Energy, Minerals & Natural Resources

1625 N. French Dr., Hobbs, NM 88240

E-mail Address: david stewart@oxy.com

4/1/03

Phone:

432-685-5717

Date:

District II
1301 W. Grand Avenue, Artesia, NM 88210-Submit to appropriate District Office Oil Conservation Divsiion 1000 Rio Brazos Rd., Aztec NA 1220 S. St. Francis Dr. District IV AMENDED REPORT Santa Fe, NM 87505 1220 S. St. Francis Dr. Santa Februm 87505 PM 1 54 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE ¹Operator Name and Address ² OGRID Number 16696 OXY USA Inc. ³API Numbe Midland, TX 79710-0250 P.O. Box 50250 30-059-⁴Property Code ⁵Property Name Well No 2233 27111 Bravo Dome Carbon Dioxide Gas Unit ⁹ Proposed Pool 1 10 Proposed Pool 2 96010 Bravo Dome Carbon Dioxide Gas 640 ⁷Surface Location UL or lot no. Lot. Idn Feet from the North/South Line East/West line Section Township Range Feet from the County T 33 E Union 1807 South east 1914 ⁸ Proposed Bottom Hole Location If Different From Surface Feet from the North/South Line UL or lot no. Section Township Range Lot. Idn 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 5-406241 N R 16 Multiple 17 Proposed Depth 18 Formation 9 Contractor 2600 Tubb No N/A Depth to ground water Distance from nearest fresh water well Distance from nearest surface water >100' >1000 >1000 Pit Volume 4000 bbls Liner: Synthetic X 12 __ mils thick Clay Drilling Method: Fresh Water X Gas/Air 🔲 Closed-Loop System Brine ___ Diesel/Oil-based ²¹Proposed 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 $^{\rm 23}$ I hereby certify that the information given above is true and complete to the best of OIL CONSERVATION DIVISION my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines X a general permit . or Approved by: an (attached) alternative OCD-approved plan Na ST Printed name: David Stewart Title: Sr. Regulatory Analyst **Expiration Date:** Approval Date:

Conditions of Approval:

Attached

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210

District III

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

1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code API Number Pool Name 30-059- 20498 96010 BRAVO DOME CARBON DIOXIDE GAS 640 Property Code Property Name Well Number BRAVO DOME CARBON DIOXIDE GAS UNIT 2233 27111 071 OGRID No. Operator Name Elevation 16696 OXY USA INC. 4969.1 Surface Location UL or lot no. Section Township Range Lot Idn. Feet from the North/South line Feet from the East/West line County 33 F 1807' SOUTH 1914' EAST UNION 22 N Bottom Hole Location If Different From Surface Feet from the UL or lot no. Section Lot Idn. North/South line Feet from the Township Range East/West line County Dedicated Acres Joint or Infill Consolidation Code 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

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 41,108 Date NM-E NAD27 SURVEYOR CERTIFICATION Lat - 36° 08'57.85" Lon - 103° 27'37.00" I hereby certify that the well location shown on this plat X - 757758.37 was plotted from field notes of actual surveys made by Y - 1874768.18 me or under my supervision, and that the same is true and correct to the best of my belief. 1914 Date of Survey ME Signature an 15079 Certificate Number

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:

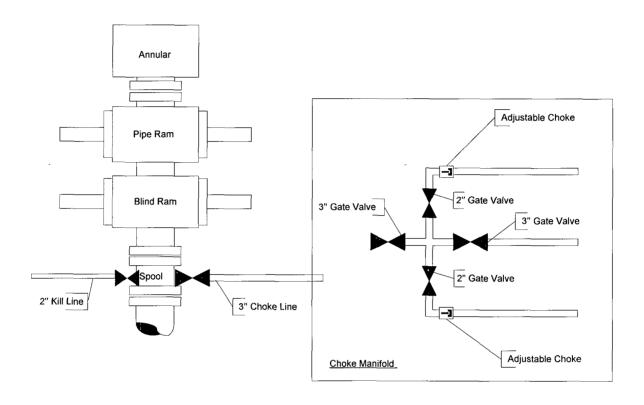
Surface:

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 400 sy									
Premium Plus CaCl					400 sx 2%				
Poly E Flake Slurry Yield					0.125 lb/sx 1.35 cfs				
Mix Water Mix Water Sour	ce			6.3 gal/sx Freshwater					

Production:

Production:									
			Ce	emen	t Design				
Slurry	Weight (ppg)	TOC (feet)	BOC (feet)			Slurry Volume (Bbls)	Cement Required (sx.)	Com	ment
Lead	11.1	0	±1830			233	400	TOC Surface	to
Tail	13.2	±1830	2600			50	150	TOC above Cimarro	±600' on
Lead Slurry				Tail Slurry					
CaCl 3 Poly E Flake 0.125 Slurry Yield 3.25		8 cfs		Premium Plus CaCl Poly E Flake Slurry Yield		150 sx 3% 0.125 lb/sx 1.86 cfs			
Mix Water 20.56 gas Mix Water Source Freshw					9.99 gal/sk Freshwater				

9" BOP - 3000psi



110 8 e, deep 25 120' -04 5' deep 80 4' deep 55 120'

Bravo Dome Unit Location and Pit Design Cheyenne Rig 8

Bravo Dome Unit Cellar and Sump Pit Cheyenne Rig 8

