District I			J	Energy,	State of Ne Minerals &		exico ral Resources			Form C-101 June 16, 2008	
1625 N. French Di District II 1301 W. Grand Av District III	r., Hobbs, NN venue,Artesia	4 88240 ., NM 8821	recei	VEC) Dil Conserva	ation	Divsiion	S	Submit to approp	riate District Office	
1000 Rio Brazos F District IV 1220 S. St. Franci	000 Rio Brazos Rd., Aztec, NM 87410 NOV 18 7111 1220 S.					NM	87505		🗌 AMI	ENDED REPORT	
APPLICA PLUGBA	TION F	OR PE	RMIT TO	DRIL	L, RE-ENI	ΓER,	DEEPEN,				
			perator Name an	d Address					² OGRID Numb 157984	er	
Occidental									³ API Number		
	294, Hous	ston, Τ)	77210-42	94	⁵ Property	Name		30- 02	5-349	<u>55</u>	
	552 /	<u> </u>		So	uth Hobbs (Unit	10		248	
-	Hobbs: (⁹ Propose Grayburé	d Pool 1 g - San And	res	/			¹⁰ Proposed 1	Pool 2		
⁷ Surface Lo											
UL or lot no.	Section	Townshi	-	, Lot. Id			North/South Line	Feet from the	East/West line	County	
<u>D</u>	9	19-5			125		North	455	West	Lea	
	1		1	Lot. Id	From Surfa		North/South Line	Feet from the	East/West line	County	
UL or lot no. M	Section 4	Townshi 19-5	_	Lot. 1d	120		South	90	West	Lea	
Additional	Well Loc	ation									
¹¹ Work Ty	pe Code V		¹² Well Type Co 0	de	le ¹³ Cable/Ro R		¹⁴ Leas			Ground Level Elevation 3601.7' GL	
¹⁶ Mult			17 Proposed Dep	th	¹⁸ Forma	ation	tion ¹⁹ Contractor		tor ²⁰ Spud Date		
<u> </u>	0		5370'		San Ai	ndres		H&P	12	2/1/10	
²¹ Proposed	Casing a	nd Cerr	ent Progra	m							
Hole S			asing Size		ng weight/foot		Setting Depth	Sacks of Cem	ent I	Estimated TOC	
······											
12-1	/4		9-5/8		36		1525	670		Surface	
8-3/	′4	_	5-1/2	ļ	17		5370	1290		Surface	
						<u> </u>					
²² Describe the Describe the blow						CK, giv	ve the data on the pre	sent productive z	one and proposed	new productive zone.	
	•		·								
1778-	man 84 Par		Years From	ee Ameni	RABBAR						
re l	rmnt £x Date I	pires 2 Inless I	rilling Un	derway							
	254000 4				See Atta	ached					
							· · · · · · · · · · · · · · · · · · ·				
²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.					OIL C	ONSERVAT	FION DIVIS	ION			
Approved by:											
Signature:	Signature: Mark Stephen						O BREE OL PAN	Ang B REALQUALESE	0		
	Mark Step		<u></u>			Title	PETROLEU	a Branca	Ū.		
Title:	Regulator	y Comp	iance Anal	yst		Approval Date: NOV 2 3 2010 Expiration Date:					
E-mail Address:			oxy.com								
Date: 11/17/10	Date: Phone:					Cond	Conditions of Approval Attached				

2

District 1625 N. French D District II 1301 W. Grond Av District III 1000 Rio Brazos District N 1220 S. St. Fronc	Rd., Azlec	. NM 87410	18	2010 12	20 South Santa F	tural RVATIC St. e, NM	Resources N DIVISIOI Francis Di 1 87505	Departmer N r. CATION PLAT		o Appropr Stat Fe	October	4 Copies 3 Copies
the second	API Numb			Pool Co				F	ool Name			
30.00	15 -	3995	5	3192	.0		Но	bbs; Gray	burg-San	Andre		
Property (Code	- CIP		Property Nome						Well Number 248		
1955				SOUTH HOBBS G/SA UNIT								
OGRID N				Operator Nome						Elevation		
15798			OCCIDENTAL PERMIAN LTD.							3601.7'		
13750	<u> </u>	1					Location					
UL or lot no. Sectio		ownship		Ronge		Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t line	County
D 9		SOUTH	38	EAST, N.I	М. Р. М.	•	125'	NORTH	455'	WES	T	LEA
I			L	Bottom H	lole Loca	tion	lf Differen	t From Sur	face			
UL or lot no. Sectio	00	lownship	1	Range		Lot Idn	Feel from the	North/South line	Feet from the	Eost/Wes	t line	County
M 4	- · · ·	SOUTH	38	EAST, N.	M. P. M.		120'	SOUTH	90'	WES	ST	LEA
Dedicoted Acres	s Join	t or Infill	Consolid	otion Code	Order No.							
40									oland	ard unit I	hos heen	approved by the

