

HALLIBURTON

ConocoPhillips

Survey Report

EVGSAU # 3127-001

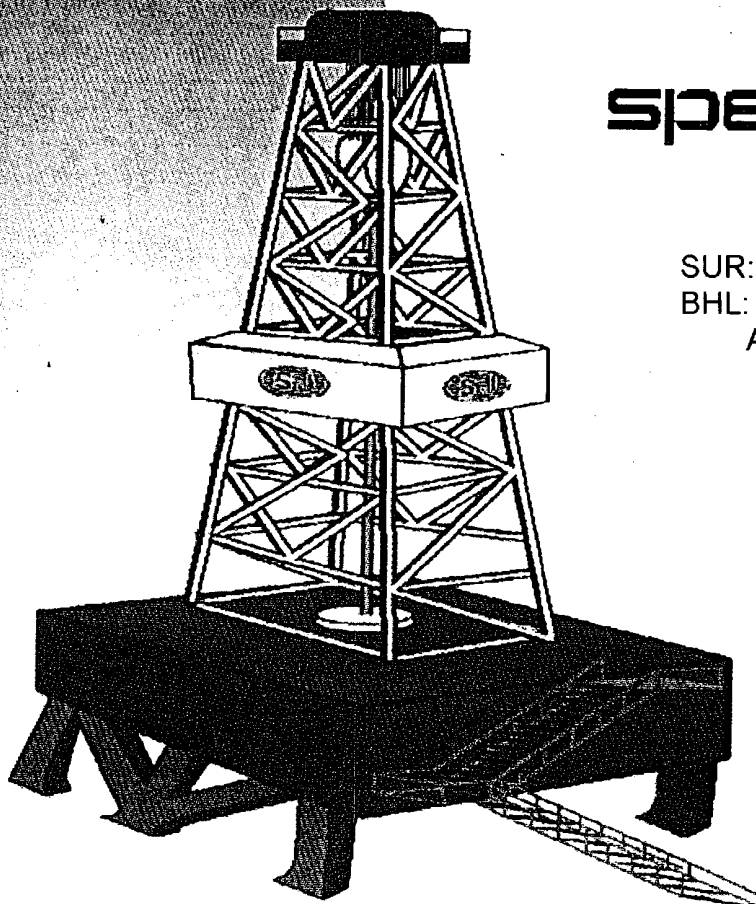
Lea County, New Mexico

Sec. 31-T17S-R35E

February 10, 2003

sperry-sun

SUR: 31-17s-35e, 1980/S & 1980/E
BHL: 31-17s-35e, 1813/S & 89/E
API # 30-025-02960



