Office	opriate District		State of New Mexico.				Form C-103			
District I - (575) 393-61	61		Energy, Minerals and Natural Resource	ces			Revised July 18, 2013			
1625 N. French Dr., Hol			•		ELL AP					
<u>District II</u> – (575) 748-1 811 S. First St., Artesia,			OIL CONSERVATION DIVISIO		0-015-41					
District III - (505) 334-0	5178		1220 South St. Francis Dr.	5	5. Indicate Type of Lease STATE STATE					
1000 Rio Brazos Rd., A District IV – (505) 476-2			Santa Fe, NM 87505	6		il & Gas Lo				
1220 S. St. Francis Dr., 87505					. State C					
	SUNDRY NO	DTICES	AND REPORTS ON WELLS	7	. Lease N	Jame or Un	it Agreement Name			
			TO DRILL.OR TO DEEPEN OR PLUG BACK TO N FOR PERMIT" (FORM C-101) FOR SUCH			34 STATE				
1. Type of Well: (	Dil Well 🛛	Gas	Well Dther	#			:			
2. Name of Operat OCCIDENTAL PE		5		1	57984	Number				
3. Address of Oper PO BOX 4294, HC		XAS 77	210			ame or Wi ; GLORIE				
4. Well Location				1						
Unit Letter	r_G_:_210	5fee	t from the _NORTH line and2233 fe	et from the	EAST li	ne				
Section 3	34 To	ownship	17S Range 28E NMPM		EDDY	County				
		11.	Elevation (Show whether DR, RKB, RT, C	GR, etc.)						
12. Check Appr	opriate Bo		licate Nature of Notice, Report or C	Other Dat	а		• • • • • • • • • • • • • • • • • • •			
NC		INTEN		SUBSE		T REPO	BT OF:			
PERFORM REME										
TEMPORARILY AE			— 1	CE DRILLI	NG OPN					
PULL OR ALTER C	ASING	🗋 мі	ILTIPLE COMPL	CEMENT J	ОВ					
DOWNHOLE COM	MINGLE [									
CLOSED-LOOP SY	/STEM		_				_			
OTHER:		1 . 1		.1 1	·	. 1				
			operations. (Clearly state all pertinent dep SEE RULE 19.15.7.14 NMAC. For Mult							
	mpletion or			ipic comp	ictions. r	C				
			from the approved permit as follows:				CEIVED			
			MD/ TVD OBJECTIVE: Yeso			FFF	3 <b>07</b> 2014			
2. REVISE Surface Interval	D CEMENT									
		PROG	RAM			1				
	Amount		· ·			NMOC				
Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG		DARTESIA 24-Hr Comp			
Interval Lead:	SX	Ft of Fill	· ·			Ft <sup>4</sup> /sk				
<b>Interval</b> <b>Lead:</b> 0' – 400'	1	Ft of	Туре	Gal/Sk 6.39	<b>PPG</b> 14.8		DARTESIA 24 Hr Comp 1608 psi			
Interval Lead: 0' – 400' (125% Excess)	SX	Ft of Fill	Type Premium Plus Cement:			Ft <sup>4</sup> /sk				
<b>Interval</b> <b>Lead:</b> 0' – 400'	SX	Ft of Fill	Type Premium Plus Cement:			-Ft <sup>4</sup> /sk				
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead:	sx 200	Ft of Fill 400 Ft of	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type	6.39	14.8	-Ft <sup>1</sup> /sk	1608 psi			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval	sx 200	Ft of Fill 400 Ft of	Type Premium Plus Cement: 2% Calcium Chloride – Flake	6.39	14.8	-Ft <sup>1</sup> /sk	1608 psi			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail:	sx 200 Amount sx	Ft of Fill 400 Ft of Fill	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:	6.39 Gal/Sk	14.8 PPG	-Ft <sup>3</sup> /sk 1.35 Ft <sup>3</sup> /sk	1608 psi 24 Hr Comp			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail: 3000' - 5500'	sx     200     Amount sx     410	Ft of Fill400Ft of Fill3000	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:   0.25 lbm/sk D-AIR 5000   Premium Plus Cement:   0.5% Halad ®-344, 0.2% WellLife	6.39 Gal/Sk 13.88	14.8 <b>PPG</b> 11.9	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43	1608 psi 24 Hr Comp 281 psi			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail:	sx 200 Amount sx	Ft of Fill 400 Ft of Fill	TypePremium Plus Cement: 2% Calcium Chloride – FlakeTypeInterfill C: 0.25 lbm/sk D-AIR 5000Premium Plus Cement: 0.5% Halad ®-344, 0.2% WellLife 734, 5 lbm/sk Microbond, 0.3%	6.39 Gal/Sk	14.8 PPG	-Ft <sup>3</sup> /sk 1.35 Ft <sup>3</sup> /sk	1608 psi 24 Hr Comp			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail: 3000' - 5500' (100 % Excess)	sx     200     Amount sx     410     460	Ft of Fill     400     Ft of Fill     3000     2500	TypePremium Plus Cement: 2% Calcium Chloride – FlakeTypeInterfill C: 0.25 lbm/sk D-AIR 5000Premium Plus Cement: 0.5% Halad ®-344, 0.2% WellLife 734, 5 lbm/sk Microbond, 0.3% Econolite, 0.3% CFR-3	6.39 Gal/Sk 13.88 7.72	14.8 <b>PPG</b> 11.9	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43	1608 psi 24 Hr Comp 281 psi			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail: 3000' - 