

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
May 27, 2004

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

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

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 OXY USA Inc. P.O. Box 50250 Midland, TX 79710-0250		² OGRID Number 16696	
⁴ Property Code 27111		³ API Number 30- 059- 20515	
⁵ Property Name Bravo Dome Carbon Dioxide Gas Unit		⁶ Well No. 321	
⁹ Proposed Pool 1 Bravo Dome Carbon Dioxide Gas 640		¹⁰ Proposed Pool 2 96010	

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
K	32	23 N	33 E		1700	South	1700	West	Union

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 N	¹² Well Type Code C	¹³ Cable/Rotary R	¹⁴ Lease Type Code S-106229	¹⁵ Ground Level Elevation 5034'
¹⁶ Multiple No	¹⁷ Proposed Depth 2600'	¹⁸ Formation Tubb	¹⁹ Contractor N/A	²⁰ Spud Date 6/15/09
Depth to ground water >100'		Distance from nearest fresh water well >1000'		Distance from nearest surface water >1000'
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume 4000 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	+/- 750'	400sx	Surface
7-7/8"	5-1/2"	5.9#FG/15.5#	+/- 2600'	550sx	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 <input checked="" type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> . Signature: <i>David Stewart</i>		OIL CONSERVATION DIVISION	
Printed name: David Stewart		Approved by: <i>Ed Martin</i>	
Title: Sr. Regulatory Analyst		Title: DISTRICT SUPERVISOR	
E-mail Address: david.stewart@oxy.com		Approval Date: 4/22/08 Expiration Date: 4/22/10	
Date: 4/18/08	Phone: 432-685-5717	Conditions of Approval: Attached <input type="checkbox"/>	

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 30-059-20515	Pool Code 96010	Pool Name BRAVO DOME CARBON DIOXIDE GAS 640
Property Code 27111	Property Name BRAVO DOME CARBON DIOXIDE GAS UNIT 2333	Well Number 321
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 5034.0


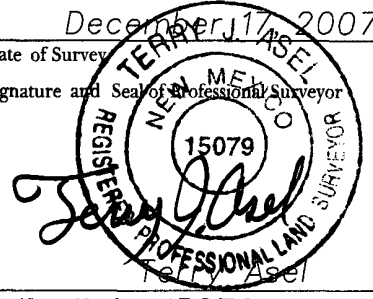
Surface Location

UL or lot no. K	Section 32	Township 23 N	Range 33 E	Lot Idn.	Feet from the 1700'	North/South line SOUTH	Feet from the 1700'	East/West line WEST	County UNION
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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 640	Joint or Infill N	Consolidation Code	Order No.						

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

<div>32</div> <div><p>NM-E NAD27 Lat - 36° 10' 41.97" Lon - 103° 26' 54.68" X - 761133.13 Y - 1885327.52</p><p>1700'</p><p>1700'</p></div>	<div>OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <div> Signature David Stewart Printed Name Sr. Regulatory Analyst Title 4/18/08 Date</div>
	<div>SURVEYOR CERTIFICATION</div> <p>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.</p> <p>December 17, 2007 Date of Survey</p> <div> Signature and Seal of Professional Surveyor</div> <p>Certificate Number 15079</p>

Bravo Dome CO2 wells - 2008

CASING:

MD (ft)	Hole Size (in)	Csg Size (in)	Wt (lb/ft)	Grd	Cplg
0 - ±750	12-1/4	8-5/8	24	J55	STC
0 - ± 2440	7-7/8	5-1/2 FG	5.9	FG	10 Rd
2440 - ± 2600	7-7/8	5-1/2 Steel	15.5	J55	LTC

CEMENT:

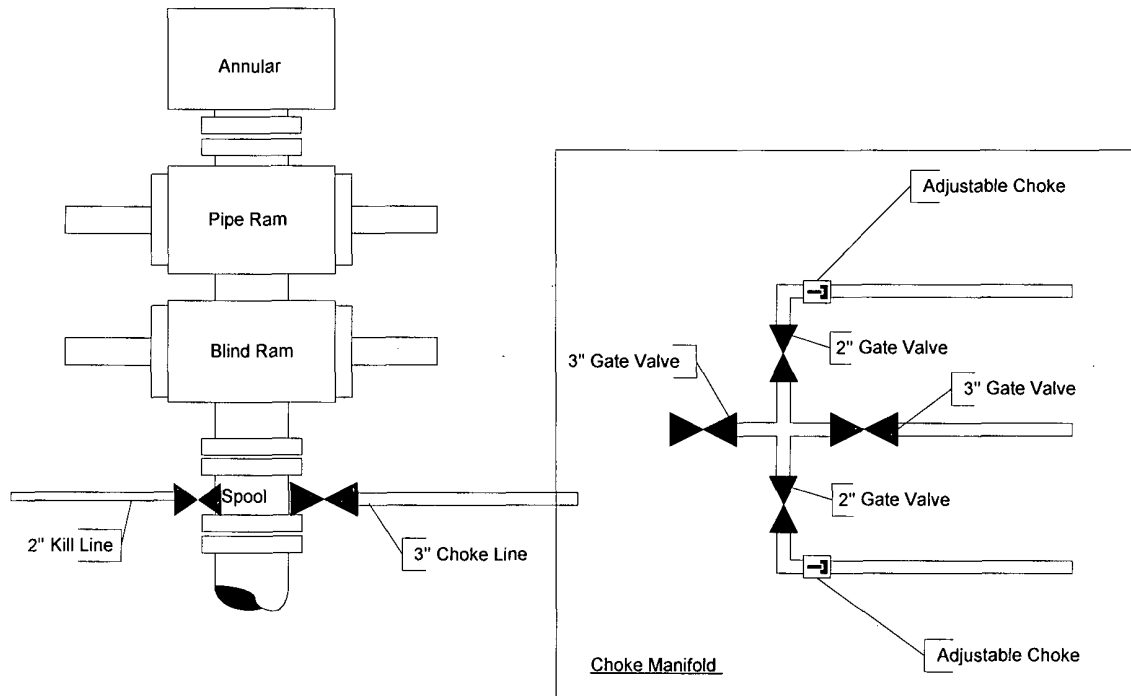
Surface:

