State of New Mexico Energy, Minerals & Natural Resources

Form C-101 -May 27, 2004

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

E-mail Address: david stewart@oxy.com

Date:

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

Submit to appropriate District Office

District IV 2008 FIRM 19 Imanuel Design Report 1220 S. St. Francis Dr., Santa Fe, NM 87505 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE ² OGRID Number ¹Operator Name and Address 16696 OXY USA Inc. ³API Number 9 P.O. Box 50250 Midland, TX 79710-0250 30-059 ⁶Well No. ⁴Property Code ⁵Property Name Bravo Dome Carbon Dioxide Gas Unit 2433 27111 ⁹ Proposed Pool I 10 Proposed Pool 2 Bravo Dome Carbon Dioxide Gas 640 96010 ⁷Surface Location UL or lot no. North/South Line Feet from the Feet from the East/West line Section Township Lot. Idn County 34 24 G N 1674 North Union 1900 Proposed Bottom Hole Location If Different From Surface Feet from the North/South Line Feet from the East/West line UL or lot no Lot. Idn Section Township County Additional Well Location 11 Work Type Code 12 Well Type Code 13 Cable/Rotary ¹⁴ Lease Type Code 15 Ground Level Elevation 5-LD6203 N R 5244.5 16 Multiple 17 Proposed Depth 18 Formation Contractor 2600' Tubb N/A Distance from nearest fresh water well Depth to ground water Distance from nearest surface water >100' >1000 Pit Volume 4000 bbls Liner: Synthetic X 12 __ mils thick Clay Drilling Method: Fresh Water X Brine 🔲 Gas/Air 🔲 Closed-Loop System Diesel/Oil-based ²¹Proposed Casing and Cement Program Estimated TOC Hole Size Casing weight/foot Setting Depth Sacks of Cement Casing Size 12-1/4" 8-5/8" 24# +/-750' 400sx Surface 5.9#FG/15.5# 7-7/8" 5-1/2" +/-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 14.82 Title: Printed name: David Stewart Sr. Regulatory Analyst Expiration Date: 3/27/10 Approval Date:

Conditions of Approval:

Attached

432-685-5717

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 State of New Mexico
Energy, Minerals & Natural Resources Department

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

District III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

District IV 2040 South Pacheco, Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Numb	er	Pool Code		Pool Name							
30-059- 20	489	96	5010_	BRAV	0 D0	ME	CARBON	DIO	XIDE	GAS	640
Property Code		Property Name								Well Nun	nber
27111	BRAVO	DOME	CARBON	DIOXIDE	GAS	UN	IT 2433	5		341	
OGRID No.			Op	erator Name						Elevatio	on
16696		OXY USA INC.							Ē	5244	.5

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	34	24 N	33 E		1674'	NORTH	1900'	EAST	UNION

Bottom Hole Location If Different From Surface

ſ	UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
	Dedicated Acre	s Joint	or Infill (Consolidation	Code C	rder No.				
	640	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

-	34			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
		NM-E NAD27 Lat - 36° 16'12.96" Lon - 103° 24'21.41" X - 773378.09 Y - 1918913.77	1900'	Signature David Stewart Printed Name Sr. Regulatory Analyst Title 3/17/08
				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. December 17, 2007 Date of Survey Signature and Seal of offessional surveyor 15079 Certificate Number 15079

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:

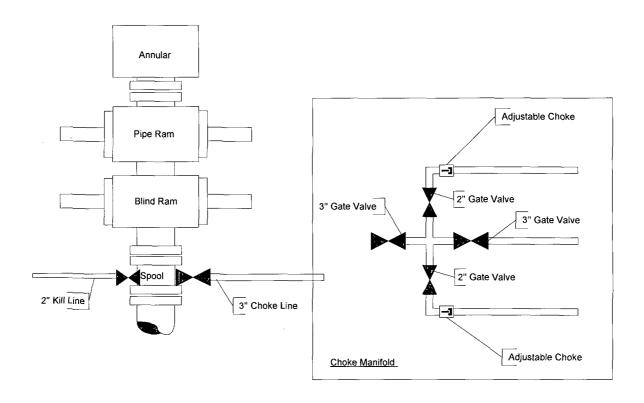
Surface:

			Cem	nt Design						
Slurry	Weight (ppg)	TOC (feet)	BOC (feet)		Slurry Volume (Bbls)	Cement Required (sx.)	Comment			
Lead	14.8	Surface	750		96	400	TOC ±surface			
Premium Plus			Le	d Slurry	4	00 sx				
Premium Plus					400 sx					
CaCl					2%					
Poly E Flake				į		25 lb/sx				
Slurry Yield				1.35 cfs						
Mix Water				6.3 gal/sx						
Mix Water Sοι	ırce			Freshwater						

Production:

Production.										
			Cer	nen	t Design					
Slurry	Weight (ppg)	TOC (feet)	BOC (feet)			Slurry Volume (Bbls)	Cement Required (sx.)	Com	ment	
Lead	11.1	0	±1830 233		233		TOC Surface	to		
Tail	13.2	±1830	2600			50	150	TOC above Cimarro	±600' on	
	Lead :	Slurry				Tail	Slurry			
Premium Plus CaCl Poly E Flake Slurry Yield		3% 0.125 lb/sx 3.28 cfs			Premium Pl CaCl Poly E Flak Slurry Yield Mix Water	e	150 sx 3% 0.125 lb/sx 1.86 cfs			
Mix Water Mix Water Source					Mix Water S	Source		9.99 gal/sk Freshwater		

9" BOP - 3000psi



80 e, deep 25 120, .0 5' deep 8 4' deep 55 120,

Bravo Dome Unit Location and Pit Design Cheyenne Rig 8

Bravo Dome Unit Cellar and Sump Pit Cheyenne Rig 8

