	3 4 4	07	19N	33E	638310	3972341*	100		
TU 00540			HA	1 2 2	19	19N	33E	638336	3970522*	80		
TU 00541			HA	2 2 2	29	19N	33E	640178	3968933*	100		
TU 00542			HA	1 3 1	30	19N	33E	637153	3968488*	40		
TU 00567	R		HA	2 3 2	31	19N	33E	638191	3966883*	288		
TU 00567 POD2			HA	4 2 2	31	19N	33E	638698	3967149	285	148	137
TU 00571			HA	3 1 3	35	19N	33E	643654	3966383*	150		
TU 00572			HA	2 1 2	34	19N	33E	643034	3967375*	150		
TU 00573			HA	3 3 3	28	19N	33E	640402	3967529*	200		
TU 00574			HA	3 3 3	28	19N	33E	640402	3967529*	200		
TU 00575			HA	3 3 3	28	19N	33E	640402	3967529*	200		
TU 00576			HA	4 3 1	25	19N	33E	645439	3968429*	80		
TU 00577			HA	2 2 3	22	19N	33E	642593	3969789*	80		
TU 00578			HA	4 4 2	04	19N	33E	641706	3974818*	625		
TU 00580			HA	1 4 2	30	19N	33E	638370	3968504*	130		
TU 00581			HA	2 2 4	20	19N	33E	640188	3969740*	300		
TU 00583			HA	2 4 2	30	19N	33E	638570	3968504*	130		
TU 00584			HA	2 2 3	30	19N	33E	637770	3968089*	125		
TU 00585			HA	3 4 2	30	19N	33E	638370	3968304*	140		
TU 00586			HA	4 1 4	30	19N	33E	638173	3967895*	150		
TU 00734			HA	4 4 2	04	19N	33E	641708	3974818*	270		

