District I
1625 N. French Dr., Hobbs, NM 88240
Phane: (575) 393-6161 Fax: (575) 393-0720
District II.
811 S. First St., Artesia, NM 88210
Phane: (573) 748-1283 Fax: (575) 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

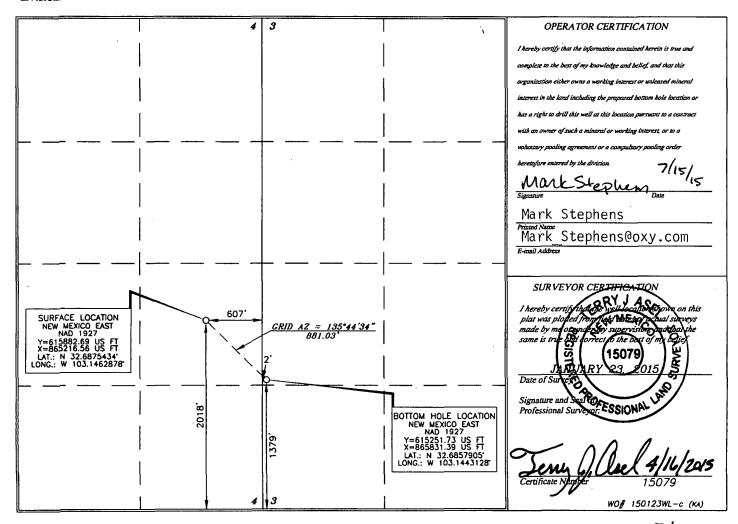
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
30-025-42694	31920	Hobbs; Grayburg-San Andres	
Property Code	Property Na	ame .	Well Number
19552	SOUTH HOBBS	G/SA UNIT	260
OGRID No.	Operator Na	ame	Elevation
157984	OCCIDENTAL PE	RMIAN LTD.	3612.0'
	Surface Loc	etion	

Surtace Location Township UL or lot no. Section Range Lot Idn Feet from the North/South line Feet from the East/West line County 19 SOUTH 38 EAST, N.M.P.M. 2018' **SOUTH** 607 **EAST LEA** 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 19 SOUTH 38 EAST, N.M.P.M. 1379' SOUTH WEST **LEA** Dedicated Acres Joint or Infill Consolidation Code Order No. 40

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.



## APD DATA - DRILLING PLAN

**OPERATOR NAME / NUMBER: OXY USA WTP LP** 

LEASE NAME / NUMBER: South Hobbs G/SA Unit #260

STATE: NM

COUNTY: Lea

**SURFACE LOCATION:** 

2018' FSL & 607' FEL, Sec 4, T19S, R38E

SL:

Lat:

32.6875434'N

LONG: 103.1462878'W

**X**:

Lat:

X:

865216.56

Y:

615882.69

**New Mexico East NAD 1927** 

**BOTTOM HOLE LOCATION:** 

1379' FSL & 2' FWL, Sec 3, T19S, R38E

BHL:

32.6857905'N 865831.39

LONG: 103.1443128'W Y:

615251.73

**New Mexico East NAD 1927** 

C-102 PLAT APPROX GR ELEV: 3612.0'

EST KB ELEV: 3628.5' (16.5' KB)

#### GEOLOGIC NAME OF SURFACE FORMATION 1.

a. Permian

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

Formation	TV Depth Top*	Expected Fluids
Base Red Beds	228	Fresh Water
Rustler	1554	Formation Fluid
Top of Salt	1664	Formation Fluid
Base of Salt	2724	Formation Fluid
Queen	3454	Formation Fluid
Grayburg	3754	Formation Fluid
Basal Grayburg	3944	Formation Fluid
San Andres	4044	Hydrocarbon
TD	4550	TD

<sup>\*</sup>Note: Depths are below GL.

