District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Divsiion
1220 S. St. Francis Dr.
Santa Fe, NM 87505

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2008 AUG 4 PM 1 44

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

[1] Operator Name and Address	[2] OGRID Number
OXY USA Inc. P.O. Box 50250 Midland, TX 79710-0250	16696
	[3] API Number 30- 021- 20487

[4] Property Code	[5] Property Name	[6] Well No.
27111	Bravo Dome Carbon Dioxide Gas Unit 2131	281

[9] Proposed Pool 1		[10] Proposed Pool 2
Bravo Dome Carbon Dioxide Gas 640	96010	Wildcat

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
G	28	21N	31E		1700	north	1700	east	Harding

[8] Proposed 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

Additional Well Location

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	C	R	P	4726.1'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
No	2700'	Tubb	N/A	9/1/08

Depth to ground water	Distance from nearest fresh water well	Distance from nearest surface water

Pit: Liner: Synthetic ☐ _____ mils thick Clay ☐ Pit Volume _____ bbls Drilling Method:

Closed-Loop System ☐ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	9-5/8"	36#	1100'	655sx	Surface
8-1/2"	7"	23#	2700'	365sx	Surface

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See Attachment

[23] I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐ a general permit ☐, or an (attached) alternative OCD-approved plan ☐ .**

Signature:

Printed name: David Stewart

Title: Sr. Regulatory Analyst

E-mail Address: david_stewart@oxy.com

Date: 7/30/08 Phone: 432-685-5717

OIL CONSERVATION DIVISION

Approved by: Ed Martin

Title: DISTRICT SUPERVISOR

Approval Date: 8/25/08 Expiration Date: 8/25/10

Conditions of Approval:

Attached ☐

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-021-20487	96010	Wildcat BRAVO DOME CARBON DIOXIDE GAS 640

Property Code	Property Name	Well Number
27111	BRAVO DOME CARBON DIOXIDE GAS UNIT 2131	281

OGRID No.	Operator Name	Elevation
16696	OXY USA INC.	4726.1

Surface Location

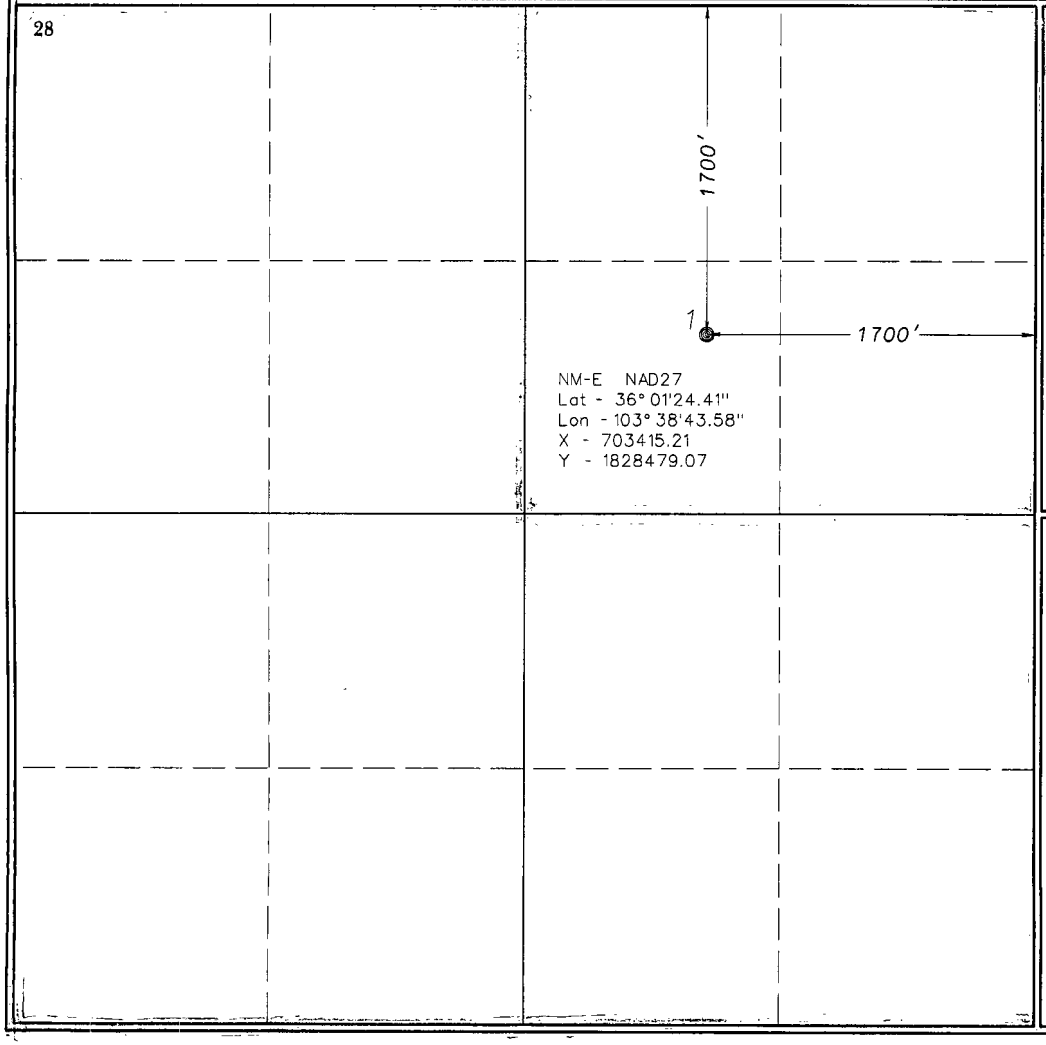
UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
G	28	21 N	31 E		1700'	NORTH	1700'	EAST	HARDING

