

Scientific Drilling Inc.

Planning Report

Company: OXY USA Inc.		Date: 12/27/2000	Time: 16:24:26	Page: 1
Field: Hobbs San Andres		Co-ordinate(NE) Reference: Site: Lea County, New Mexico, True North		
Site: Lea County, New Mexico		Vertical (TVD) Reference: Mean Sea Level 0.0 above Mean Sea Level		
Well: NHU #28-644		Section (VS) Reference: Site (0.0E,0.0N,237.3Azi)		
Wellpath: OH Original hole		Plan: Plan #1		

Field: Hobbs San Andres	
Map System: US State Plane Coordinate System 1927	Map Zone: Texas, Central Zone
Ellipsoid: Clarke - 1866	North Reference: True
Sys Datum: Mean Sea Level	Geomagnetic Model: igrf2000

Site: Lea County, New Mexico	
Site Position:	Northing: ft
From: Local Only	Easting: ft
Position Uncertainty: 0.0 ft	Latitude:
Water Depth: 0.0 ft	Longitude:
	Magnetic Declination: 0.00 deg
	Grid Convergence: deg

Well: NHU #28-644	
Well Position: +N/-S 0.0 ft	Northing: ft
From Slot: +E/-W 0.0 ft	Easting : ft
Position Uncertainty: 0.0 ft	Latitude:
	Longitude:

Wellpath: OH Original hole		Drilled From: Surface
Vertical Section: +N/-S 0.0 ft		Tie-on Depth: ft
From: Site +E/-W 0.0 ft		V.Section Direction: 237.30 deg
Measured Depth Reference: Mean Sea Level 0.0 ft		Above System Datum: Mean Sea Level

Plan: Plan #1		Date Composed: 12/27/2000
		Version: 1
Principal: Yes		Locked: No

Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1650.0	0.00	0.00	1650.0	0.0	0.0	0.00	0.00	0.00	0.00	
3031.3	31.08	237.32	2964.5	-197.4	-307.6	2.25	2.25	-8.88	237.32	
4436.1	31.08	237.32	4167.7	-589.0	-918.0	0.00	0.00	0.00	0.00	Midpoint28-644
4589.0	31.08	237.32	4298.7	-631.6	-984.5	0.00	0.00	0.00	0.00	

Section 1 : Start Hold										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1000.0	0.00	0.00	1000.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1100.0	0.00	0.00	1100.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1200.0	0.00	0.00	1200.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1300.0	0.00	0.00	1300.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1400.0	0.00	0.00	1400.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1500.0	0.00	0.00	1500.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1600.0	0.00	0.00	1600.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1650.0	0.00	0.00	1650.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

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Planning Report

Company: OXY USA Inc. Field: Hobbs San Andres Site: Lea County, New Mexico Well: NHU #28-644 Wellpath: OH Original hole	Date: 12/27/2000 Time: 16:24:26 Page: 2 Co-ordinate(NE) Reference: Site: Lea County, New Mexico, True North Vertical (TVD) Reference: Mean Sea Level 0.0 above Mean Sea Level Section (VS) Reference: Site (0.0E,0.0N,237.3Azi) Plan: Plan #1
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Section 2 : Start DLS 2.25 TFO 237.32

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1700.0	1.13	237.32	1700.0	-0.3	-0.4	0.5	2.25	2.25	0.00	0.00
1800.0	3.38	237.32	1799.9	-2.4	-3.7	4.4	2.25	2.25	0.00	0.00
1900.0	5.63	237.32	1899.6	-6.6	-10.3	12.3	2.25	2.25	0.00	0.00
2000.0	7.88	237.32	1998.9	-13.0	-20.2	24.0	2.25	2.25	0.00	0.00
2100.0	10.13	237.32	2097.7	-21.4	-33.4	39.7	2.25	2.25	0.00	0.00
2200.0	12.38	237.32	2195.7	-32.0	-49.8	59.2	2.25	2.25	0.00	0.00
2300.0	14.63	237.32	2293.0	-44.6	-69.4	82.5	2.25	2.25	0.00	0.00
2400.0	16.88	237.32	2389.2	-59.2	-92.3	109.7	2.25	2.25	0.00	0.00
2500.0	19.13	237.32	2484.3	-75.9	-118.3	140.6	2.25	2.25	0.00	0.00
2600.0	21.38	237.32	2578.1	-94.6	-147.4	175.2	2.25	2.25	0.00	0.00
2700.0	23.63	237.32	2670.5	-115.3	-179.6	213.4	2.25	2.25	0.00	0.00
2800.0	25.88	237.32	2761.3	-137.9	-214.9	255.3	2.25	2.25	0.00	0.00
2900.0	28.13	237.32	2850.4	-162.4	-253.1	300.7	2.25	2.25	0.00	0.00
3000.0	30.38	237.32	2937.6	-188.8	-294.2	349.5	2.25	2.25	0.00	0.00
3031.3	31.08	237.32	2964.5	-197.4	-307.6	365.5	2.25	2.25	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
3100.0	31.08	237.32	3023.4	-216.5	-337.5	401.0	0.00	0.00	0.00	0.00
3200.0	31.08	237.32	3109.0	-244.4	-381.0	452.6	0.00	0.00	0.00	0.00
3300.0	31.08	237.32	3194.7	-272.3	-424.4	504.2	0.00	0.00	0.00	0.00
3400.0	31.08	237.32	3280.3	-300.2	-467.8	555.9	0.00	0.00	0.00	0.00
3500.0	31.08	237.32	3366.0	-328.1	-511.3	607.5	0.00	0.00	0.00	0.00
3600.0	31.08	237.32	3451.6	-355.9	-554.7	659.1	0.00	0.00	0.00	0.00
3700.0	31.08	237.32	3537.3	-383.8	-598.2	710.7	0.00	0.00	0.00	0.00
3800.0	31.08	237.32	3622.9	-411.7	-641.6	762.3	0.00	0.00	0.00	0.00
3900.0	31.08	237.32	3708.6	-439.6	-685.1	814.0	0.00	0.00	0.00	0.00
4000.0	31.08	237.32	3794.2	-467.4	-728.5	865.6	0.00	0.00	0.00	0.00
4100.0	31.08	237.32	3879.9	-495.3	-772.0	917.2	0.00	0.00	0.00	0.00
4200.0	31.08	237.32	3965.5	-523.2	-815.4	968.8	0.00	0.00	0.00	0.00
4300.0	31.08	237.32	4051.1	-551.1	-858.9	1020.5	0.00	0.00	0.00	0.00
4400.0	31.08	237.32	4136.8	-578.9	-902.3	1072.1	0.00	0.00	0.00	0.00
4436.1	31.08	237.32	4167.7	-589.0	-918.0	1090.7	0.00	0.00	0.00	0.00

Section 4 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4500.0	31.08	237.32	4222.4	-606.8	-945.8	1123.7	0.00	0.00	0.00	0.00
4589.0	31.08	237.32	4298.7	-631.6	-984.5	1169.7	0.00	0.00	0.00	0.00

Scientific Drilling

OXY USA Inc.

Field: Hobbs San Andres
Site: Lea County, New Mexico
Well: NHH-28-46
Wellbore: OH Original hole
Plan: Plan m)