MAY 01 2003



ConocoPhillips
New Mexico
Lea County
EVGSAU 3127-001 - MWD Surveys

Sperry-Sun

Survey Report

8 February, 2003

Data Source: Information from Location

Survey Ref: svy6178

HALLIBURTON

HALLIBURTONConocoPhillips
New Mexico
Lea County**Survey Report for EVGSAU 3127-001**
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station Coordinates			Vertical Section (ft)	Dogleg Rate ('"/100ft)	Comment
			TVD (ft)	Northings (ft)	Eastings (ft)			
Gyro								
0.00	0.000	0.000	0.00	0.00 N	0.00 E	0.00		1st Gyro Survey @ 100' md
100.00	0.550	306.580	100.00	0.29 N	0.39 W	-0.41	0.55	
200.00	0.380	305.130	200.00	0.76 N	1.04 W	-1.11	0.17	
300.00	0.040	92.210	299.99	0.95 N	1.28 W	-1.36	0.41	
400.00	0.310	163.860	399.99	0.69 N	1.17 W	-1.23	0.30	
500.00	0.320	203.020	499.99	0.17 N	1.20 W	-1.21	0.21	
600.00	0.750	196.490	599.99	0.71 S	1.50 W	-1.42	0.43	
700.00	1.780	215.040	699.96	2.61 S	2.57 W	-2.31	1.10	
800.00	2.280	225.460	799.90	5.28 S	4.88 W	-4.36	0.62	
900.00	2.260	223.030	899.82	8.11 S	7.65 W	-6.84	0.10	
1000.00	2.350	219.270	999.74	11.14 S	10.29 W	-9.18	0.18	
1100.00	2.740	218.470	1099.64	14.60 S	13.08 W	-11.63	0.39	
1200.00	2.290	212.450	1199.55	18.16 S	15.63 W	-13.83	0.52	
1300.00	1.270	210.120	1299.50	20.80 S	17.26 W	-15.20	1.02	
1400.00	0.430	200.760	1399.48	22.11 S	17.95 W	-15.76	0.85	
1500.00	0.340	207.000	1499.48	22.73 S	18.22 W	-15.97	0.10	
1600.00	0.480	227.150	1599.48	23.28 S	18.66 W	-16.36	0.20	
1700.00	0.310	114.320	1699.48	23.67 S	18.72 W	-16.38	0.66	
1800.00	1.260	200.120	1799.47	24.82 S	18.85 W	-16.40	1.28	
1900.00	0.340	167.580	1899.46	26.14 S	19.17 W	-16.59	0.99	
2000.00	0.750	252.080	1999.45	26.63 S	19.73 W	-17.10	0.79	
2100.00	0.260	114.380	2099.45	26.92 S	20.14 W	-17.49	0.96	
2200.00	0.650	131.520	2199.45	27.39 S	19.51 W	-16.81	0.41	
2300.00	0.230	283.540	2299.45	27.72 S	19.28 W	-16.55	0.86	
2400.00	1.250	85.250	2399.44	27.59 S	18.39 W	-15.68	1.47	
2500.00	0.480	145.650	2499.43	27.84 S	17.07 W	-14.34	1.10	
2600.00	2.150	61.080	2599.40	27.28 S	15.19 W	-12.52	2.16	
2700.00	1.410	41.480	2699.36	25.45 S	12.73 W	-10.25	0.95	
2800.00	1.700	71.450	2799.32	24.06 S	10.51 W	-8.17	0.85	
2900.00	0.750	93.110	2899.30	23.62 S	8.45 W	-6.16	1.04	
3000.00	0.800	85.730	2999.29	23.60 S	7.10 W	-4.82	0.11	
3100.00	0.760	78.810	3099.28	23.42 S	5.75 W	-3.50	0.10	
3200.00	0.710	65.250	3199.27	23.04 S	4.54 W	-2.33	0.18	
3300.00	0.700	42.700	3299.26	22.33 S	3.56 W	-1.42	0.28	
3400.00	0.530	37.470	3399.26	21.51 S	2.87 W	-0.81	0.18	
3500.00	0.440	32.530	3499.25	20.82 S	2.38 W	-0.39	0.10	
3600.00	0.460	36.910	3599.25	20.18 S	1.93 W	0.00	0.04	
3700.00	0.270	51.650	3699.25	19.71 S	1.51 W	0.38	0.21	
3787.00	0.460	23.620	3786.25	19.26 S	1.21 W	0.63	0.29	
3808.00	0.530	31.190	3807.25	19.10 S	1.12 W	0.70	0.46	
3840.00	4.200	103.100	3839.22	19.24 S	0.10 E	1.93	12.71	Last Gyro Survey @ 3840' md

