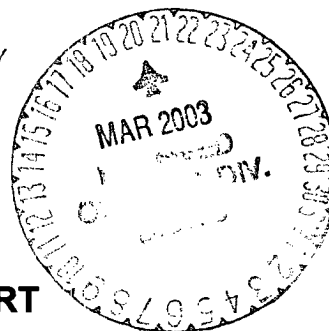


Schlumberger

6501 S. Fiddler's Green Circle, Suite 400
Greenwood Village, CO 80111
(303) 486-3200

Surface: 1945/S 1150/W
BHL 1948/S 2037/W



30-045-31171

SUB-SURFACE SURVEY CERTIFICATION REPORT

BP America Inc.

Company

March 4, 2003

Date

Lease

Gartner A 5M

Well Name

San Juan Co., NM

County/State

Survey Depths

0

to

250

ft

Type of Survey

Inclination Survey

Survey Depths

271

3369

ft

Type of Survey

Measurements While Drilling (MWD)

Survey Depths

3400

to

7450

ft

Type of Survey

Inclination Survey

Site Supervisor

Greg Johnson

The data submitted in this report conforms to the standards and procedures as set forth by Schlumberger. This report represents a true and correct directional wellbore survey based on original survey data obtained at the well site.

A. Allen Starkey

Account Manager

This document has been subscribed and affirmed, or sworn before me in the county of Arapahoe in the state of Colorado, this 7th day of March, 2003.

Christine J. Wilson

My commission expires:

12-12-05

Survey Report - Geodetic

Report Date: 04-Mar-2003 Client: BP, San Juan Performance Unit Field: NM, San Juan County (NAD 83 WZ) Structure / Slot: BP 27 30N 8W (Gartner A 5M) / Gartner A 5M Well: Gartner A 5M Borehole: Original Hole UWI/API#: Survey Name / Date: Gartner A 5M Final Surveys / March 4, 2003 Tort / AHD / DDI / ERD ratio: 60.098° / 987.79 ft / 4.734 / 0.12C Grid Coordinate System: NAD83 New Mexico State Planes, Westam Zone, US Feet Location Lat/Long: N 36 46 53.999, W 107 40 6.00E Location Grid NE YX: N 2103887.638 ftUS, E 2771410.436 ftUS Grid Convergence Angle: -0.09879679° Grid Scale Factor: 0.99991934		Survey / DLS Computation Method: Minimum Curvature / Lubinski Vertical Section Azimuth: 90.000° Vertical Section Origin: N 0.000 ft, E 0.000 ft TVD Reference Datum: RKB TVD Reference Elevation: 6156.000 ft relative to MSL Sea Bed / Ground Level Elevation: 6144.000 ft relative to MSL Magnetic Declination: +10.859° Total Field Strength: 51521.558 nT Magnetic Dip: 63.706° Declination Date: March 04, 2003 Magnetic Declination Model: BGGM 2002 North Reference: True North Total Corr Mag North -> True North: +10.859° Local Coordinates Referenced To: Well Head	
--	--	--	--