a. - - - - -

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

NOV 1 8 2010 HOBBSUCD

RECEIVED

OPERATOR NAME / NUMBER: Occidental Permian Limited Partnership 157984

LEASE NAME / NUMBER: South Hobbs G/SA Unit # 248 Federal Lease No: N/A (not Federal land)

STATE: NM COUNTY: Lea

4.4

SURFACE LOCATION: Section 9 T19S R38E N.M.P.M. 125 FNL 455 FWL

SL:	LAT:	32.6816313 N	LONG: 103.16004	82 W	
	X:	861006.4	Y: 613684.6	NAD:	New Mexico East NAD 1927

BOTTOM HOLE LOCATION: Section 4 T19S R38E N.M.P.M. 120 FNL 90 FWL

BHL:	LAT:	32.6823036 N	LONG: 103.16123	37 W	
	X:	860639.0	Y: 613925.2	NAD:	New Mexico East NAD 1927

C-102 PLAT ELEVATION: 3601.7 ft RKB ELEV: 3626.7 ft

- 1. GEOLOGIC NAME OF SURFACE FORMATION a. Permian
- 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS

Formation	Total Vertical Depth Top	Expected Fluids
Red Bed	165	Freshwater
Rustler	1525	Formation Fluid
Top of Salt	1635	Formation Fluid
Base of Salt	2715	Formation Fluid
Basal Grayburg	3950	Formation Fluid
San Andres	4055	Hydrocarbon
Glorietta (TD)	5325	Formation Fluid

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.

GREATEST PROJECTED TD 5370 MD 5325 TVD OBJECTIVE: San Andres

3. CASING PROGRAM

Surface Casing: 9 5/8" 36# J55 LTC casing set at \pm 1525 ft MD/ 1525 ft TVD in a 12 1/4" hole filled with 9.2 ppg mud Production Casing: 5 1/2"17# J55 LTC casing set at \pm 5370 ft MD/ 5325 ft TVD in a 8 3/4" hole filled with 9.5 ppg mud

d. The operator's proposed casing program, including size, grade, weight, type of thread and coupling, the setting depth of each string, and its condition. The operator must include the minimum design criteria, including casing loading assumptions and corresponding safety factors for burst, collapse, and tensions (body yield and joint strength). The operator must also include the lengths and setting depth of each casing when a tapered casing string is proposed. The hole size for each well bore section of hole drilled must be included. Special casing designs such as the use of coiled tubing or expandable casing may necessitate additional information.

4. <u>CEMENT PROGRAM:</u>

Surface Interval

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC:	<u>0'800')</u>		·				
Lead: 0' - 460' (120% Excess)	420	460	Halliburton Light Premium Plus 1 % Calcium Chloride - Flake (Accelerator) 5 lbm/sk Gilsonite (Lost Circulation Additive) 0.125 lbm/sk Poly-E-Flake (Lost Circulation Addit)	8.92	12.9	1.79	870 psi
Tail: 460' – 1525' (120% Excess)	250	1065	Premium Plus Cement 94 Ibm/sk Premium Plus Cement (Cement) 1 % Calcium Chloride - Flake (Accelerator)	6.36	14.8	1.34	2500 psi

Production Interval

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp		
Production (T	OC: 3500')	1 st Stage	9						
Tail: 3500-5325' (125% Excess)	610	1825'	Premium Plus Cement 94 Ibm/sk Premium Plus Cement (Cement) 1 % LAP-1 (Low Fluid Loss Control) 0.4 % CFR-3 (Dispersant) 0.25 Ibm/sk D-AIR 3000 (Defoamer) 0.2 % HR-800 (Retarder)	6.27	14.8	1.34	1180 psi		
Production (TC	DV Tool @ 3500' Production (TOC: Surface) 2 nd Stage								
Lead: 0' - 3267' (125% Excess)	580	3267'	Interfill C 0.125 lbm/sk Poly-E-Flake (Lost Circulation Addit) 5 lbm/sk Gilsonite (Lost Circulation Additive)	13.36	11.9	2.44	470 psi		
Tail: 3267' – 3500' (125%Excess)	100	233'	Premium Plus Cement 94 lbm/sk Premium Plus Cement	6.34	14.8	1.33	1350 psi		

e. The estimated amount and types(s) of cement expected to be used in the setting of each casing string. If stage cementing will be used, provide the setting depth of the stage tool(s) and amount and type of cement, including additives, to be used for each stage. Provide the yield of each cement slurry and the expected top of cement, with excess, for each cemented string or stage.

