

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
May 27, 2004

District I
1025 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 Property Name Bravo Dome Carbon Dioxide Gas Unit 2132	³ API Number 30-021-20354
⁹ Proposed Pool 1 Bravo Dome Carbon Dioxide Gas 640 96010		⁶ Well No. 342
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	34	21N	32E		2278	south	1692	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


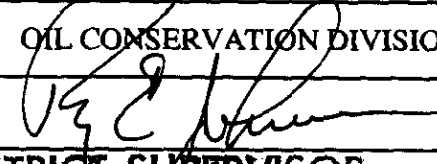
¹¹ Work Type Code N	¹² Well Type Code C	¹³ Cable/Rotary R	¹⁴ Lease Type Code S-L6389	¹⁵ Ground Level Elevation 4811.8'
¹⁶ Multiple No	¹⁷ Proposed Depth 2600'	¹⁸ Formation Tubb	¹⁹ Contractor N/A	²⁰ Spud Date 7/20/05
Depth to ground water >100'		Distance from nearest fresh water well >1000'		Distance from 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: 		OIL CONSERVATION DIVISION	
Printed name: David Stewart		Approved by: 	
Title: Sr. Regulatory Analyst		Title: DISTRICT SUPERVISOR	
E-mail Address: david.stewart@oxy.com		Approval Date: 7/13/05 Expiration Date: 7/13/06	
Date: 7/12/05	Phone: 432-685-5717	Conditions of Approval: Attached <input type="checkbox"/>	

District IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Free Lease - 3 Copies

☐ AMENDED REPORT

34		<h3 style="text-align: center;">OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <div style="text-align: center; margin-top: 20px;"> </div> <hr/> <p style="text-align: center;">Signature David Stewart</p> <hr/> <p style="text-align: center;">Printed Name Sr. Regulatory Analyst</p> <hr/> <p style="text-align: center;">Title 7/12/05</p> <hr/> <p style="text-align: center;">Date</p>
		<h3 style="text-align: center;">SURVEYOR CERTIFICATION</h3> <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> <div style="text-align: center; margin-top: 20px;"> <p>Date of Survey July 8, 2005</p> <hr/> <p style="text-align: center;">Signature and Seal of Professional Surveyor</p> <div style="text-align: center; margin-top: 10px;"> </div> </div> <hr/> <p style="text-align: center;">Certificate Number 15079</p>

ATTACHMENT C-101
BDCDGV

PROPOSED TD: 2600' TVD

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

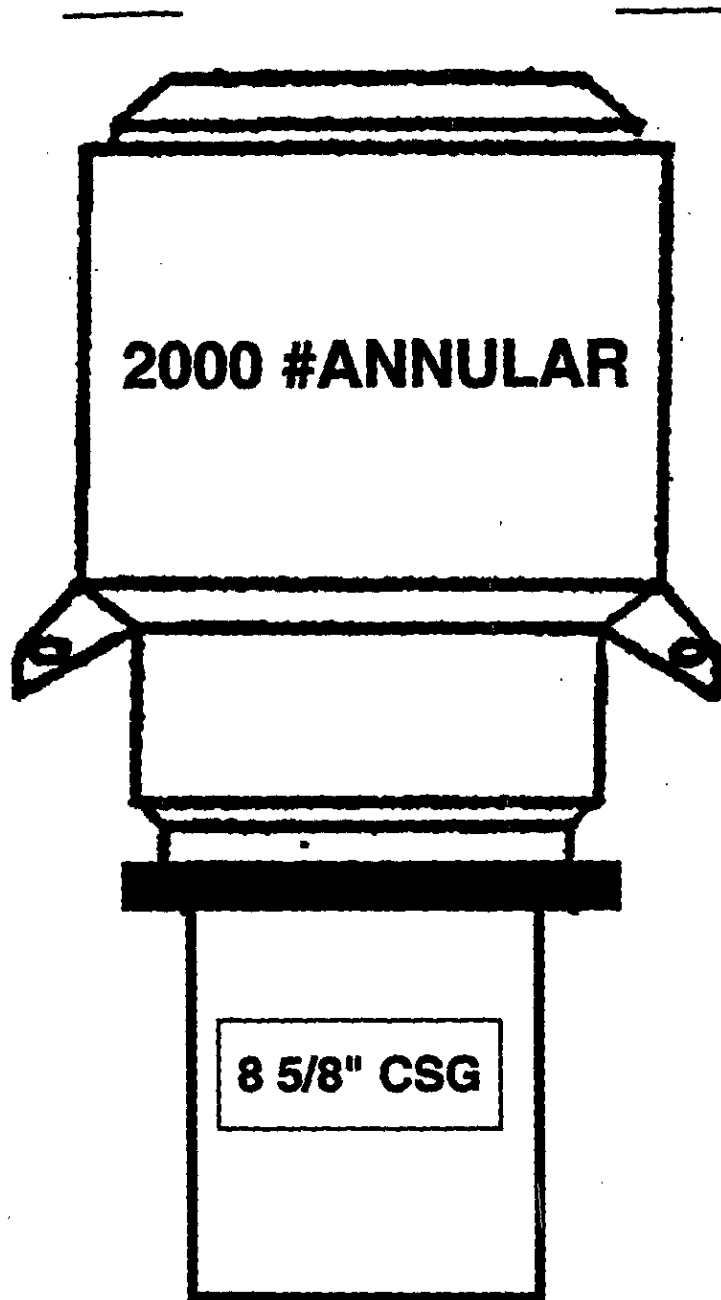
CASING: Surface: 8-5/8" OD 24# J55 8rd ST&C new casing set at 700'
12-1/4" hole
Centralizers from TD-Surf, every fourth joint
Production: 5-1/2" OD new casing from 0-2600'
300'-15.5# J55 8rd LTC 2300'-5.9# 10rd FG
7-7/8" hole - 5 centralizers

*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% CaCl₂ + .25#/sx Poly E Flake, (WT-14.8ppg, Yld-1.34cf/sx, FW-6.3g/sx)

Production - Cement with 150sx Premium Plus with 3% CaCl₂ + .25#/sx Poly E Flake, (WT-11.1ppg, Yld-3.27cf/sx, FW-20.47g/sx) followed by 150sx Premium Plus with 3% CaCl₂ + .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



BRAVO DOME 2003 DRILLING PROJECT BOP DIAGRAM