Cement Design							
Slurry	Weight (ppg)	TOC (feet)	BOC (feet)		Slurry Volume (Bbls)	Cement Required (sx.)	Comment
Lead	14.8	Surface	750		96	400	TOC ±surface
Lead Slurry							
Premium Plus CaCl Poly E Flake Slurry Yield Mix Water Mix Water Source				400 sx 2% 0.125 lb/sx 1.35 cfs 6.3 gal/sx Freshwater			

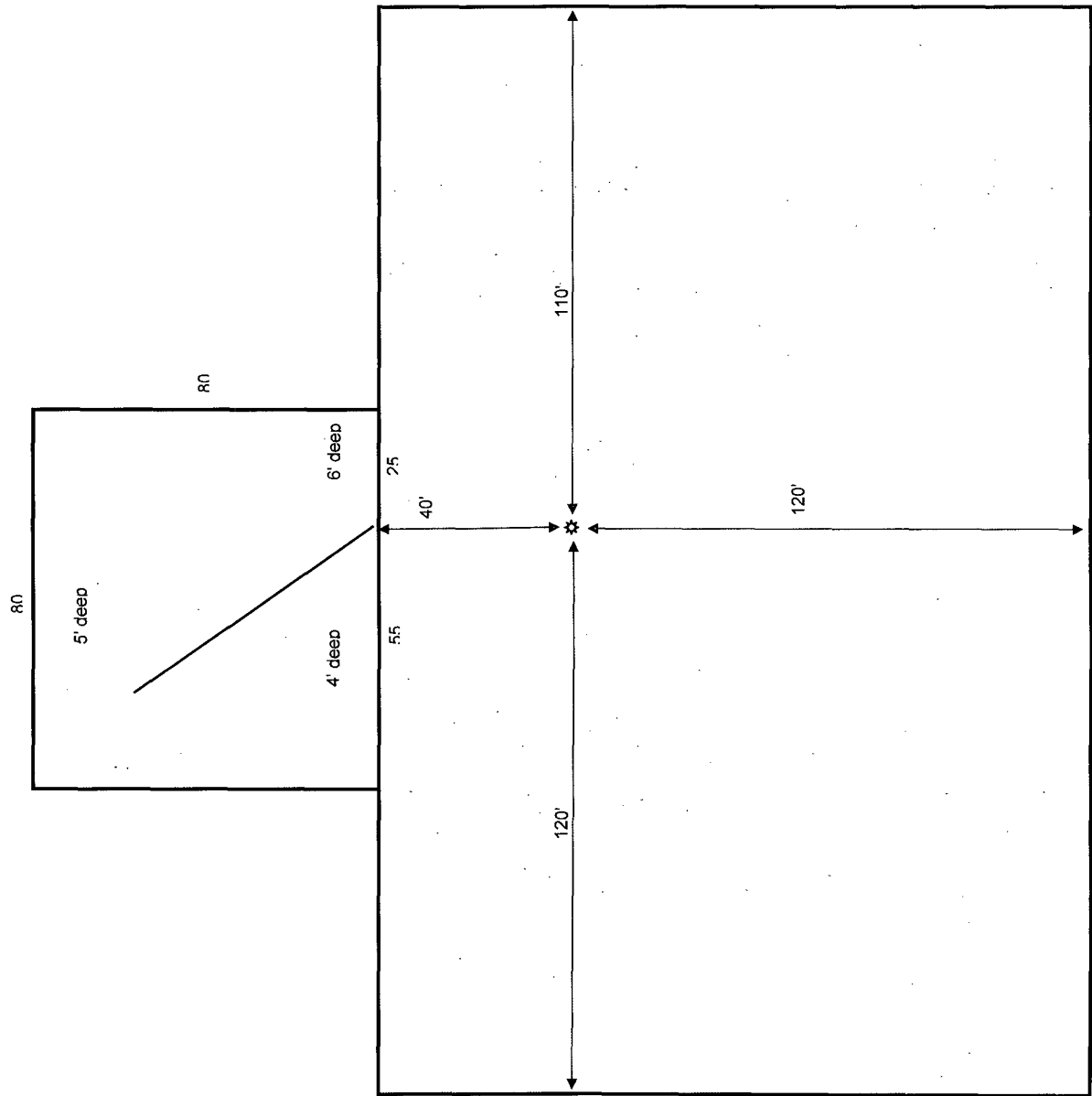
Production:

Cement Design							
Slurry	Weight (ppg)	TOC (feet)	BOC (feet)		Slurry Volume (Bbls)	Cement Required (sx.)	Comment
Lead	11.1	0	±1830		233	400	TOC to Surface
Tail	13.2	±1830	2600		50	150	TOC ±600' above Cimarron
Lead Slurry				Tail Slurry			
Premium Plus CaCl Poly E Flake Slurry Yield Mix Water Mix Water Source		400 sx 3% 0.125 lb/sx 3.28 cfs 20.56 gal/sk Freshwater		Premium Plus CaCl Poly E Flake Slurry Yield Mix Water Mix Water Source		150 sx 3% 0.125 lb/sx 1.86 cfs 9.99 gal/sk Freshwater	

9" BOP - 3000psi



Bravo Dome Unit
Location and Pit Design
Cheyenne Rig 8



Bravo Dome Unit
Cellar and Sump Pit
Cheyenne Rig 8

