

QUEEN SAND OPERATING COMPANY

Structure : DQSU No.56

Slot : slot #1

Field : CAPROCK

Location : CHAVES COUNTY, NEW MEXICO

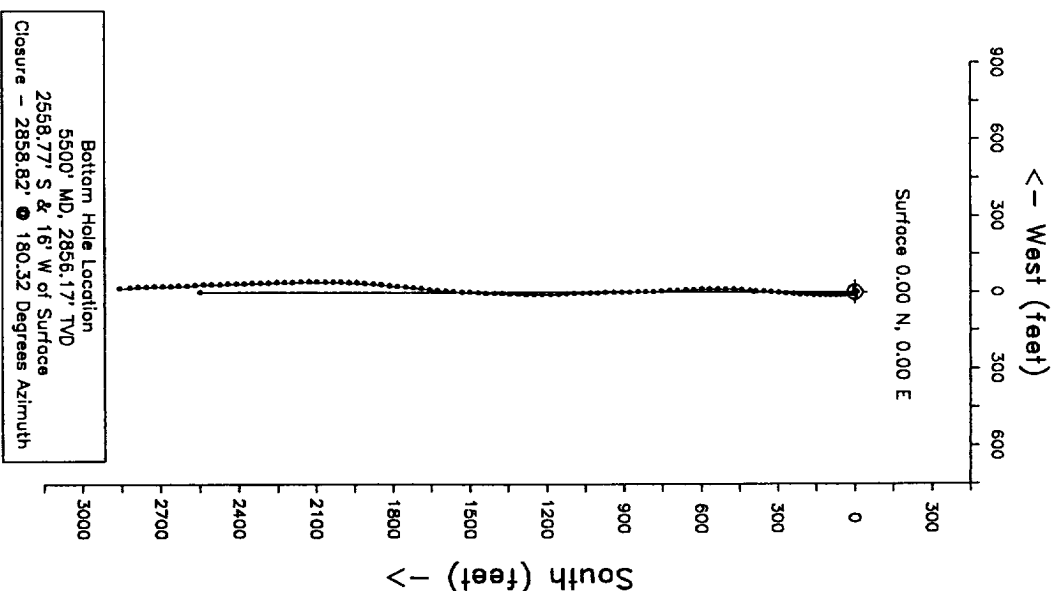
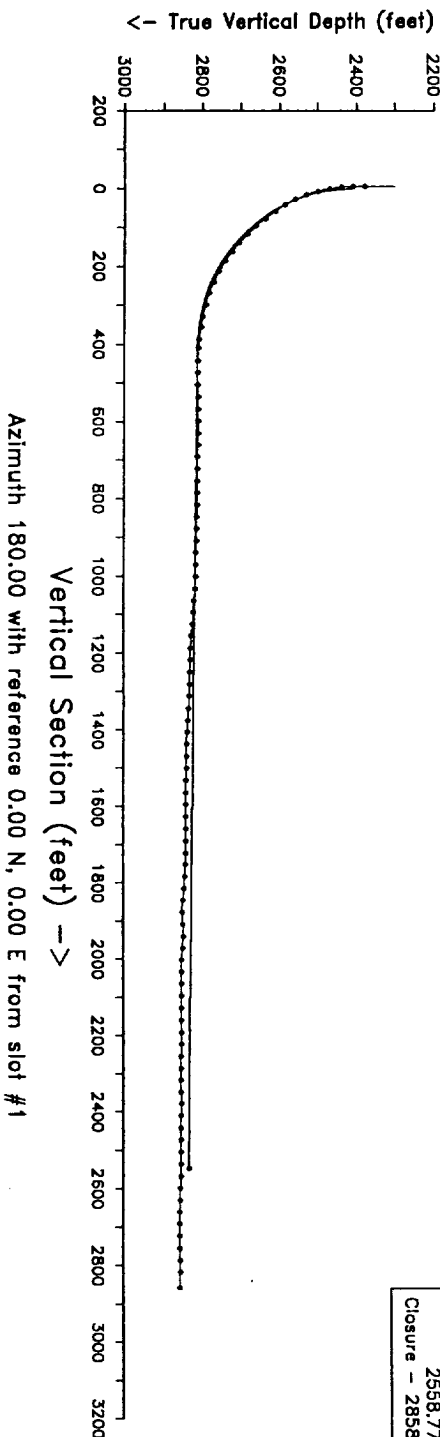
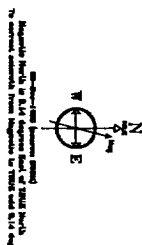
SUR: 130/N & 380/W D-15-145-31e