5. PRESSURE CONTROL EQUIPMENT

Surface Section (0 - 1525 ft): Will use a diverter

Production Section (1525 - 5370 ft MD): Will be drilled with a 11" 5M two ram stack w/ 5M annular preventer, & 5M Choke Manifold.

a. All BOP's and associated equipment will be tested to 1200 psi with a third party BOP testing service before drilling out the 13-3/8" casing shoe. Prior to drilling out the 9-5/8" casing shoe, the BOP's and Annular preventer will be tested in accordance with On-shore Order #2.

b. Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be accommodated on the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 5000 psi WP rating. Oxy requests that the system be tested at 5,000 psi WP rating.

b. 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 5000 psi WP rating. Oxy requests that the system be tested at 5,000 psi WP rating.

c. Oxy also requests a variance to connect the BOP choke outlet to the choke manifold using a co-flex hose made by *Contitech Rubber Industrial KFT*. It is a 3" ID x 35' flexible hose rated to 10,000 psi working pressure. It has been tested to 15,000 psi and is built to API Spec 16C. Once the flex line is installed it will be tied down with safety clamps. Please see attached certifications.

- d. See attached BOP & Choke manifold diagrams.
- e. A kelly cock will be in the drill string at all times while drilling.
- f. A full opening drill pipe stabbing valve with the appropriate connections will be on the rig floor at all times

6. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0-1525 ft	8.4-9.2 ppg	34-36	NC	WBM
1525-3900 ft	9.0-9.2 ppg	28-32	NC	WBM
3900-5370 ft	9.2-9.6 ppg	36-42	<6	WBM

<u>Remarks:</u> Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

f. Type and characteristics of the proposed circulating medium or mediums proposed for the drilling of each well bore section, the quantities and types of mud and weighting material to be maintained, and the monitoring equipment to be used on the circulating system. The operator must submit the following information when air or gas drilling is proposed:

- Length, size, and location of the blooie line, including the gas ignition and dust suppression systems;
- Location and capacity of the compressor equipment, including safety devices, describe the distance from the well bore, and location within the drill site; and
- Anticipated amounts, types, and other characteristics as defined in this section, of the stand by mud or kill fluid and associated circulating equipment.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

- **a.** A Kelly cock will be in the drill string at all times.
- **b.** A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- c. 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. <u>If Hydrogen Sulfide is encountered</u>, <u>measured amounts and formations will be reported to the REGULATORY AGENCIES</u>

8. LOGGING / CORING AND TESTING PROGRAM:

- A. Mud Logger: Basal Grayburg to TD
- B. DST's: None
- C. Open Hole Logs as follows: GR / RES / DEN / POR / SON / FMI from Basal Grayburg to TD

9. POTENTIAL HAZARDS:

- A. H2S detection equipment will be in operation before 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 maximum bottomhole pressure anticipated is 5000 psi.
- C. No abnormal temperatures or pressures are anticipated. The highest anticipated pressure gradient is 0.55 psi/ft or 5000 psi. 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.
- D. No losses are anticipated at this time.
- E. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well.
- F. 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 25 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:

<u>Name</u>	Title	Office Phone	<u>Mobile Phone</u>
Douglas Muir	Drilling Engineer	713-366-5852	713-213-9739
Frank Hutton	Drilling Engineer Supervisor	713-366-5325	713-855-4274
Nelson Emery	Drilling Superintendent	713-215-7537	281-467-2862
Richard Jackson	Drilling Manager	713-215-7235	281-467-6383



1

.

BOP STACK



ł







•

ŗ





5

÷,



4 p - 2

LOCATION VERIFICATION MAP



VICINITY MAP



DIRECTIONS BEGINNING AT THE INTERSECTION OF SOUTH GRIMES STREET AND STANOLIND ROAD, GO WEST ON PAVED ROAD FOR 0.6 MILES, TURN LEFT AND GO SOUTH ON CALICHE LEASE ROAD FOR 0.1 MILES, TURN RIGHT AND GO WEST ON CALICHE LEASE ROAD FOR 0.3 MILES, TURN RIGHT ON PROPOSED ROAD AND GO NORTH FOR 0.1 MILES TO LOCATION.

