

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-41232	Pool Code 96830	Pool Name Artesia; Glorieta-Yeso
Property Code 309600	Property Name MCHAM "34" STATE	Well Number 3
OGRID No. 157984	Operator Name OCCIDENTAL PERMIAN LIMITED PARTNERSHIP	Elevation 3674.2'

Surface Location

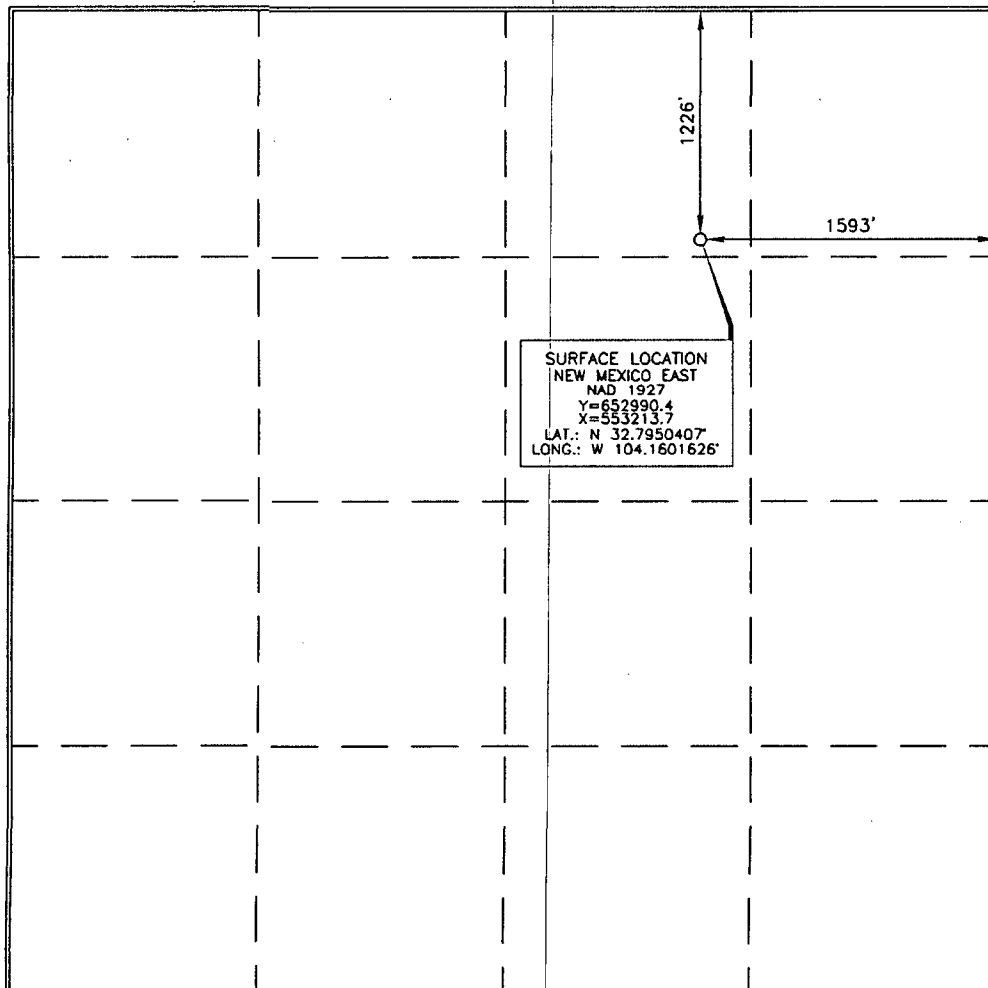
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	17 SOUTH	28 EAST, N.M.P.M.		1226'	NORTH	1593'	EAST	EDDY

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

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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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, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Jennifer Duarte* Date: 3/21/13
Printed Name: Jennifer Duarte
Email Address: jennifer.duarte@oxy.com

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.