BAL: 2989/N & 364/W L-15-145-31e

30-005-21153



INTEQ



Created by borthw
Date plotted : 31-Jan-2000
Plot Reference is 14.3 Deg B/Hc.
Coordinates are in feet reference slot #1.
True Vertical Depths are reference rotary table.
--- Baker Hughes INTEQ ---

QUEEN SAND OPERATING COMPANY
DQSU No.56

slot #1
CAPROCK
CHAVES COUNTY, NEW MEXICO

S U R V E Y L I S T I N G

by
Baker Hughes INTEQ

Your ref : Gyro/MWD
Our ref : svy1334
License :

Date printed : 31-Jan-2000
Date created : 3-Jan-2000
Last revised : 26-Jan-2000

Field is centred on n33 5 0.000,w103 55 0
Structure is centred on n33 5 0.000,w103 55 0

Slot location is n33 5 0.000,w103 55 0.000
Slot Grid coordinates are N 758084.198, E 627623.269
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866
Reference North is True North

QUEEN SAND OPERATING COMPANY
 DQSU No.56,slot #1
 CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 1
 Your ref : Gyro/MWD
 Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00
100.00	0.28	34.76	100.00	0.20 N	0.14 E	-0.20
200.00	0.07	220.59	200.00	0.36 N	0.24 E	-0.36
300.00	0.23	277.34	300.00	0.34 N	0.00 E	-0.34
400.00	0.21	295.69	400.00	0.44 N	0.36 W	-0.44
500.00	0.23	25.09	500.00	0.70 N	0.44 W	-0.70
600.00	0.45	354.88	600.00	1.27 N	0.39 W	-1.27
700.00	0.44	334.73	699.99	2.00 N	0.59 W	-2.00
800.00	0.72	310.83	799.99	2.76 N	1.23 W	-2.76
900.00	0.67	337.29	899.98	3.71 N	1.93 W	-3.71
1000.00	0.50	334.86	999.98	4.64 N	2.34 W	-4.64
1100.00	0.29	293.62	1099.97	5.14 N	2.75 W	-5.14
1200.00	0.31	330.06	1199.97	5.48 N	3.12 W	-5.48
1300.00	0.14	3.76	1299.97	5.83 N	3.25 W	-5.83
1400.00	0.02	81.23	1399.97	5.96 N	3.22 W	-5.96
1500.00	0.03	208.76	1499.97	5.93 N	3.22 W	-5.93
1600.00	0.26	26.01	1599.97	6.11 N	3.14 W	-6.11
1700.00	0.06	76.14	1699.97	6.32 N	2.99 W	-6.32
1800.00	0.42	71.80	1799.97	6.45 N	2.59 W	-6.45
1900.00	0.33	84.05	1899.97	6.59 N	1.96 W	-6.59
2000.00	0.25	74.50	1999.97	6.68 N	1.47 W	-6.68
2100.00	0.53	122.66	2099.96	6.49 N	0.87 W	-6.49
2200.00	0.62	88.02	2199.96	6.26 N	0.05 E	-6.26
2300.00	0.64	73.05	2299.95	6.44 N	1.13 E	-6.44
2380.00	0.78	79.88	2379.95	6.67 N	2.09 E	-6.67

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 180.00 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

QUEEN SAND OPERATING COMPANY
 DQSU No.56, slot #1
 CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 2
 Your ref : Gyro/MWD
 Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
2410.00	1.70	135.80	2409.94	6.38 N	2.61 E	-6.38
2440.00	5.50	163.50	2439.88	4.69 N	3.33 E	-4.69
2471.00	10.70	166.70	2470.56	0.46 N	4.41 E	-0.46
2502.00	15.70	167.10	2500.73	6.44 S	6.01 E	6.44
2571.00	20.30	170.20	2530.20	15.83 S	7.86 E	15.83
2564.00	24.90	173.40	2558.82	27.62 S	9.53 E	27.62
2594.00	29.10	174.60	2585.54	41.16 S	10.94 E	41.16
2625.00	33.60	176.40	2612.01	57.23 S	12.19 E	57.23
2656.00	37.60	177.50	2637.21	75.25 S	13.14 E	75.25
2687.00	41.00	179.00	2661.20	94.87 S	13.73 E	94.87
2718.00	44.40	180.50	2683.98	115.89 S	13.81 E	115.89
2748.00	47.50	181.40	2704.83	137.45 S	13.45 E	137.45
2779.00	52.60	182.90	2724.73	161.18 S	12.55 E	161.18
2809.00	57.20	183.00	2741.98	185.69 S	11.29 E	185.69
2840.00	61.40	183.30	2757.80	212.30 S	9.82 E	212.30
2871.00	66.00	184.10	2771.53	240.02 S	8.02 E	240.02
2901.00	70.40	184.50	2782.67	267.79 S	5.93 E	267.79
2932.00	74.90	184.80	2791.91	297.28 S	3.54 E	297.28
2963.00	79.00	184.70	2798.91	327.37 S	1.04 E	327.37
2994.00	81.20	184.50	2803.90	355.84 S	1.26 W	355.84
3023.00	84.70	184.20	2807.70	386.51 S	3.59 W	386.51
3046.00	86.60	184.90	2809.45	409.37 S	5.41 W	409.37
3079.00	87.60	184.10	2811.12	442.23 S	7.99 W	442.23
3110.00	90.50	183.50	2811.63	473.15 S	10.05 W	473.15
3142.00	92.60	180.00	2810.76	505.12 S	11.02 W	505.12