5500' (100 % Excess)	sx     200     Amount sx     410     460	Ft of Fill     400     Ft of Fill     3000     2500	TypePremium Plus Cement: 2% Calcium Chloride – FlakeTypeInterfill C: 0.25 lbm/sk D-AIR 5000Premium Plus Cement: 0.5% Halad ®-344, 0.2% WellLife 734, 5 lbm/sk Microbond, 0.3%	6.39 Gal/Sk 13.88 7.72	14.8 <b>PPG</b> 11.9	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43	1608 psi 24 Hr Comp 281 psi			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail: 3000' - 5500' (100 % Excess) The volumes indica	sx     200     Amount sx     410     460     ted above m	Ft of Fill 400 Ft of Fill 3000 2500 ay be re	TypePremium Plus Cement: 2% Calcium Chloride – FlakeTypeInterfill C: 0.25 lbm/sk D-AIR 5000Premium Plus Cement: 0.5% Halad ®-344, 0.2% WellLife 734, 5 lbm/sk Microbond, 0.3% Econolite, 0.3% CFR-3	6.39 Gal/Sk 13.88 7.72 nt.	14.8 <b>PPG</b> 11.9 14.2	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43 1.55	1608 psi 24 Hr Comp 281 psi			
Interval     Lead:     0' - 400'     (125% Excess)     Production Casing     Interval     Lead:     0' - 3000'     (100 % Excess)     Tail:     3000' - 5500'     (100 % Excess)     The volumes indica     I hereby certify that	sx     200     Amount sx     410     460     ted above m	Ft of Fill 400 Ft of Fill 3000 2500 ay be re	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:   0.25 lbm/sk D-AIR 5000   Premium Plus Cement:   0.5% Halad ®-344, 0.2% WellLife   734, 5 lbm/sk Microbond, 0.3%   Econolite, 0.3% CFR-3   exised-depending on caliper measureme   et strue-and complete to the best of my kr	6.39 Gal/Sk 13.88 7.72 nt.	14.8 <b>PPG</b> 11.9 .14.2 nd belief.	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43 1.55	1608 psi 24 Hr Comp 281 psi 1413 psi			
Interval     Lead:     0' - 400'     (125% Excess)     Production Casing     Interval     Lead:     0' - 3000'     (100 % Excess)     Tail:     3000' - 5500'     (100 % Excess)     Tail:     3000' - 5500'     (100 % Excess)     The volumes indicate     I hereby certify that     SIGNATURE	sx 200 Amount sx 410 460 ted above m the informati	Ft of Fill 400 Ft of Fill 3000 2500 ay be re	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:   0.25 lbm/sk D-AIR 5000   Premium Plus Cement:   0.5% Halad ®-344, 0.2% WellLife   734, 5 lbm/sk Microbond, 0.3%   Econolite, 0.3% CFR-3   xised-depending on caliper measureme   e is true and complete to the best of my kr   TITLE: REGULATOR	6.39 Gal/Sk 13.88 7.72 nt. towledge a Y TECHN	14.8 <b>PPG</b> 11.9 14.2 nd belief. ICIAN II	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43 1.55 DATE	1608 psi 24 Hr Comp 281 psi 1413 psi :: 1/31/14			
Interval Lead: 0' - 400' (125% Excess) Production Casing Interval Lead: 0' - 3000' (100 % Excess) Tail: 3000' - 5500' (100 % Excess) The volumes indica I hereby certify that SIGNATURE Type or priot name	sx 200 Amount sx 410 460 ted above m the informati	Ft of Fill 400 Ft of Fill 3000 2500 ay be re	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:   0.25 lbm/sk D-AIR 5000   Premium Plus Cement:   0.5% Halad ®-344, 0.2% WellLife   734, 5 lbm/sk Microbond, 0.3%   Econolite, 0.3% CFR-3   exised-depending on caliper measureme   TITLE: REGULATOR   F-mail address	6.39 Gal/Sk 13.88 7.72 nt. owledge a Y TECHN	14.8 <b>PPG</b> 11.9 .14.2 Id belief. ICIAN II	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43 1.55 DATE	1608 psi 24 Hr Comp 281 psi 1413 psi 1413 psi 1413 psi			
Interval     Lead:     0' - 400'     (125% Excess)     Production Casing     Interval     Lead:     0' - 3000'     (100 % Excess)     Tail:     3000' - 5500'     (100 % Excess)     The volumes indica     I hereby certify that	sx 200 Amount sx 410 460 ted above m the informati	Ft of Fill 400 Ft of Fill 3000 2500 ay be re	Type   Premium Plus Cement:   2% Calcium Chloride – Flake   Type   Interfill C:   0.25 lbm/sk D-AIR 5000   Premium Plus Cement:   0.5% Halad ®-344, 0.2% WellLife   734, 5 lbm/sk Microbond, 0.3%   Econolite, 0.3% CFR-3   exised-depending on caliper measureme   TITLE: REGULATOR   F-mail address	6.39 Gal/Sk 13.88 7.72 nt. owledge a Y TECHN	14.8 <b>PPG</b> 11.9 .14.2 Id belief. ICIAN II	<b>Ft<sup>3</sup>/sk</b> 1.35 <b>Ft<sup>3</sup>/sk</b> 2.43 1.55 DATE	1608 psi 24 Hr Comp 281 psi 1413 psi :: 1/31/14			