Date of Survey: AUGUST 7, 2013
Signature and Seal of Professional Surveyor: *Jerry J. Asul* 9/6/2013
Certificate Number: 15079

APD DATA - DRILLING PLAN -

OPERATOR NAME / NUMBER: Occidental Permian LP

157984

LEASE NAME / NUMBER: McHam 34 State # 3

STATE: NM

COUNTY: Eddy

SURFACE LOCATION:

1226' FNL & 1593' FEL, Sec 34, T17S, R28E

Surface Location: LAT: 32.7950407 N LONG: 104.1601626 W X: 553213.7 Y: 652990.4 NAD: 27

C-102 PLAT APPROX GR ELEV: 3674.2'

EST KB ELEV: 3688.2' (14' KB)

1. GEOLOGIC NAME OF SURFACE FORMATION:

a. Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	TV Depth Top	Expected Fluids
Rustler	276	Fresh Water
Top of Salt	438	-
Base of Salt	460	-
Yates	535	-
Seven Rivers	750	-
Queen	1370	-
Grayburg	1820	Oil
San Andres	2150	Oil/Water
Glorietta	3700	Oil
Paddock	3840	Oil
Blinberry	4310	Oil
TD	5300	Oil

A. Fresh Water formation is outcropping and will be covered with the 16" conductor pipe, which will be set at 80' prior to spud.

GREATEST PROJECTED TD: 5300' MD/ 5300' TVD **OBJECTIVE:** Yeso

3. CASING PROGRAM: (All casing is in NEW condition)

Surface Casing: 11 3/4" casing set at ± 450' MD/ 450' TVD in a 14 3/4" hole filled with 8.40 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 450'	450'	42	H-40	ST&C	1070	1980	307	11.084	10.928	7.06	3.27	18.64

Intermediate Casing: 8 5/8" casing set at ± 1800' MD / 1800' TVD in a 10 5/8" hole filled with 9.6 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 1800'	1800'	32	J-55	LT&C	2530	3930	417	7.921	7.875 SD	3.52	1.86	8.49

Production Casing: 5.5" casing set at ± 5300' MD / 5300' TVD in a 7 7/8" hole filled with 9.6 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 5300'	5300'	17	J-55	LT&C	4910	5320	247	4.892	4.767	1.86	2.51	3.21

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

4. CEMENT PROGRAM:

Surface Interval

Interval	Amount sx	Ft of Fill		Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC: 0' - 450')								
Lead: 0' - <u>450'</u> (150 % Excess)	390	450'		Premium Plus Cement, with 1% Calcium Chloride - Flake	6.36	14.80	1.34	1608 psi

Intermediate Interval

Interval	Amount sx	Ft of Fill		Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Intermediate (TOC: 0' - 1800')								
Lead: 0' - 1200' (150 % Excess)	280	1200'		Halliburton Light Premium Plus, with 5 lbm/sk Salt, 5 lbm/sk Kol-Seal	9.72	12.9	1.9	655 psi
Tail: 1200' - <u>1800'</u> (150 % Excess)	240	600'		Premium Plus Cement	6.34	14.8	1.33	1914 psi

Production Interval

Interval	Amount sx	Ft of Fill		Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Production (TOC: 0' - 5300')								
Lead: 0' - 2800' (100 % Excess)	290	2800'		Interfill C, with 0.4 % HR-800, 0.25 % D-AIR 5000	14.34	11.9	2.48	327 psi
Tail: 2800' - <u>5300'</u> (100 % Excess)	570	2500'		Premium Plus, with 0.5% Halad ®-344, 0.2 % WellLife 734, 0.3 % Econolite, 0.3 % CFR-3, 5 lbm/sk Microbond	7.72	14.2	1.55	1914 psi

Description of cement additives: Calcium Chloride - Flake (Accelerator), Kol-Seal (Lost Circulation Additive), Interfill C (Cement), HR-800 (Retarder), D-AIR 5000 (Defoamer), Halad ® -344 (Low Fluid Loss Control), WellLife 734 (Cement Enhancer), Microbond (Expander), Econolite (Light Weight Additive), CFR-3 (Dispersant)

5. DIRECTIONAL PLAN

Vertical well

6. PRESSURE CONTROL EQUIPMENT:

Surface: 0 – 450' None.