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 180.00 degrees.

Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

QUEEN SAND OPERATING COMPANY
 DQSU No.56, slot #1
 CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 3
 Your ref : Gyro/MWD
 Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
3173.00	91.30	178.40	2809.71	536.10 S	10.59 W	536.10
3205.00	90.20	179.00	2809.29	568.09 S	9.87 W	568.09
3236.00	90.80	179.10	2809.02	599.08 S	9.35 W	599.08
3267.00	88.80	177.50	2809.13	630.06 S	8.43 W	630.06
3277.00	87.30	177.20	2810.18	661.01 S	7.00 W	661.01
3329.00	88.00	177.30	2811.45	691.95 S	5.51 W	691.95
3360.00	89.60	177.00	2812.10	722.90 S	3.97 W	722.90
3392.00	90.40	177.50	2812.10	754.87 S	2.44 W	754.87
3422.00	89.30	177.40	2812.18	784.84 S	1.10 W	784.84
3454.00	90.10	177.90	2812.35	816.81 S	0.21 E	816.81
3485.00	89.10	178.40	2812.57	847.79 S	1.21 E	847.79
3516.00	88.80	178.10	2813.13	878.77 S	2.16 E	878.77
3547.00	89.00	179.20	2813.73	909.76 S	2.89 E	909.76
3578.00	89.60	179.20	2814.11	940.75 S	3.32 E	940.75
3609.00	88.60	178.90	2814.59	971.74 S	3.83 E	971.74
3640.00	88.00	179.30	2815.51	1002.72 S	4.32 E	1002.72
3671.00	85.80	179.30	2817.19	1033.67 S	4.70 E	1033.67
3702.00	86.00	178.40	2819.41	1064.59 S	5.32 E	1064.59
3733.00	85.70	177.50	2821.65	1095.49 S	6.42 E	1095.49
3774.00	85.30	177.20	2824.08	1126.36 S	7.85 E	1126.36
3795.00	85.90	178.50	2826.46	1157.24 S	9.01 E	1157.24
3826.00	88.80	179.20	2827.89	1188.20 S	9.63 E	1188.20
3857.00	89.50	179.10	2828.35	1219.19 S	10.09 E	1219.19
3889.00	87.20	180.20	2829.28	1251.18 S	10.29 E	1251.18
3921.00	88.70	182.60	2830.42	1283.15 S	9.51 E	1283.15

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 180.00 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