Station ID	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSec (ft)	N-S (ft)	E-W (ft)	DLS (°/100ft)	Grid Coordinates		Geographic Coordinates	
									Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2103887.64	2771410.44	N 36 46 53.999	W 107 40 6.005
Begin SLB Inclination Surveys	100.00	0.20	60.19	100.00	0.15	0.09	0.15	0.20	2103887.73	2771410.59	N 36 46 54.000	W 107 40 6.004
	200.00	0.45	60.19	200.00	0.64	0.37	0.64	0.25	2103888.01	2771411.08	N 36 46 54.002	W 107 40 5.998
Last SLB Inclination Survey	250.00	0.77	60.19	250.00	1.10	0.63	1.10	0.65	2103888.27	2771411.54	N 36 46 54.005	W 107 40 5.992
Begin SLB MWD Surveys	271.00	1.59	60.19	270.99	1.48	0.85	1.48	3.90	2103888.49	2771411.91	N 36 46 54.007	W 107 40 5.987
	302.00	1.87	80.18	301.98	2.35	1.15	2.35	2.13	2103888.79	2771412.79	N 36 46 54.010	W 107 40 5.977
	333.00	2.02	72.05	332.96	3.37	1.40	3.37	1.01	2103889.05	2771413.80	N 36 46 54.013	W 107 40 5.964
	364.00	2.44	72.10	363.94	4.52	1.77	4.52	1.35	2103889.42	2771414.95	N 36 46 54.016	W 107 40 5.950
	396.00	3.10	73.18	395.90	5.99	2.23	5.99	2.07	2103889.88	2771416.43	N 36 46 54.021	W 107 40 5.932
	427.00	3.36	76.57	426.85	7.68	2.69	7.68	1.04	2103890.34	2771418.11	N 36 46 54.025	W 107 40 5.911
	459.00	3.97	78.74	458.78	9.68	3.12	9.68	1.95	2103890.78	2771420.11	N 36 46 54.030	W 107 40 5.887
	490.00	4.58	81.25	489.70	11.95	3.52	11.95	2.06	2103891.18	2771422.38	N 36 46 54.034	W 107 40 5.859
	522.00	5.16	85.57	521.58	14.65	3.82	14.65	2.14	2103891.49	2771425.08	N 36 46 54.037	W 107 40 5.825
	554.00	6.01	87.28	553.43	17.76	4.02	17.76	2.71	2103891.68	2771428.19	N 36 46 54.038	W 107 40 5.787
	585.00	6.39	88.13	584.25	21.11	4.15	21.11	1.26	2103891.82	2771431.53	N 36 46 54.040	W 107 40 5.746
	616.00	7.07	86.89	615.03	24.73	4.31	24.73	2.24	2103891.99	2771435.16	N 36 46 54.041	W 107 40 5.701
	648.00	7.52	89.70	646.77	28.79	4.43	28.79	1.79	2103892.11	2771439.22	N 36 46 54.043	W 107 40 5.652
	679.00	8.29	91.94	677.48	33.06	4.36	33.06	2.67	2103892.06	2771443.48	N 36 46 54.042	W 107 40 5.599