Intermediate: 0 - 1800' the minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required to drill below the surface casing shoe shall be 3000 (3M) psi. Operator will be using an 11" 3M two ram stack with 3M annular preventer and 3M Choke Manifold.

- a. The 11" 3000 psi blowout prevention equipment will be installed and operational after setting the 11 3/4" surface casing and the 11 3/4" SOW x 13 5/8" 3K conventional wellhead; the rotating head body will be installed but the rubber will be installed when it becomes operationally necessary.
- b. The BOP and ancillary BOPE will be tested by a third party. All equipment will be tested to 250/1386 against the surface casing (70% of casing burst) psi for 30 minutes by a third party and charted.
- c. The pipe rams will be functionally tested every 24 hours; the blind rams will be functionally tested on every trip out of the hole. These functional tests will be documented on the Daily Driller's Log.
- d. Other accessory equipment (BOPE) will include a safety valve and subs as needed to fit all drill strings, and a 2" kill line and 3 " choke line having a 3000 psi WP rating, tested to 3000 psi.

Production: 0 – 5300' will be drilled with an 11" 3M two ram stack with a 3M annular preventer and 3M Choke Manifold.

- a. The BOP and ancillary BOPE will be tested by a third party upon installation to the 8 5/8" intermediate casing. All equipment will be tested to 3000 psi (high) and 250 psi (low) except the annular, which will be tested to 70% of its rated working pressure, 2100 psi (high) and 250 psi (low) for ten minutes each. All test will performed against a test plug with the Section B Wellhead valve open to assure that the test is not being performed against the casing
- b. The pipe rams will be functionally tested every 24 hours; the blind rams will be functionally tested on every trip out of the hole. These functional tests will be documented on the Daily Driller's Log.
- c. Same as above
- d. Same as above
- e. Oxy requests a variance so to use a co-flex line between the BOP and choke manifold. (schematic attached)
Manufacturer: Hebei Ouya Ltd.
Serial Number: 1642343-04
Length: 39" Size: 3" Ends: flanges
WP rating: 3000 psi Anchors required by manufacturer: No
- f. See attached BOP & Choke manifold diagrams.

7. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0 – 450'	8.4 – 8.9	32 – 34	NC	Fresh Water /Spud Mud
450' – 1800'	9.6 – 10.0	28 – 40	NC	Brine Water
1800' – 5300'	9.6 – 10.0	28 – 40	10-20	Fresh Water /Spud Mud

8. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. **If Hydrogen Sulfide is encountered , measured amounts and formations will be reported to the NMOCD**

9. POTENTIAL HAZARDS:

- H2S detection and breathing equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- The bottomhole pressure is anticipated to be 2645 psi. (0.5 psi/ft)
- No abnormal temperatures or pressures are anticipated.
- Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after the NMOCD has approved the APD. Anticipated spud date will be as soon as possible after location is built. Move in operations and drilling is expected to take 18 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

10. MUD AND WIRELINE LOGGING:

- Mud logging: from Intermediate casing to TD.
- Open Hole Logging as follows: Triple Combo from TD to the shoe of the intermediate CSG

COMPANY PERSONNEL:

<u>Name</u>	<u>Title</u>	<u>Office Phone</u>	<u>Mobile Phone</u>
Anthony Tschacher	Drilling Engineer	(713)985-6949	(832)270-6883
Sebastian Millan	Drilling Engineer Supervisor	(713)350-4950	(832)528-3268
Roger Allen	Drilling Superintendent	(713)215-7617	(281)682-3919
Douglas Chester	Drilling Manager	(713)366-5194	(713)918-9124