A. Fresh Water formations will be covered with the 16" conductor pipe, which will be set at 53' prior to spud.

GREATEST PROJECTED TD 4670' MD / 4550' TVD

**OBJECTIVE**: San Andres

#### - CASING PROGRAM

Surface Casing: 9.625" 36# J55 LTC casing set at ± 1700' MD/ 1680' TVD in a 12.25" hole filled with 9.5 ppg mud Production Casing: 7" 26# J55 LTC casing set at ± 4670' MD/ 4550' TVD in a 8.75" hole filled with 10.5 ppg mud

	OD	ID	Coupling	Drift	Weight			Burst Collans	Collanse	Collapse Tension		Torque (ft-lbs)			
String	(in)	(in)	OD (in)	(in)	(#/ft)	Grade	CXN	(psi)	(psi)	(k-lbs)	Minimum	Optimum	Maximum		
Conductor	16	15.25	17	14.5	65	H40	Weld	1640	670	736	4390	4390	4390		
Surface	9.625	8.921	10.625	8.765	36	J55	LTC	3520	2020	564	3400	4530	5660		
Production	7	6.276	7.656	6.151	26	J55	LTC	4980	4320	415	2750	3670	4590		

### 4. **CEMENT PROGRAM:**

**Surface Interval** 

Interval	Amount sks	Ft of Fill	Туре	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Surface (TOC:	0'-1590')						-
Lead: 0'-1193' 100% Excess	440	1193	Premium Plus Cement: 94 lbm/sk Premium Plus Cement 4 % Bentonite (Light Weight Additive) 1 % Calcium Chloride - Flake(Accelerator) 0.125 lbm/sk Poly-E-Flake (LC Additive)	9.11	13.5	1.73	824 psi
Tail: 1193' – 1590' 100% Excess	200	397	Premium Plus Cement: 94 lbm/sk Premium Plus Cement, 1 % Calcium Chloride - Flake	6.34	14.8	1.335	1926 psi

Interval	Amount sks	Ft of Fill	Туре	Gal/Sk	PPG	Ft <sup>3</sup> /sk	24 Hr Comp
Production (T	OC: 0' - 451	7')		•			•
Stage 1 Primary: 3822'-4517' 85% Excess	190	695	Poz Premium Plus Cement 50/50 Poz Premium Plus Cement 0.6 lbm/sk LAP-1 (LC Additive) 0.3 lbm/sk CFR-3 (Dispersant) 0.25 lbm/sk D-AIR 3000 (Defoamer) 0.125 lbm/sk Poly-E-Flake (LC Additive)	4.69	14.8	1.123	1236 psi
Stage 2 Lead: 0' - 1590' 10 % Excess 1590' - 2882' 200 % Excess	370	2882	Interfill C 0.125 lbm/sk Poly-E-Flake (LC.) 0.5 % Halad(R)-322 (LC Additive) 0.5 lbm/sk D-AIR 5000 (Defoamer)	13.4	11.9	2.394	376 psi
Stage 2 Tail:  2882'-3822' 100 % Excess	190	940	Premium Plus Cement 94 lbm/sk Premium Plus Cement 0.2 % WellLife 734 (Cement Enhancer) 5 lbm/sk Microbond (Expander) 0.3 % Econolite (Light Weight Additive) 0.3 % CFR-3 (Dispersant) 0.5 % Halad(R)-344 (LC Additive)	7.7	14.20	1.547	1914 psi

#### 5. PRESSURE CONTROL EQUIPMENT

**Surface: 0 – 1700'** None.

**Production: 1700' - 4670'** 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 (including annular).

Casing	Wellhe	ad Flange	BOP Stack		(	,	Pressure	Test (psi)				
Size	Size	Pressure	m (1)	m (1) Size		Ini	tial	Subsec	quent			
(in.)	(in.)	(psi)	Type <sup>(1)</sup>	(in.)	(in.)	(in.)	(in.)	(psi)	Rams	Ann	Rams	Ann
9 5/8"	11"	3000	R, R, A, G	11"	5000	250/3000	250/ <b>2100</b>	250/3000	250/2100			

- a. The 11" 3000 psi blowout prevention equipment will be installed and operational after setting the 9 5/8" surface casing and the 9 5/8" SOW x 11" 3K wellhead. A modified Wellhead System with 7" Mandrel Hanger will be used.
- **b.** The BOP and auxiliary BOPE will be tested by a third party upon installation to the 9 5/8" 36# J-55 surface casing. All equipment will be tested to 250/3000 psi (Annular to 250/2100 psi) for 10 min.
- c. The pipe rams will be functionally tested during each 24 hour period; the blind rams will be functionally tested on each trip out of the hole. These functional tests will be documented on the Daily Driller's Log. 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.
- d. See attached BOP & Choke manifold diagrams.