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640 ~~160~~	N		

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

David Stewart
Printed Name

Sr. Regulatory Analyst
Title

7/30/08
Date

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.

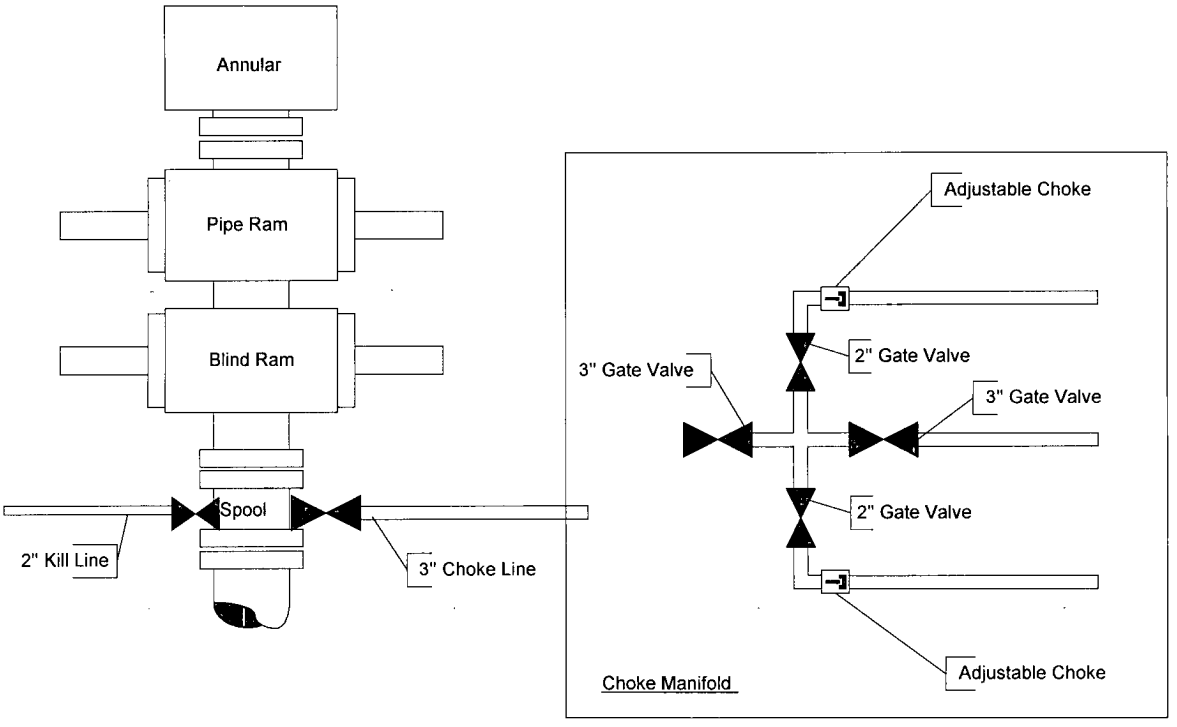
April 4, 2008
Date of Survey

Signature and Seal of Professional Surveyor

TERRY J. ASEL NEW MEXICO 15079 REGISTERED PROFESSIONAL LAND SURVEYOR

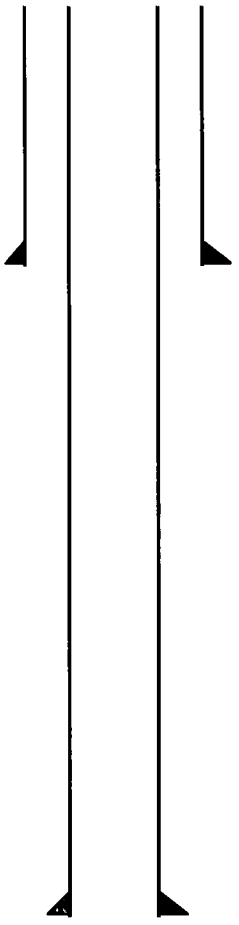
Certificate Number 15079

9" BOP - 3000psi



2 CASING STRING

Casing design



Hole Size: 12 1/4"
Surface @ +/- 1100'
9 5/8" 36# J-55

Hole Size: 8 1/2"
Production @ +/- 2700'
7" 23# J-55

Cementing Design

Surface Casing

Fluid 1: Precede cement with 20 bbl
Fresh Water

Fluid Volume:	20 bbl

Fluid 2: Mix and pump 655 sks
Premium Plus Cement
94 lbm/sk Premium Plus Cement (Cement)
2 % Calcium Chloride (Accelerator)

Fluid Weight	14.80 lbm/gal
Slurry Yield:	1.35 ft^3/sk
Total Mixing Fluid:	6.39 Gal/sk
Top of Fluid:	0 ft
Calculated Fill:	700 ft
Volume:	139.85 bbl

Production Casing

Fluid 1: Precede cement with 20 bbl
Fresh Water

Fluid Volume:	20 bbl

Fluid 2: Lead with 215 sks
MidCon-2 Premium Plus
2 % Calcium Chloride (Accelerator)
1 lbm/sk Pheno Seal - Blend (Lost Circulation Additive)

Fluid Weight	11.1 lbm/gal
Slurry Yield:	3.27 ft^3/sk
Top of Fluid:	0 ft
Volume:	125.21 bbl

Fluid 3: Tail-in with 150 sks
Premium Plus Cement
94 lbm/sk Premium Plus Cement (Cement)
2 % Calcium Chloride (Accelerator)

Fluid Weight	13.2 lbm/gal
Slurry Yield:	1.35 ft^3/sk