Average Depth to Water: 148 feet

Minimum Depth: 148 feet

Maximum Depth: 148 feet

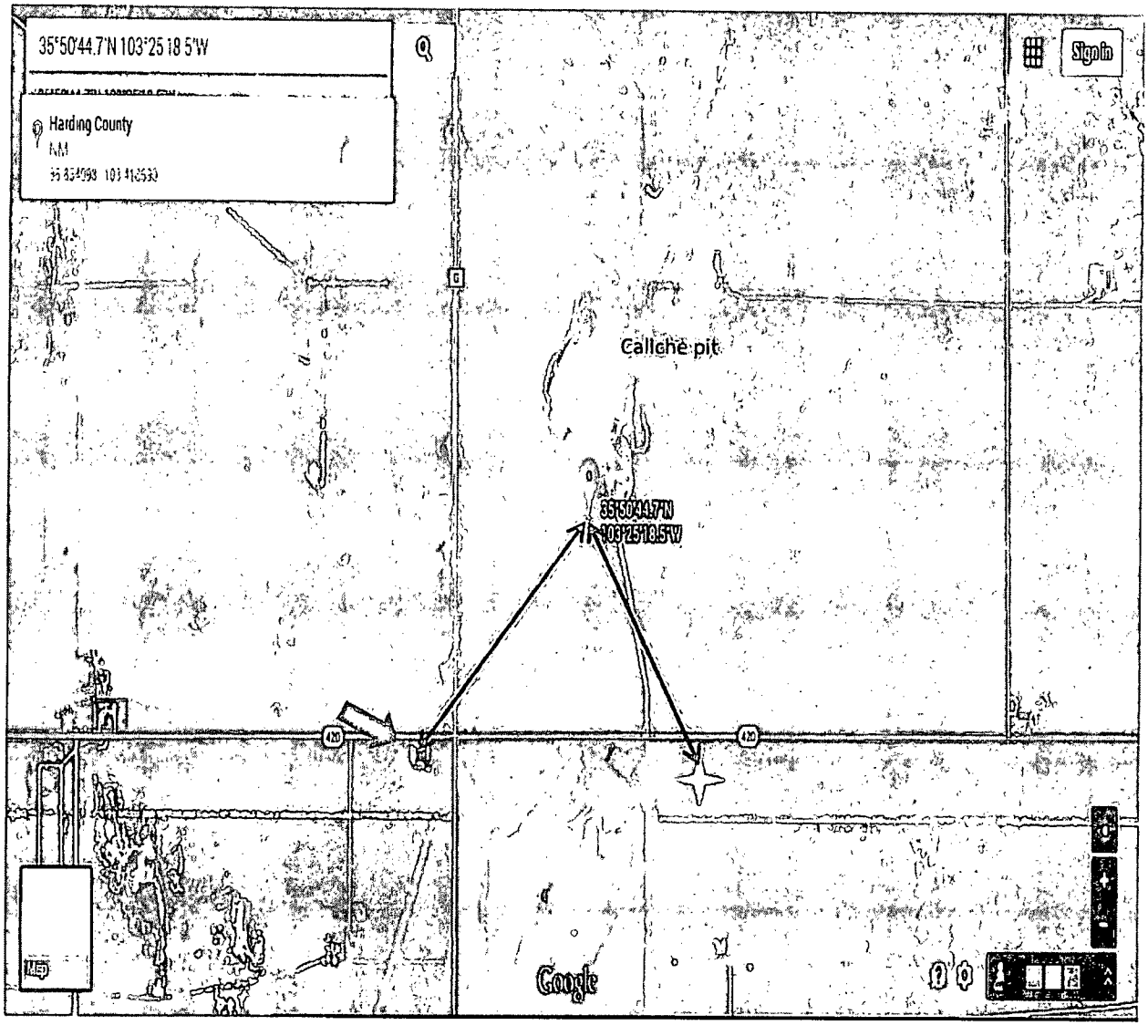
Record Count: 34

PLSS Search:

Township 19N Range 33E

WELL NAME: BDCDGU 19 33 27 2 K

FIGURE 4



NEAREST BUILDING : 2,880 FEET

NEAREST WATER WELL : 2,626 FEET

WELL NAME: BDCDGU 19 33 27 2 K

TEMPORARY PIT DESIGN

In accordance with Rule 19 15 17 the following information describes the design and construction of temporary pits on Occidental Permian Ltd (OXY) locations. This is OXY's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

1. OXY will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.

2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.

3. OXY will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. The sign will list the operator on record as the operator, the location of the well site by unit letter, section, township range, and emergency telephone numbers.

4. OXY shall construct all new fences utilizing 4 strand barbed wire. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a wooded posts. Entire location including pits will be fenced at all times.

5. OXY shall construct the temporary pit so that the foundation and interior slope are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.

6. OXY shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.

7. Pit walls will be walked down by a crawler type tractor following construction.

8. All temporary pits will be lined with 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.

9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.

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TEMPORARY PIT DESIGN

10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.

11. OXY will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. OXY will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. OXY will minimize the number of field seams in corners and irregularly shaped areas.

12. The liner shall be protected from and fluid force or mechanical damage through the use of mud pit slides, or a manifold system.

13. The pit shall be protected form run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.

14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.

15. Temporary blow pits will be constructed to allow gravity flow to discharge into the lined drill pit.

16. The lower half of the blow pit (nearest lined pit) will be lined with 20 mil liner. The upper half of the blow pit will remain unlined as allowed in Rule 19 15 17 11 F 11.