Survey Report for EVGSAU 3127-001
Data Source: Information from Location

Measured Depth (ft)	Incl. (Deg)	Azim. (Deg)	Station Coordinates			Vertical Section (ft)	Dogleg Rate (°/100ft)	Comment
			TVD (ft)	Northings (ft)	Eastings (ft)			
MWD Surveys								
3858.00	7.200	115.300	3857.13	19.87 S	1.76 E	3.64	17.88	1st MWD Survey @ 3858' md
3890.00	11.600	113.200	3888.69	22.00 S	6.53 E	8.60	13.79	
3922.00	13.400	102.000	3919.93	24.04 S	13.12 E	15.35	9.41	
3954.00	12.900	106.300	3951.10	25.81 S	20.17 E	22.54	3.43	
3986.00	13.000	96.600	3982.29	27.23 S	27.18 E	29.65	6.79	
4018.00	11.500	87.300	4013.56	27.49 S	33.94 E	36.40	7.73	
4050.00	9.500	80.000	4045.02	26.88 S	39.73 E	42.11	7.49	
4081.00	7.800	74.400	4075.67	25.87 S	44.27 E	46.54	6.11	
4113.00	6.200	71.000	4107.43	24.72 S	48.00 E	50.14	5.16	
4145.00	4.900	74.900	4139.28	23.81 S	50.95 E	52.99	4.23	
4177.00	3.400	92.500	4171.20	23.49 S	53.22 E	55.22	6.10	
4209.00	2.800	100.000	4203.15	23.67 S	54.94 E	56.94	2.26	
4241.00	2.400	114.400	4235.12	24.08 S	56.32 E	58.36	2.38	
4272.00	2.200	117.300	4266.09	24.62 S	57.44 E	59.52	0.75	
4304.00	6.600	109.800	4297.99	25.53 S	59.71 E	61.87	13.84	
4336.00	18.000	104.200	4329.20	27.37 S	66.26 E	68.57	35.78	
4368.00	30.200	99.100	4358.36	29.86 S	79.05 E	81.53	38.64	
4399.00	42.100	97.100	4383.35	32.39 S	97.13 E	99.77	38.57	
4431.00	50.300	98.400	4405.48	35.52 S	119.99 E	122.83	25.79	
4463.00	55.000	99.200	4424.89	39.42 S	145.12 E	148.21	14.82	
4495.00	59.800	99.900	4442.13	43.89 S	171.70 E	175.10	15.11	
4526.00	64.600	99.900	4456.58	48.60 S	198.70 E	202.43	15.48	
4558.00	69.200	99.200	4469.13	53.48 S	227.72 E	231.78	14.52	
4590.00	73.900	98.700	4479.25	58.20 S	257.70 E	262.07	14.76	
4622.00	78.700	98.100	4486.83	62.74 S	288.44 E	293.11	15.11	
4653.00	83.300	96.700	4491.68	66.68 S	318.80 E	323.70	15.49	
4685.00	87.700	95.600	4494.19	70.10 S	350.51 E	355.59	14.17	
4717.00	89.400	95.200	4495.00	73.11 S	382.36 E	387.58	5.46	
4749.00	89.800	94.800	4495.22	75.90 S	414.23 E	419.58	1.77	
4781.00	90.900	96.000	4495.03	78.91 S	446.09 E	451.58	5.09	
4812.00	91.300	97.600	4494.43	82.58 S	476.86 E	482.56	5.32	
4844.00	91.400	98.100	4493.68	86.95 S	508.56 E	514.52	1.59	
4876.00	90.700	97.800	4493.09	91.37 S	540.24 E	546.49	2.38	
4908.00	90.700	97.600	4492.70	95.66 S	571.95 E	578.46	0.62	
4940.00	90.500	98.600	4492.37	100.17 S	603.63 E	610.43	3.19	
4971.00	91.100	99.000	4491.93	104.91 S	634.26 E	641.37	2.33	
5003.00	91.400	99.300	4491.24	110.00 S	665.85 E	673.30	1.33	
5035.00	90.600	98.800	4490.68	115.03 S	697.44 E	705.23	2.95	
5067.00	90.500	98.500	4490.37	119.84 S	729.08 E	737.18	0.99	
5097.00	90.500	98.500	4490.11	124.28 S	758.75 E	767.13	0.00	
5132.00	90.800	98.600	4489.71	129.48 S	793.36 E	802.08	0.90	
5163.00	91.000	98.700	4489.22	134.14 S	824.00 E	833.03	0.72	
5195.00	91.100	99.000	4488.64	139.06 S	855.61 E	864.97	0.99	
5227.00	91.500	98.100	4487.91	143.82 S	887.25 E	896.91	3.08	
5257.00	91.900	97.300	4487.02	147.84 S	916.97 E	926.88	2.98	