QUEEN SAND OPERATING COMPANY
 DQSU No.56, slot #1
 CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 4
 Your ref : Gyro/MWD
 Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
3952.00	87.10	182.50	2831.56	1314.09 S	5.17	1314.09
3984.00	86.20	181.60	2833.43	1346.02 S	3.97	1346.02
4015.00	86.20	181.80	2835.48	1376.93 S	0.64	1376.93
4045.00	86.90	181.40	2837.29	1406.87 S	2.69	1406.87
4109.00	90.20	183.20	2838.10	1438.83 S	11.75	1438.83
4140.00	87.80	181.30	2837.98	1470.78 S	0.94	1470.78
4172.00	88.90	183.60	2838.53	1501.75 S	9.30	1501.75
4204.00	89.80	184.30	2839.45	1533.71 S	7.96	1533.71
4235.00	89.70	185.60	2839.81	1565.63 S	3.56	1565.63
4267.00	89.00	185.20	2839.95	1596.51 S	4.21	1596.51
4298.00	89.80	186.00	2840.31	1628.37 S	2.52	1628.37
4330.00	89.80	186.30	2840.63	1659.22 S	3.65	1659.22
4362.00	89.80	185.60	2840.74	1691.03 S	0.94	1691.03
4392.00	88.70	185.50	2840.86	1722.86 S	2.19	1722.86
4424.00	85.20	184.50	2841.25	1752.72 S	3.68	1752.72
4455.00	84.50	185.20	2842.95	1784.54 S	11.37	1784.54
4487.00	84.70	185.30	2845.73	1815.31 S	3.19	1815.31
4519.00	92.00	185.80	2848.75	1847.03 S	0.70	1847.03
4570.00	94.60	184.60	2849.67	1878.85 S	22.87	1878.85
4582.00	87.70	183.50	2847.88	1909.67 S	9.23	1909.67
4613.00	85.30	182.00	2847.95	1941.56 S	21.83	1941.56
4644.00	86.80	181.80	2849.13	1972.46 S	9.12	1972.46
4675.00	91.00	181.40	2851.27	2003.37 S	4.88	2003.37
4706.00	89.40	180.20	2851.86	2034.35 S	13.61	2034.35
			2851.75	2065.34 S	6.45	2065.34

All data is in feet unless otherwise stated.
 Coordinates from slot #1 and TVD from rotary table.
 Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 180.00 degrees.
 Calculation uses the minimum curvature method.
 Presented by Baker Hughes INTEQ

QUEEN SAND OPERATING COMPANY
DQSU No.56, slot #1
CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 5
Your ref : Gyro/MWD
Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
4738.00	89.90	179.10	2851.95	2097.34 S	3.78	2097.34
4769.00	89.80	178.30	2852.03	2128.33 S	2.60	2128.33
4801.00	89.10	178.10	2852.34	2160.31 S	2.28	2160.31
4833.00	90.50	179.10	2852.45	2192.30 S	5.38	2192.30
4841.00	89.70	178.10	2852.40	2223.29 S	4.13	2223.29
4895.00	88.80	177.70	2852.80	2254.27 S	3.18	2254.27
4927.00	89.80	179.00	2853.19	2286.25 S	5.13	2286.25
4958.00	90.60	178.90	2853.08	2317.25 S	2.60	2317.25
4990.00	90.30	178.70	2852.83	2349.24 S	1.13	2349.24
5021.00	90.30	178.40	2852.67	2380.23 S	0.97	2380.23
5052.00	88.80	178.10	2852.91	2411.21 S	4.93	2411.21
5084.00	89.60	178.50	2853.36	2443.20 S	2.80	2443.20
5115.00	90.00	179.30	2853.47	2474.19 S	2.89	2474.19
5147.00	91.00	178.40	2853.19	2506.18 S	4.20	2506.18
5178.00	89.90	177.40	2852.95	2537.16 S	4.80	2537.16
5210.00	87.90	176.30	2853.56	2569.10 S	7.13	2569.10
5241.00	87.90	177.20	2854.70	2600.03 S	2.90	2600.03
5272.00	88.50	177.20	2855.67	2630.98 S	1.94	2630.98
5303.00	89.50	177.10	2856.21	2661.93 S	3.24	2661.93
5311.00	89.80	179.20	2856.40	2692.92 S	6.84	2692.92
5366.00	90.00	179.90	2856.46	2724.91 S	2.28	2724.91
5397.00	90.30	178.20	2856.38	2755.91 S	5.57	2755.91
5429.00	91.10	178.40	2855.98	2787.89 S	2.58	2787.89
5460.00	89.50	176.30	2855.82	2818.86 S	8.52	2818.86
5500.00	89.50	176.30	2856.17	2858.77 S	0.00	2858.77

All data is in feet unless otherwise stated.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 180.00 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

QUEEN SAND OPERATING COMPANY
DQSU No.56, slot #1
CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 6
Your ref : Gyro/MWD
Last revised : 26-Jan-2000

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Depth	R E C T A N G U L A R C O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect
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All data is in feet unless otherwise stated.
Coordinates from slot #1 and TVD from rotary table.
Bottom hole distance is 2858.82 on azimuth 180.32 degrees from wellhead.
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CAPROCK, CHAVES COUNTY, NEW MEXICO

SURVEY LISTING Page 7
Your ref : Gyro/MWD
Last revised : 26-Jan-2000

Targets associated with this wellpath			
Target name	Geographic Location	T.V.D.	Rectangular Coordinates
		2832.00	2550.00S 0.00E
			29-Dec-1999