Total Mixing Fluid:	6.39 Gal/sk
Top of Fluid:	2420 ft
Volume:	36.07 bbl

Drilling Fluid Program

Surface Hole

12-1/4" Open Hole - (0'- 1,100') - 9-5/8" Casing	
Drilling Fluid System	Fresh Water/M-I Gel Spud Mud
Key Products	M-I Gel, Soda Ash, Drilling Paper, Lime, Fibrous LCM
Solids Control	Adjustable Linear Shaker
Potential Problems	Seepage Losses, Total Losses, Hole Cleaning

Interval Drilling Fluid Properties					
Depth Interval (ft)	**Mud Weight (lb/gal)**	**Plastic Viscosity (cp)**	**Yield Point ($lb/100ft^2$)**	**API Fluid Loss (ml/30min)**	**Drill Solids (%)**
0 - 1,100	8.4 - 8.8	2 - 4	3 - 5	NC	<5.0

Production Hole

8 1/2" Open Hole - (1,100'- ~~3,100~~ 2700') - 7" Casing	
Drilling Fluid System	Fresh Water KCL Water (optional)
Key Products	MI Gel, My-Lo-Jel, MF-55, Fibrous LCM, MI Bar, Caustic Soda, Duo Vis (optional)
Solids Control	Reserve Pit, Adjustable Linear Shaker
Potential Problems	Seepage Losses, Total Losses, Hole Cleaning

Interval Drilling Fluid Properties					
Depth Interval (ft)	**Mud Weight (lb/gal)**	**Plastic Viscosity (cp)**	**Yield Point ($lb/100ft^2$)**	**API Fluid Loss (ml/30min)**	**Drill Solids (%)**
1,100 - 2,300	8.4 - 8.6	1 - 2	1 - 2	NC	<5
*1,100– 2,300	8.4 - 8.6	1 - 2	1 - 2	10	<5
2,300 - 3,100	8.4 - 10.0	8 - 12	10 - 14	8 - 10	<2

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

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2008 NOV 22 PM 2 53

Form C-144
June 24, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, 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.

