· Office	Form C-103
District I – (575) 393-6161 Energy, Minerals and Natural Resources	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283	WELL API NO.
District II = (373) 748-1283         811 S. First St., Artesia, NM 88210         OIL CONSERVATION DIVISION	30-015-40941 5 Indicate Tures of Lesse
District III – (505) 334-6178 1220 South St. Francis Dr.	5. Indicate Type of Lease STATE 🖾 FEE 🗌
1000 Rio Brazos Rd., Aztec, NM 87410 District IV – (505) 476-3460 Santa Fe, NM 87505	6. State Oil & Gas Lease No.
<u>District IV</u> – (505) 476-3460 Salita FC, 1111 87505 1220 S. St. Francis Dr., Santa Fe, NM	0. State Off & Gas Lease No.
87505	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH	Tigger 9 State
PROPOSALS.)	8. Well Number 10
1. Type of Well: Oil Well Gas Well Other	
2. Name of Operator OXY USA WTP LP	9. OGRID Number 192463
3. Address of Operator	10. Pool name or Wildcat
PO BOX 4294; HOUSTON, TX 77210	EMPIRE; GLORIETA-YESO, EAST
4. Well Location	
Unit LetterO:_940feet from theS line and1726	feet from theEline
Section 9 Township 17S Range 29E	NMPM EDDY County
Township     173     Kange     29E       11. Elevation (Show whether DR, RKB, RT, GR, etc.)	
11. Elevation (Snow whether DR, RKB, RT, GR, etc. 3569'	
3307	
12. Check Appropriate Box to Indicate Nature of Notice,	Report or Other Data
12. Check Appropriate Dox to indicate Nature of Notice,	Report of Other Data
NOTICE OF INTENTION TO: SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK 🔲 PLUG AND ABANDON 🔲 🔤 REMEDIAL WOR	K 🛛 ALTERING CASING 🗌
TEMPORARILY ABANDON 🔲 CHANGE PLANS 🛛 🛛 COMMENCE DR	ILLING OPNS. P AND A
PULL OR ALTER CASING 🔲 MULTIPLE COMPL 🔲 CASING/CEMEN	Т ЈОВ
CLOSED-LOOP SYSTEM	
	<u> </u>
13. Describe proposed or completed operations. (Clearly state all pertinent details, an	
of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Co proposed completion or recompletion.	mpletions: Attach wellbore diagram of
proposed completion of recompletion.	
OVV USA WTD I D respectfully request to make abanges to the assing and comparting may	
OXY USA WTP LP respectfully request to make changes to the casing and cementing pro-	
the attached for your use and review. Should you have any questions, concerns or need ad	
	ditional information, please do not hesitate to
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the attached for your use and review. Should you have any questions, concerns or need ad contact me at any time.         Spud Date:       Rig Release Date:         I hereby certify that the information above is true and complete to the best of my knowledge         SIGNATURE       TITLE_REGULATORY SPECI         Type or print name _JENNIFER DUARTE_ E-mail address: _jennifer_duarte@oxy.con         For State Use Only	ditional information, please do not hesitate to
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# OXY USA Inc Tigger 9 State 10 SUNDRY NOTICE

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

# GREATEST PROJECTED TD: 5,300 MD/ TVD OBJECTIVE: Yeso

# 1. REVISED CASING PROGRAM

#### Surface Casing: 8.625" casing set at $\pm$ 450' MD/TVD in a 11" hole filled with 8.4 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
11	450	8.625	24	J55	STC	8.097	New	2950	1370	1.42	10.42	2.26

Production Casing: 5.5" casing set at  $\pm$  5,300' MD/TVD in a 7.875" hole filled with 9.6 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

# **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 + 80% 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' - 450' (150% Excess)	210	450	Premium Plus Cement: 2% Calcium Chloride – Flake	6.39	14.8	1.35	2500 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	Econocem <sup>™</sup> System, 0.25 lbm D-AIR 5000	13.88	11.9	2.43	258 psi
<b>Tail:</b> 3000' - 5300' (75 % Excess)	460	2300	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	1697 psi

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