#### 6. MUD PROGRAM:

Depth (ft)	Mud Weight (ppg)	Viscosity (sec/qt)	Fluid Loss (cc's)	рН	Mud System
0 - 1500	8.4 – 9.5	28 – 30	N/C	<9.0	Freshwater / Sweeps
1500 - 1700	8.8 - 9.5	32 – 40	< 25	<9.0	FW – Native Mud
1700 - 3600	9.8 - 10.0	28 - 32	N/C	10.0 – 11.0	Brine Water / Sweeps
3600 – 4670	10.0 - 10.5	36 - 45	<8	10.5 – 11.0	Salt Gel / Starch

Remarks: Pump high viscosity sweeps as needed for hole cleaning. The necessary mud products for additional weight and fluid loss control will be on location at all times.

A. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

#### 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

- **a.** A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- b. 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 REGULATORY AGENCIES.

#### 8. LOGGING / CORING AND TESTING PROGRAM:

- A. Mud Logger: None.
- B. DST's: None.
- C. Open Hole Logs as follows: May have triple combo for production section surface to TD. Spectral GR from B. Grayburg to TD.

#### 9. POTENTIAL HAZARDS:

- A. H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- B. The MASP will be 1254psi and BOP test (MASP + 500) will be 1754psi
- C. No abnormal temperatures or pressures are anticipated. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. 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

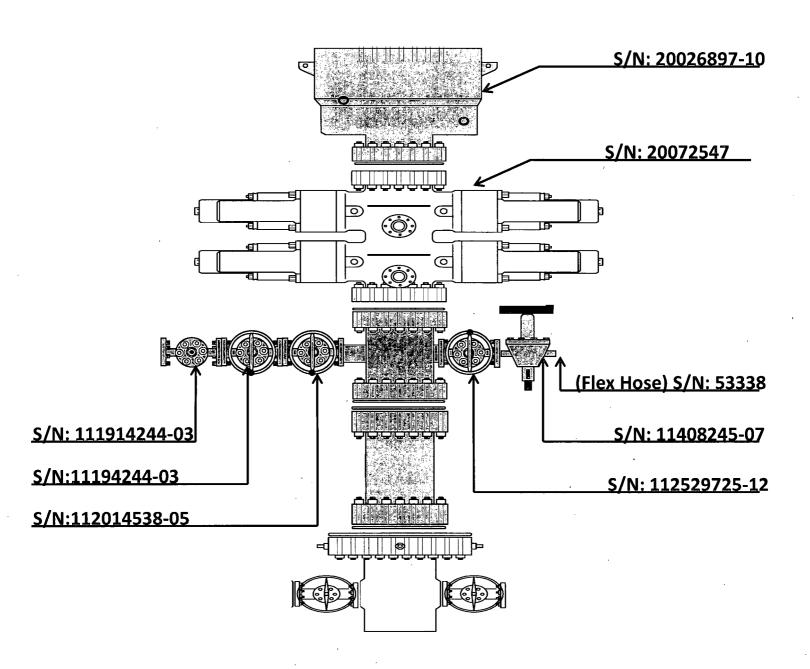
Road and location construction will begin after Oxy has submitted APD. Anticipated spud date will be as soon as possible after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 10 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