711.00	9.29	89.25	709.10	37.95	4.32	37.95	3.38	2103892.02	2771448.37	N 36 46 54.041	W 107 40 5.539
743.00	10.05	90.25	740.65	43.32	4.34	43.32	2.43	2103892.05	2771453.74	N 36 46 54.042	W 107 40 5.473
773.00	10.78	91.11	770.15	48.74	4.27	48.74	2.49	2103891.99	2771459.17	N 36 46 54.041	W 107 40 5.406
805.00	11.51	90.90	801.55	54.93	4.16	54.93	2.28	2103891.90	2771465.35	N 36 46 54.040	W 107 40 5.330
836.00	11.81	91.61	831.91	61.19	4.03	61.19	1.07	2103891.77	2771471.61	N 36 46 54.039	W 107 40 5.253
868.00	12.10	90.28	863.22	67.82	3.92	67.82	1.25	2103891.67	2771478.24	N 36 46 54.038	W 107 40 5.172
899.00	12.48	89.67	893.51	74.42	3.92	74.42	1.30	2103891.69	2771484.84	N 36 46 54.038	W 107 40 5.091
931.00	12.94	90.11	924.72	81.46	3.93	81.46	1.47	2103891.71	2771491.88	N 36 46 54.038	W 107 40 5.004
963.00	13.36	90.34	955.88	88.74	3.91	88.74	1.32	2103891.70	2771499.16	N 36 46 54.037	W 107 40 4.915
992.00	14.09	89.73	984.05	95.62	3.90	95.62	2.57	2103891.71	2771506.04	N 36 46 54.037	W 107 40 4.830
1024.00	14.53	90.67	1015.06	103.53	3.87	103.53	1.55	2103891.69	2771513.95	N 36 46 54.037	W 107 40 4.733
1055.00	14.70	92.03	1045.06	111.35	3.69	111.35	1.24	2103891.52	2771521.77	N 36 46 54.035	W 107 40 4.637
1087.00	15.22	90.54	1075.97	119.60	3.51	119.60	2.02	2103891.35	2771530.02	N 36 46 54.033	W 107 40 4.535
1119.00	15.59	92.21	1106.82	128.10	3.30	128.10	1.81	2103891.16	2771538.52	N 36 46 54.031	W 107 40 4.431
1150.00	16.09	92.50	1136.65	136.56	2.95	136.56	1.63	2103890.83	2771546.97	N 36 46 54.028	W 107 40 4.327
1182.00	16.46	92.50	1167.37	145.51	2.56	145.51	1.16	2103890.45	2771555.93	N 36 46 54.024	W 107 40 4.217
1246.00	16.86	92.30	1228.68	163.85	1.79	163.85	0.63	2103889.71	2771574.27	N 36 46 54.017	W 107 40 3.991
1309.00	17.33	91.75	1288.90	182.35	1.14	182.35	0.79	2103889.09	2771592.77	N 36 46 54.010	W 107 40 3.764
1372.00	16.89	93.68	1349.11	200.87	0.27	200.87	1.14	2103888.25	2771611.28	N 36 46 54.001	W 107 40 3.536
1435.00	16.78	90.76	1409.41	219.09	-0.44	219.09	1.35	2103887.57	2771629.51	N 36 46 53.994	W 107 40 3.312
1498.00	16.91	90.73	1469.71	237.35	-0.68	237.35	0.21	2103887.37	2771647.76	N 36 46 53.992	W 107 40 3.068
1593.00	16.51	89.82	1560.69	264.66	-0.81	264.66	0.50	2103887.28	2771675.08	N 36 46 53.991	W 107 40 2.752
1687.00	17.38	87.86	1650.61	292.05	-0.25	292.05	1.11	2103887.90	2771702.46	N 36 46 53.996	W 107 40 2.416
1782.00	16.43	89.00	1741.51	319.66	0.52	319.66	1.06	2103888.71	2771730.07	N 36 46 54.004	W 107 40 2.076
1877.00	16.84	88.48	1832.53	346.85	1.12	346.85	0.46	2103889.35	2771757.25	N 36 46 54.010	W 107 40 1.742
1971.00	17.06	86.98	1922.45	374.23	2.21	374.23	0.52	2103890.49	2771784.63	N 36 46 54.021	W 107 40 1.405
2067.00	16.68	86.54	2014.32	402.04	3.78	402.04	0.42	2103892.11	2771812.44	N 36 46 54.036	W 107 40 1.063
2160.00	17.66	86.93	2103.17	429.45	5.34	429.45	1.06	2103893.72	2771839.84	N 36 46 54.052	W 107 40 0.726
2223.00	17.67	87.99	2163.20	448.55	6.19	448.55	0.51	2103894.60	2771858.94	N 36 46 54.060	W 107 40 0.492
2286.00	16.76	90.24	2223.38	467.19	6.48	467.19	1.79	2103894.93	2771877.58	N 36 46 54.063	W 107 40 0.263
2381.00	16.20	89.90	2314.47	494.14	6.45	494.14	0.60	2103894.94	2771904.52	N 36 46 54.063	W 107 39 59.931
2474.00	16.54	86.83	2403.71	520.33	7.20	520.33	1.00	2103895.74	2771930.71	N 36 46 54.070	W 107 39 59.609
2569.00	16.48	88.17	2494.79	547.30	8.38	547.30	0.41	2103896.96	2771957.68	N 36 46 54.082	W 107 39 59.278
2664.00	16.57	84.72	2585.87	574.26	10.06	574.26	1.04	2103898.69	2771984.63	N 36 46 54.098	W 107 39 58.946
2725.00	15.50	87.49	2644.49	591.06	11.22	591.06	2.16	2103899.87	2772001.43	N 36 46 54.110	W 107 39 58.740
2788.00	14.92	88.31	2705.29	607.58	11.82	607.58	0.98	2103900.51	2772017.95	N 36 46 54.116	W 107 39 58.537
2851.00	14.58	90.98	2766.21	623.62	11.93	623.62	1.21	2103900.64	2772033.98	N 36 46 54.117	W 107 39 58.340

