Scientific Drilling

Scientific Drilling Intl.
Planning Report

Company:	OXY Permian	**Date:** 2/22/2002	**Time:** 10:10:07	**Page:**	1
Field:	Hobbs San Andres-NAD27	**Co-ordinate(NE) Reference:**	Well: SHU #247, Grid North		
Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	SHU #247	**Section (VS) Reference:**	Well (0.00N,0.00E,80.65Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Field: Hobbs San Andres-NAD27

Map System:	US State Plane Coordinate System 1927	**Map Zone:**	New Mexico, Eastern Zone
Geo Datum:	NAD27 (Clarke 1866)	**Coordinate System:**	Well Centre
Sys Datum:	Mean Sea Level	**Geomagnetic Model:**	igrf2000

Site: Lea County, New Mexico

Site Position:		**Northing:**	188235.34 m	**Latitude:**	32	41	32.651 N
From:	Map	**Easting:**	261491.27 m	**Longitude:**	103	10	11.886 W
Position Uncertainty:	0.0 ft			**North Reference:**			Grid
Ground Level:	0.0 ft			**Grid Convergence:**			0.63 deg

Well: SHU #247 **Slot Name:**

Well Position:	+N/-S	0.0 ft	**Northing:**	188235.34 m	**Latitude:**	32	41	32.651 N
	+E/-W	0.0 ft	**Easting :**	261491.27 m	**Longitude:**	103	10	11.886 W
Position Uncertainty:		0.0 ft						

Wellpath: 1

				Drilled From:	Surface
				Tie-on Depth:	0.0 ft
Current Datum:	SITE	**Height**	0.0 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	12/14/2001			**Declination:**	8.60 deg
Field Strength:	50023 nT			**Mag Dip Angle:**	60.97 deg

Vertical Section:	**Depth From (TVD)** ft	**+N/-S** ft	**+E/-W** ft	**Direction** deg
	4033.0	0.0	0.0	80.65

Plan:	Plan #1	**Date Composed:**	12/14/2001
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

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	
1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2629.9	18.67	80.65	2615.3	21.8	132.3	2.25	2.25	9.72	80.65	
4126.4	18.67	80.65	4033.0	99.6	605.0	0.00	0.00	0.00	0.00	Mid Pay 247
4406.1	18.67	80.65	4298.0	114.1	693.4	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
1700.0	0.00	0.00	1700.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
1800.0	0.00	0.00	1800.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00

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Site:	Lea County, New Mexico	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	SHU #247	**Section (VS) Reference:**	Well (0.00N,0.00E,80.65Azi)		
Wellpath:	1	**Plan:**	Plan #1		

Section 1 : Start Hold

MD	Incl	Azim	TVD	+N/-S	+E/-W	VS	DLS	Build	Turn	°TFO

Section 2 : Start DLS 2.25 TFO 80.65

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
1900.0	2.25	80.65	1900.0	0.3	1.9	2.0	2.25	2.25	0.00	0.00
2000.0	4.50	80.65	1999.8	1.3	7.7	7.8	2.25	2.25	0.00	0.00
2100.0	6.75	80.65	2099.3	2.9	17.4	17.7	2.25	2.25	0.00	0.00
2200.0	9.00	80.65	2198.4	5.1	30.9	31.4	2.25	2.25	0.00	0.00
2300.0	11.25	80.65	2296.8	7.9	48.3	48.9	2.25	2.25	0.00	0.00
2400.0	13.50	80.65	2394.5	11.4	69.4	70.4	2.25	2.25	0.00	0.00
2500.0	15.75	80.65	2491.2	15.5	94.3	95.6	2.25	2.25	0.00	0.00
2600.0	18.00	80.65	2586.9	20.2	123.0	124.6	2.25	2.25	0.00	0.00
2629.9	18.67	80.65	2615.3	21.8	132.3	134.0	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
2700.0	18.67	80.65	2681.7	25.4	154.4	156.5	0.00	0.00	0.00	180.00
2800.0	18.67	80.65	2776.4	30.6	186.0	188.5	0.00	0.00	0.00	180.00
2900.0	18.67	80.65	2871.2	35.8	217.6	220.5	0.00	0.00	0.00	180.00
3000.0	18.67	80.65	2965.9	41.0	249.2	252.5	0.00	0.00	0.00	180.00
3100.0	18.67	80.65	3060.6	46.2	280.8	284.5	0.00	0.00	0.00	180.00
3200.0	18.67	80.65	3155.4	51.4	312.4	316.6	0.00	0.00	0.00	180.00
3300.0	18.67	80.65	3250.1	56.6	343.9	348.6	0.00	0.00	0.00	180.00
3400.0	18.67	80.65	3344.9	61.8	375.5	380.6	0.00	0.00	0.00	180.00
3500.0	18.67	80.65	3439.6	67.0	407.1	412.6	0.00	0.00	0.00	180.00
3600.0	18.67	80.65	3534.3	72.2	438.7	444.6	0.00	0.00	0.00	180.00
3700.0	18.67	80.65	3629.1	77.4	470.3	476.6	0.00	0.00	0.00	180.00
3800.0	18.67	80.65	3723.8	82.6	501.9	508.7	0.00	0.00	0.00	180.00
3900.0	18.67	80.65	3818.5	87.8	533.5	540.7	0.00	0.00	0.00	180.00
4000.0	18.67	80.65	3913.3	93.0	565.1	572.7	0.00	0.00	0.00	180.00
4100.0	18.67	80.65	4008.0	98.2	596.7	604.7	0.00	0.00	0.00	180.00
4126.4	18.67	80.65	4033.0	99.6	605.0	613.1	0.00	0.00	0.00	180.00

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
4200.0	18.67	80.65	4102.7	103.4	628.3	636.7	0.00	0.00	0.00	180.00
4300.0	18.67	80.65	4197.5	108.6	659.8	668.7	0.00	0.00	0.00	180.00
4406.1	18.67	80.65	4298.0	114.1	693.4	702.7	0.00	0.00	0.00	180.00