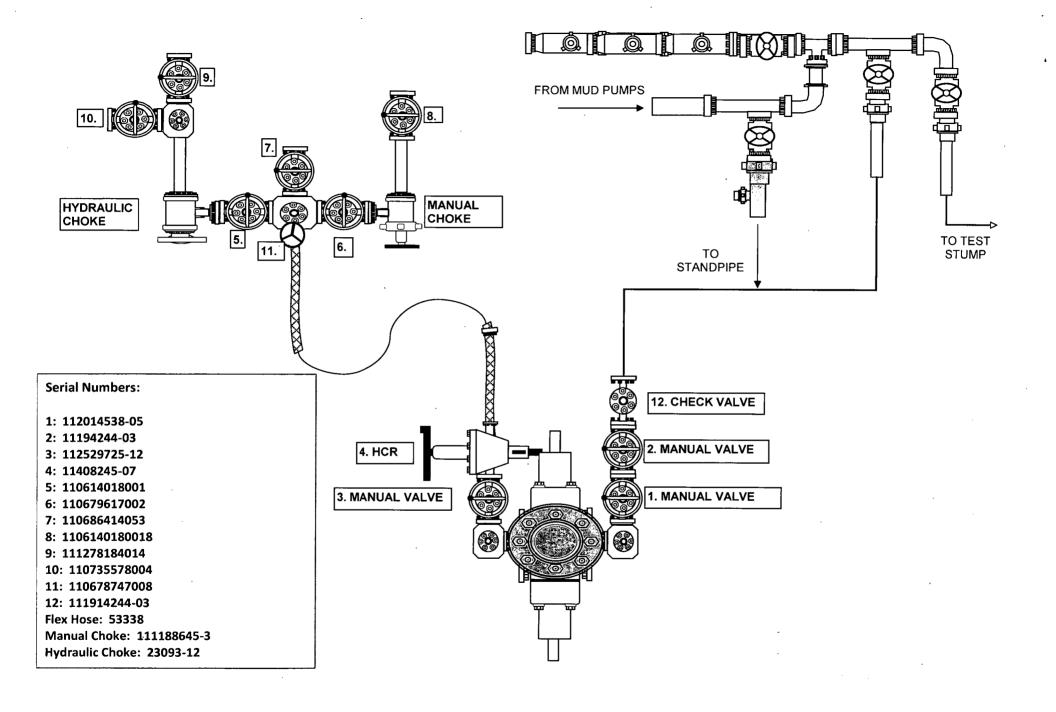
#### 11. COMPANY PERSONNEL:

Name	Title	Office Phone
Edgar Diaz-Aguirre	Drilling Engineer	713-840-3037
Adriano Celli	Drilling Engineer Supervisor	713-985-6371
Kevin Videtich	Drilling Superintendent	713-350-4761
Chad Frazier	Drilling Manager	713-215-7357

## **H&P 340 BOP Diagram**

RECEIVED





# **Certificate of Conformance**

S/N: 20072547-310

BOP ASSY, 11-5M, DBL, LXT, SXF

W/(4) 3-5M FO

TBD	
SALES ORDER NUMBER	
824265	
SALES ORDER LINE ITEM NUMBER	
0012	
CLIENT DOCUMENT NUMBER	
PO #340-352-002	
SERIAL NUMBER	
20072547-310	
DOCUMENT PART NUMBER	
29010000	\ 

RIG

20072547-310-COC-001				
DOCUMENT NUMBER		REV		
remains the property of National Oilw part; or use of this design or distributi	s loaned for limited purposes only and ell Varco, Reproduction, in whole or in on of this information to others is not consent of National Oliwell Varco. This al Oliwell Varco upon request and in	National Oilwell Varce 12950 W. Little York Houston, TX 77041 Phone 713-937-5000 Fax 713-849-6147		
5/N.20072547-310	3-5M FO	3L, LX I, SXF, VV/(4		
S/N:20072547-310	BOP ASSY, 11-5M, DBL, LXT, SXF, V			



MATIONAL OILWELL VARCO

Document number	20072547-310-COC-001
Revision	01

#### **NOV CERTIFICATE OF CONFORMANCE**

Certificate of Conformance				
Equipment Name	BOP ASSY, 11-5M, DBL, LXT, SXF, W/ (4) 3-5M FO			
Part Number	20072547			
Serial Number	20072547-310			
Customer	HELMERICH AND PAYNE INT'L DRILLING			
Rig	TBD			
Customer Purchase Order	340-352-002			
NOV Sales Order	824265			
Date of Manufacturing	JUNE 2010			
Quantity	1 (ONE)			

#### NOV certifies that the above equipment:

- 1) Was manufactured and inspected in accordance with NOV specifications and customer purchase order requirements.
- 2) Manufactured to:
  - ANSI/API Specification 16A, Third Edition, June 2004.
  - ISO 13533:2001, (Modified) Petroleum and Natural Gas Industries-Drilling and Production Equipment-Drill-Through Equipment.
- 3) Meets the applicable portions of NACE standard MR 0175/ISO 15156, First Edition for H<sub>2</sub>S service.

Certified By:

**Documentation Specialist** 