# OXY USA Inc McHam 34 State 4 SUNDRY NOTICE

Oxy, respectfully requests a dispensation from the approved permit as follows:

## **GREATEST PROJECTED TD**: 5,500 MD/ TVD **OBJECTIVE**: Yeso

# 1. REVISED CASING PROGRAM

## Surface Casing ran in a 11" hole filled with 8.4 ppg mud

Γ	Hole Size (in)	Interval (ft)	OD (in)	Wt (ppf)	Grade	Conn	IÐ (in)	Condition	Burst (psi)	Collapse (psi)	Burst SF	Coll SF	Ten SF
	11	400	8.625	24	J55	STC	8.097*	New	2950	1370	1.42	10.42	2.26

### Production Casing ran in a 7.875" hole filled with 9.8 ppg mud

Hole Size (in)	Interval (ft)	OD (in)	Wt (ppf)	Grade	Conn	ID (in)	Condition	Burst (psi)	Collapse (psi)	Burst SF	Coll SF	Ten SF
7.875	5500	5.500	17	L80	BTC	4.892	New	7740	6290	1.28	2.20	2.22

## \*SPECIAL DRIFT TO 7.875"

# **Casing Design Assumptions:**

## Burst Loads

CSG Test (Surface)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from section TD to surface

#### CSG Test (Intermediate)

- Internal: Displacement fluid + 70% CSG Burst rating
- External: Pore Pressure from the Intermediate hole TD to Surface CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

## CSG Test (Production)

- Internal: Displacement fluid + <u>80%</u> CSG Burst rating
- External: Pore Pressure from the well TD the Intermediate CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

#### Gas Kick (Surface/Intermediate)

- Internal: Gas Kick based on Pore Pressure or Fracture Gradient @ CSG shoe with a gas 0.115psi/ft Gas gradient to surface while drilling the next hole section (e.g. Gas Kick while drilling the production hole section is a burst load used to design the intermediate CSG)
- External: Pore Pressure from section TD to previous CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

#### Stimulation (Production)

- Internal: Displacement fluid + Max Frac treating pressure (not to exceed 80% CSG Burst rating)
- External: Pore Pressure from the well TD to the Intermediate CSG shoe and 8.5 ppg MWE to surface

#### **Collapse Loads**

Lost Circulation (Surface/Intermediate)

• Internal: Losses experienced while drilling the next hole section (e.g. losses while drilling the production hole section are used as a collapse load to design the intermediate CSG). After losses there will be a column of mud inside the CSG with an equivalent weight to the Pore Pressure of the lost circulation zone

• External: MW of the drilling mud that was in the hole when the CSG was run

Cementing (Surface/Intermediate/Production)

- Internal: Displacement Fluid
- External: Cement Slurries to TOC, MW to surface

Full Evacuation (Production)

- Internal: Atmospheric Pressure
- External: MW of the drilling mud that was in the hole when the CSG was run

## **Tension Loads**

Running CSG (Surface/Intermediate/Production)

• Axial load of the buoyant weight of the string plus either 100 klb over-pull or string weight in air, whichever is less

Green Cement (Surface/Intermediate/Production)

• Axial load of the buoyant weight of the string plus the cement plug bump pressure (Final displacement pressure + 500 psi )

# 2. REVISED CEMENT PROGRAM

#### Surface Interval

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	· PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Lead: 0' - 400' (125% Excess)	200	. 400	Premium Plus Cement: 2% Calcium Chloride – Flake	6.39	14.8	1.35	1608 psi

#### **Production Casing**

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Lead: 0' - 3000' (100 % Excess)	410	3000	Interfill C: 0.25 lbm/sk D-AIR 5000	13.88	• 11.9	2.43	281 psi
<b>Tail:</b> 3000' - 5500' (100 % Excess)	460	2500	Premium Plus Cement: 0.5% Halad ®-344, 0.2% WellLife 734, 5 lbm/sk Microbond, 0.3% Econolite, 0.3% CFR-3	· 7.72	. 14.2	1.55	1413 psi

The volumes indicated above may be revised depending on caliper measurement.