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TVD (ft)	Northings (ft)	Eastings (ft)						
5288.00	91.900	96.200	4485.99	151.48 S	947.73 E	957.85	3.55	
5320.00	91.300	94.700	4485.10	154.52 S	979.57 E	989.84	5.05	
5351.00	91.000	93.300	4484.48	156.68 S	1010.49 E	1020.82	4.62	
5383.00	90.300	92.500	4484.11	158.30 S	1042.45 E	1052.79	3.32	
5415.00	90.300	92.200	4483.95	159.61 S	1074.42 E	1084.74	0.94	
5447.00	90.600	92.400	4483.70	160.89 S	1106.39 E	1116.69	1.13	
5479.00	91.100	92.300	4483.22	162.21 S	1138.36 E	1148.64	1.59	
5510.00	91.300	92.200	4482.57	163.42 S	1169.33 E	1179.58	0.72	
5542.00	91.600	92.200	4481.76	164.65 S	1201.30 E	1211.52	0.94	
5574.00	92.400	91.700	4480.65	165.74 S	1233.26 E	1243.44	2.95	
5606.00	92.600	91.700	4479.25	166.69 S	1265.22 E	1275.34	0.63	
5638.00	93.400	92.100	4477.58	167.75 S	1297.15 E	1307.23	2.79	
5670.00	94.400	92.200	4475.40	168.95 S	1329.06 E	1339.11	3.14	
5702.00	94.600	92.500	4472.89	170.25 S	1360.93 E	1370.96	1.12	
5734.00	95.000	92.300	4470.21	171.59 S	1392.79 E	1402.80	1.40	
5760.00	95.100	92.400	4467.92	172.65 S	1418.67 E	1428.66	0.54	
5797.00	94.600	91.600	4464.79	173.94 S	1455.51 E	1465.46	2.54	
5829.00	93.600	90.500	4462.51	174.52 S	1487.43 E	1497.29	4.64	
5861.00	93.500	90.200	4460.52	174.72 S	1519.36 E	1529.10	0.99	
5893.00	93.700	90.000	4458.51	174.77 S	1551.30 E	1560.89	0.88	
5925.00	94.200	89.800	4456.31	174.72 S	1583.22 E	1592.67	1.68	
5957.00	94.700	89.600	4453.83	174.55 S	1615.13 E	1624.41	1.68	
5989.00	94.000	89.400	4451.40	174.27 S	1647.03 E	1656.14	2.27	
6021.00	94.100	89.200	4449.14	173.88 S	1678.95 E	1687.88	0.70	
6052.00	94.200	88.700	4446.90	173.32 S	1709.86 E	1718.60	1.64	
6085.00	94.200	88.400	4444.48	172.48 S	1742.77 E	1751.27	0.91	
6116.00	94.200	88.300	4442.21	171.59 S	1773.67 E	1781.95	0.32	
6148.00	94.000	88.000	4439.92	170.56 S	1805.57 E	1813.61	1.12	
6179.00	94.200	87.900	4437.71	169.46 S	1836.47 E	1844.26	0.72	
6234.00	94.200	87.900	4433.68	167.45 S	1891.29 E	1898.64	0.00	Last MWD Survey @ 6179' md Projection to TD @ 6234' md

All data is in Feet (US) unless otherwise stated. Directions and coordinates are relative to True North.
Vertical depths are relative to Well. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Well and calculated along an Azimuth of 95.465° (True).

Magnetic Declination at Surface is 8.530° (08-Feb-03)

Based upon Minimum Curvature type calculations, at a Measured Depth of 6234.00ft.,
The Bottom Hole Displacement is 1898.69ft., in the Direction of 95.060° (True).

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Data Source: Information from Location

Comments

Measured Depth (ft)	Station Coordinates			Comment
	TVD (ft)	Northings (ft)	Eastings (ft)	
100.00	100.00	0.29 N	0.39 W	1st Gyro Survey @ 100' md
3840.00	3839.22	19.24 S	0.10 E	Last Gyro Survey @ 3840' md
3858.00	3857.13	19.87 S	1.76 E	1st MWD Survey @ 3858' md
6179.00	4437.71	169.46 S	1836.47 E	Last MWD Survey @ 6179' md
6234.00	4433.68	167.45 S	1891.29 E	Projection to TD @ 6234' md

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