17. OXY will not allow freestanding liquids to remain on the unlined portion of the blow pit.

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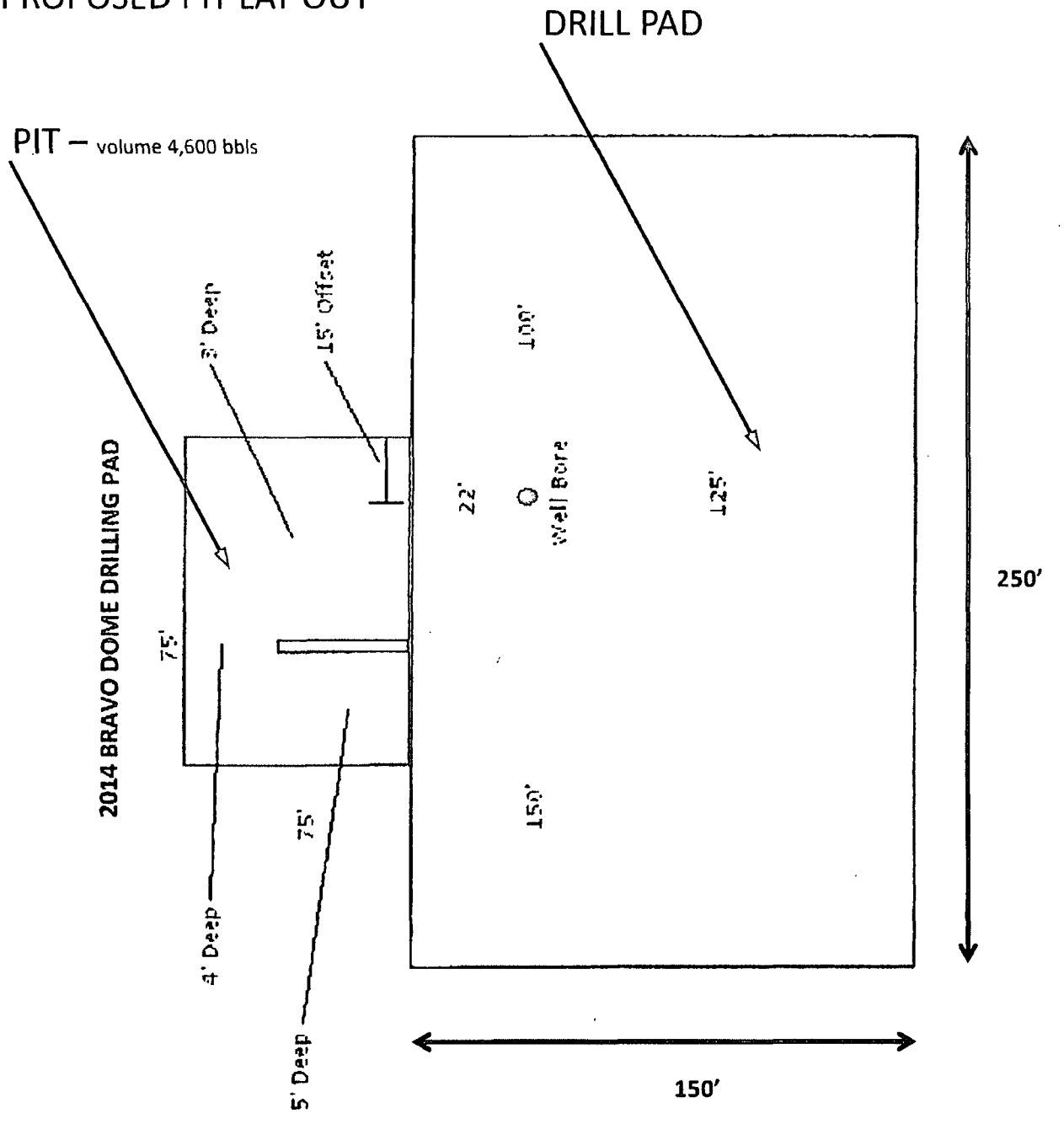
PROPOSED PIT LAY OUT



WELL NAME: BDCDGU 19 33 27 2 K

Maintenance and Operating Plan for Temporary Pits

In accordance with Rule 19 15 17, Occidental Permian Ltd (OXY) will maintain and operate a temporary pit in accordance with the following plan:

1. OXY will discharge into a temporary pit only fluids used or generated during the drilling or workover process.
2. OXY will maintain a temporary pit free of miscellaneous solid waste or debris.
3. Any hydrocarbon base drilling fluid generated during the drilling or workover operation will be contain in an appropriate tank, it will not be discharged into a temporary pit. If any measurable layer of oil from the surface of a temporary pit after any drilling or workover operation, OXY will remove it immediately.
4. OXY shall maintain at least two feet of freeboard for a temporary pit.
5. OXY will use a check list to perform a daily pit inspection while the drilling or workover rig is on-site. After drilling or workover operations, OXY will inspect the temporary pit weekly so long liquids remain in the temporary pit. A log of the inspections will be kept on the well file, inspections will be available for the district office's review upon request. OXY will file a copy of the log with the District IV office once temporary pit is closed.
6. OXY shall remove all free liquids from a temporary pit within 30 days from the date the drilling or workover rig is released.
7. OXY shall remove any liquids from the temporary pit used for cavitation within 48 hours after completing cavitation. OXY may request additional time to remove the liquids from The District IV Division Office if it is not feasible to remove the liquids with 48 hours.

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OXY Permian Temporary Pit Inspection

Wellname:		API #:		Rig Mobe Date:	
County:		Pit liner thickness:		Rig Demobe Date:	

Inspection Date	Time	By Whom	Has any hazardous waste been disposed of in pit(s)?	Is the liner of the pit intact and free of penetrations?	Is there an oil absorbent boom on location?	Distance from top of pit to fluid level (minimum 2')

All pits to be inspected DAILY during drilling/workover operations.
Any penetration of the pit liner shall be reported to the NMOCD within 48 hours.

OXY Bravo Dome
Pit Closure Plan

In accordance with Rule 19 15 17 12 NMAC the following information describes the closure requirements of temporary pits on locations. This is Oxy Bravo Dome's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to NMOCD within 60 days of pit closure. Closure report will be filed on C-144 and incorporate the following

- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results

General Plan

1. Free standing liquids will be removed as soon as practical for recycle use in the drilling of other wells. Any free standing liquids that are not recycled will be removed prior to pit closure and disposed of in a division –approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. Pit solids will be allowed to air dry as completely as possible prior to starting pit closing activities.
2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (8) of 19 15 17 13 are met.
3. The surface owner shall be notified of Oxy Bravo Dome's proposed closure plan using a means that provides proof of notice i e, certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring, Oxy Bravo Dome will ensure that temporary pits are closed, re-contoured.
5. Notice of Closure will be given to the Santa Fe Division office between 72 hours and one week of closure, via email, or verbally. The notification of closure will include the following:
   I Operator's name
   II Location by Unit Letter, Section, Township, and Range.. Well name and API number

6. The pit will stabilized with clean non-waste containing earthen material with a ratio no more than 3:1
7. After stabilization, the contents of the pit will be tested to determine whether concentrations are below standards. A five-point composite sample will be collected. The samples will be sent to an approved laboratory and analyzed for benzene, total BTEX, TPH, the GRO and DRO combined fraction, and chlorides. Assuming water could be encountered from 50' to 100', the following should not be exceeded:

    - **Chlorides** (ads determined by EPA method 300.1): **40,000 mg/kg** or background concentration, whichever is greater
    - **TPH** (EPA SW-846 method 418.a or other division-approved EPA method): **2500 mg/kg**.
    - **GRO** and **DRO** combined fraction (EPA SW-849 method 8015M): **50 mg/kg**
    - **BTEX** (EPA SW-846 method 8021B or 8260B or other approved EPA method): **50 mg/kg**
    - **Benzene** (EPA SW-846 method 8021B or 8260B or other approved EPA method): **10mg/kg**
8. If the contents are above the concentration limits after stabilization Oxy will comply with 19.15.17.13 C(Waste Excavation and Removal)
9. Upon completion of testing, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding as closely as possible. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
11. Notification will be sent to NMOCD when the reclaimed area is seeded.
12. Seeding will be accomplished by drilling on the contour whenever practical, or by other division-approved methods. Vegetative cover will be considered complete when there is a life form ratio of +/- 50% of pre-disturbance levels with at least 70% total plant cover of pre-

disturbance level (Excluding Noxious Weeds) OR in accordance to 19.15.17.13.H.5.d

13. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicated the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following – Operator Name, Lease Name, Well name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location