

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., Aztec, 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- 20468
⁵ Property Name Bravo Dome Carbon Dioxide Gas Unit 1934		⁶ Well No. 172 <i>R</i>
⁹ Proposed Pool 1 Bravo Dome Carbon Dioxide Gas 640 96010		¹⁰ Proposed Pool 2

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
J	17	19N	34E		1650 ✓	south	1980 ✓	east	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 P	¹⁵ Ground Level Elevation 4881'
¹⁶ Multiple No	¹⁷ Proposed Depth 2600'	¹⁸ Formation Tubb	¹⁹ Contractor N/A	²⁰ Spud Date 5/1/05
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 1750 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#	700' ✓	300sx	Surface ✓
7-7/8"	5-1/2"	5.9#FG/15.5#	2600'	300sx	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>[Signature]</i>	
Title: Sr. Regulatory Analyst		Title: DISTRICT SUPERVISOR	
E-mail Address: david_stewart@oxy.com		Approval Date: 4/11/05 Expiration Date: 4/11/06	
Date: 4/5/05	Phone: 432-685-5717	Conditions of Approval: Attached <input type="checkbox"/>	

ATTACHMENT C-101
BDCDGU

PROPOSED TD: 2600' TVD

BOP PROGRAM: 0-700' None
700-2600' 8" 2M annular hydril preventer.

CASING: Surface: 8-5/8" OD 24# J55 8rd ST&C new casing set at 700'
12-1/4" hole
Centralizers from TD-Surf, every fourth joint
Production: 5-1/2" OD new casing from 0-2600'
300'-15.5# J55 8rd LTC 2300'-5.9# 10rd FG
7-7/8" hole - 5 centralizers

*This well will have fiberglass casing from surface to the productive interval (Tubb). Steel casing will be used across the Tubb. The fiberglass casing must penetrate the Cimarron at a minimum. The optimum point for setting the fiberglass casing is at the midpoint of the Cimarron formation.

CEMENT: Surface - Circulate cement with 300sx Premium Plus with 2% CaCl_2 + .25#/sx Poly E Flake, (WT-14.8ppg, Yld-1.34cf/sx, FW-6.3g/sx)
Production - Cement with 150sx Premium Plus with 3% CaCl_2 + .25#/sx Poly E Flake, (WT-11.1ppg, Yld-3.27cf/sx, FW-20.47g/sx) followed by 150sx Premium Plus with 3% CaCl_2 + .25#/sx Poly E Flake, (WT-13.2ppg, Yld-1.86cf/sx, FW-9.93g/sx)

MUD: 0-700' Fresh water/native mud.
Wt 8.6-9.2ppg, Vis 32-36sec
700-2600' Fresh water/Starch/Gel
pH control as needed.
Wt 9.0-9.2ppg, Vis 28-29sec

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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 96010	Pool Name BRAVO DOME CARBON DIOXIDE GAS
Property Code 27111	Property Name BRAVO DOME CARBON DIOXIDE GAS UNIT 1934	Well Number 172
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 4881.0

Surface Location

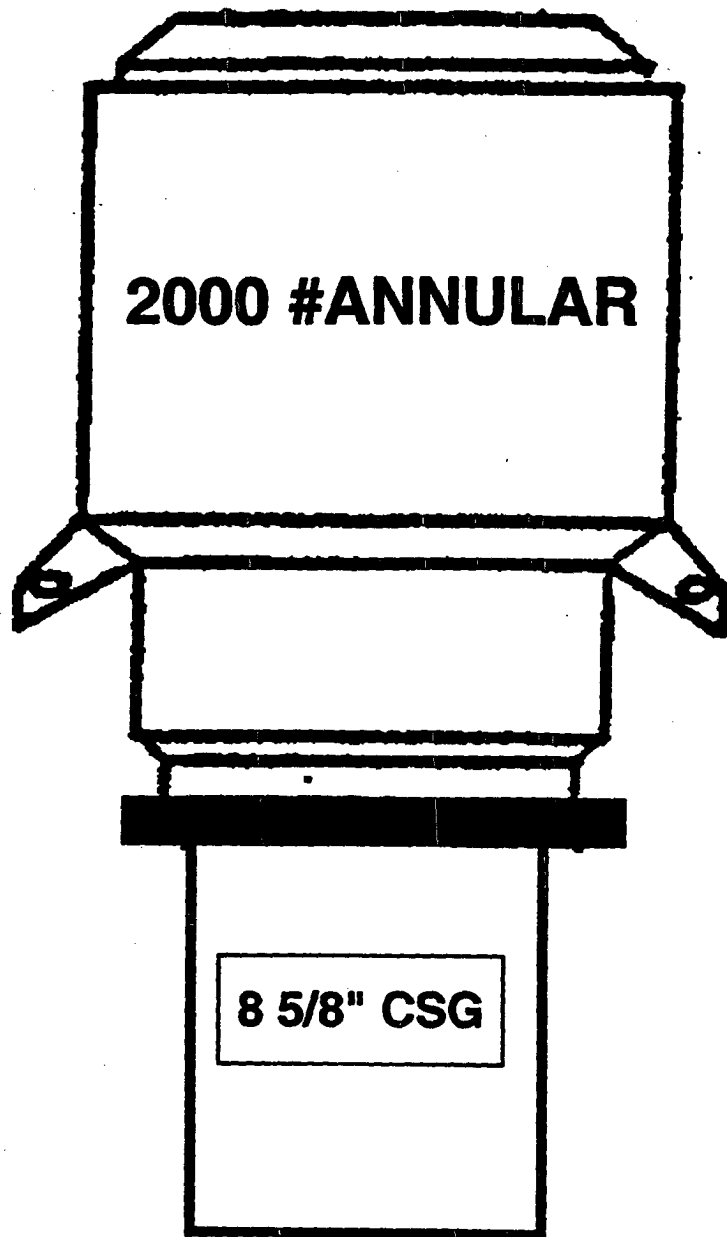
UL or lot no. J	Section 17	Township 19 N	Range 34 E	Lot Idn.	Feet from the 1650'	North/South line SOUTH	Feet from the 1980'	East/West line EAST	County UNION
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Bottom Hole Location If Different From Surface

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 Y	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

17					OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Printed Name David Stewart Title Sr. Regulatory Analyst Date 4/5/05
					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. Date of Survey March 11, 2005 Signature and Seal of Professional Surveyor Certificate Number 15079



BRAVO DOME 2003 DRILLING PROJECT BOP DIAGRAM