Operator: _OXY USA Inc. OGRID #: _____
Address: P.O. Box 303 Amistad NM 88410
Facility or well name: Bravo Dome Unit Well 2131-281G
API Number: 30-021-20487 OCD Permit Number: _____
U/L or Qtr/Qtr 1700' North 1700' East Section 28 Township 21N Range 31E County: Harding
Center of Proposed Design: Latitude 36 degrees 01' 24.41" Longitude 103 degrees 38' 43.58" NAD: ☐1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ Steel Pit
☒ Lined ☐ Unlined
Liner type: Thickness 20mil ☒ LLDPE ☐ HDPE ☐ PVC
☐ Other _____ ☐ String-Reinforced
Seams: ☒ Welded ☒ Factory ☐ Other _____
Volume: 1525 bbl Dimensions: L 80' x W 80' x D 10'

☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
☐ Drying Pad ☐ Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined
Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC
☐ Other _____
Seams: ☐ Welded ☐ Factory ☐ Other _____
Volume: _____bbl _____yd³
Dimensions: Length_____ x Width_____

☐ **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 _____

Fencing: Subsection D of 19.15.17.11 NMAC
☐ Chain link, six feet in height, two strands of barbed wire at top
☒ Four foot height, four strands of barbed wire evenly spaced between one and four feet
Netting: Subsection E of 19.15.17.11 NMAC
☐ Screen ☐ Netting ☐ Other _____
☒ Monthly inspections
Signs: Subsection C of 19.15.17.11 NMAC
☒ 12'x24', 2' lettering, providing Operator's name, site location, and emergency telephone numbers
☐ Signed in compliance with 19.15.3.103 NMAC

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

Administrative Approvals 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:
☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.
☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance.*** **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No
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 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ 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

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 - 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: _____

Closed-loop Systems 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.***

- ☐ Geologic and Hydrogeologic Data (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (required for on-site closure) - 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 - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

NMAC

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

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

Proposed Closure: 19.15.17.13 NMAC

Type: ☒ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ 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 (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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 may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 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 between 50 and 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
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 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 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 private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, 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
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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ 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

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 F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Haul-off Bins Only: (19.15.17.13.D NMAC) ***Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings.***

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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 F of 19.15.17.13 NMAC
- ☐ Construction and Design of Burial Trench (if applicable) 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 Subsection F of 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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): James E. Corley Title: Operations team Leader

Signature: _____ Date: _____

e-mail address: eddie_corley@oxy.com Telephone: (575) 799-6849

OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: Ed Martin **Approval Date:** 8/25/08

Title: DISTRICT SUPERVISOR **OCD Permit Number:** _____

Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

☐ **Closure Completion Date:** _____

Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method

☐ If different from approved plan, please explain.

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
- ☐ Proof of Deed Notice (if applicable)
- ☐ Plot Plan
- ☐ Confirmation Sampling Analytical Results
- ☐ Waste Material Sampling Analytical Results
- ☐ 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

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): James E. Corley Title: Operations Team Leader

Signature: James E. Corley Date: 8/20/2008

e-mail address: eddie_corley@oxy.com Telephone: (575) 374- 3052

Pit Design and Construction Plan

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.

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.

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.

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. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner I e, edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility
7. Pit contents shall be tested prior to mixing of any soils. Test results will be compared to NMOCD limits. If the test results are within the NMOCD limits no soils will be mixed with the pit contents. If the sample results exceed the NMOCD limits the contents will be mixed with non-waste containing, earthen material in order to achieve the solidification process. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents. The mixed contents will then be re-tested and the results will be compared to the NMOCD limits.
8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per subsection B of 19 15 17 13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19 15 17 13 i e, Dig and Haul

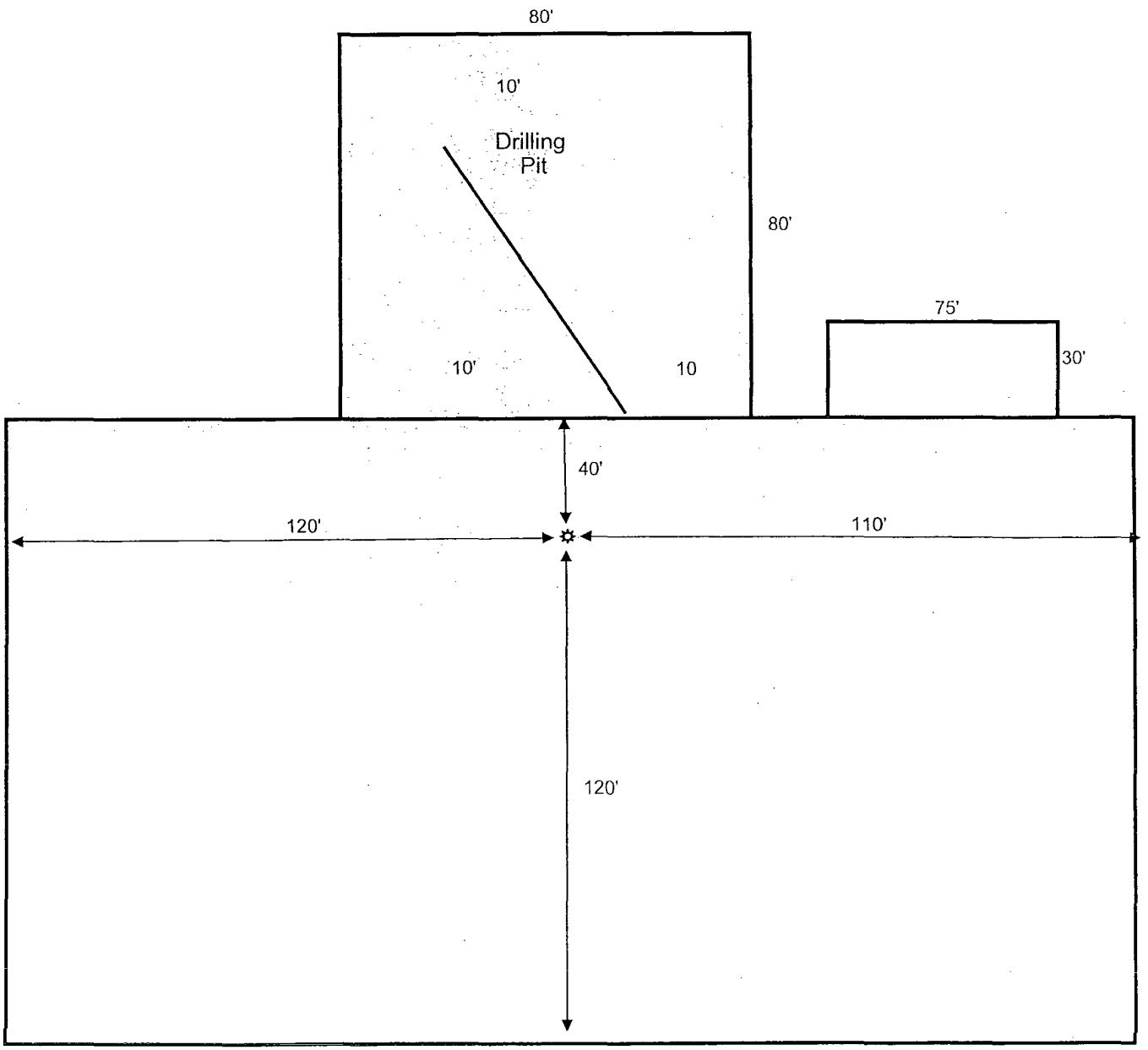
Composites	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 826oB	0.2
BTEX	EPA SW-846 8021B or 826oB	50
TPH	EPA SW-846 418 1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300 1	1000

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. Bravo Dome shall seed the disturbed areas upon abandonment of the pit and well site. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will equal 70% if the native perennial vegetative cover (un-impacted) consisting of at ***least three native plant species,*** including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons.
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

Bravo Dome Unit
Location and Pit Design
Capstar Rig



New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 21N Range: 31E Sections: 28,36

NAD27 X: Y: Zone: Search Radius:

County: HA Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

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AVERAGE DEPTH OF WATER REPORT 08/01/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

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