2914.00	14.71	90.01	2827.16	639.54	11.79	639.54	0.44	2103900.53	2772049.91	N 36 46 54.115	W 107 39 58.144
2977.00	15.03	92.10	2888.06	655.71	11.49	655.71	0.99	2103900.26	2772066.07	N 36 46 54.112	W 107 39 57.945
3040.00	15.20	92.34	2948.88	672.12	10.85	672.12	0.29	2103899.65	2772082.48	N 36 46 54.106	W 107 39 57.744
3135.00	16.08	90.80	3040.36	697.72	10.16	697.72	1.02	2103899.00	2772108.08	N 36 46 54.099	W 107 39 57.429
3198.00	15.91	90.54	3100.92	715.08	9.96	715.08	0.29	2103898.83	2772125.44	N 36 46 54.097	W 107 39 57.215
3262.00	15.97	91.34	3162.46	732.65	9.67	732.65	0.36	2103898.57	2772143.01	N 36 46 54.094	W 107 39 56.999
3325.00	16.10	92.16	3223.01	750.05	9.14	750.05	0.41	2103898.07	2772160.40	N 36 46 54.089	W 107 39 56.786
3369.00	15.81	92.55	3265.31	762.13	8.64	762.13	0.70	2103897.59	2772172.49	N 36 46 54.084	W 107 39 56.637
3400.00	15.44	92.55	3295.17	770.47	8.27	770.47	1.19	2103897.24	2772180.83	N 36 46 54.080	W 107 39 56.535
3450.00	14.36	92.55	3343.48	783.32	7.70	783.32	2.15	2103896.69	2772193.67	N 36 46 54.075	W 107 39 56.377
3500.00	11.81	92.55	3392.18	794.63	7.19	794.63	5.10	2103896.20	2772204.98	N 36 46 54.070	W 107 39 56.238
3550.00	9.29	92.55	3441.33	803.78	6.79	803.78	5.04	2103895.81	2772214.13	N 36 46 54.066	W 107 39 56.125
3600.00	7.29	92.55	3490.81	810.98	6.47	810.98	4.00	2103895.50	2772221.34	N 36 46 54.063	W 107 39 56.037
3650.00	5.51	92.55	3540.49	816.55	6.22	816.55	3.57	2103895.26	2772226.90	N 36 46 54.060	W 107 39 55.968
3700.00	4.31	92.55	3590.31	820.82	6.03	820.82	2.39	2103895.08	2772231.18	N 36 46 54.058	W 107 39 55.916
3750.00	3.73	92.55	3640.19	824.32	5.87	824.32	1.16	2103894.93	2772234.68	N 36 46 54.057	W 107 39 55.873
3800.00	2.82	92.55	3690.10	827.18	5.74	827.18	1.83	2103894.81	2772237.53	N 36 46 54.055	W 107 39 55.838
3850.00	2.02	92.55	3740.06	829.28	5.65	829.28	1.59	2103894.72	2772239.64	N 36 46 54.055	W 107 39 55.812
3900.00	1.32	92.55	3790.04	830.74	5.59	830.74	1.40	2103894.66	2772241.10	N 36 46 54.054	W 107 39 55.794
3950.00	0.94	92.55	3840.03	831.73	5.54	831.73	0.75	2103894.61	2772242.08	N 36 46 54.053	W 107 39 55.782
4000.00	0.43	92.55	3890.02	832.32	5.52	832.32	1.03	2103894.59	2772242.68	N 36 46 54.053	W 107 39 55.774
4050.00	0.45	92.55	3940.02	832.70	5.50	832.70	0.04	2103894.57	2772243.06	N 36 46 54.053	W 107 39 55.770
4100.00	0.29	92.55	3990.02	833.02	5.48	833.02	0.32	2103894.56	2772243.38	N 36 46 54.053	W 107 39 55.766
4150.00	0.43	92.55	4040.02	833.34	5.47	833.34	0.28	2103894.54	2772243.69	N 36 46 54.053	W 107 39 55.762
4200.00	0.32	92.55	4090.02	833.66	5.46	833.66	0.22	2103894.53	2772244.02	N 36 46 54.053	W 107 39 55.758
4250.00	0.46	92.55	4140.02	834.00	5.44	834.00	0.28	2103894.52	2772244.36	N 36 46 54.052	W 107 39 55.754
4300.00	0.32	92.55	4190.02	834.34	5.43	834.34	0.28	2103894.50	2772244.69	N 36 46 54.052	W 107 39 55.750
4350.00	0.43	92.55	4240.02	834.66	5.41	834.66	0.22	2103894.49	2772245.02	N 36 46 54.052	W 107 39 55.746
4400.00	0.38	92.55	4290.01	835.02	5.40	835.02	0.09	2103894.47	2772245.37	N 36 46 54.052	W 107 39 55.741
4450.00	0.38	92.55	4340.01	835.35	5.38	835.35	0.00	2103894.46	2772245.71	N 36 46 54.052	W 107 39 55.737
4500.00	0.46	92.55	4390.01	835.72	5.36	835.72	0.15	2103894.44	2772246.07	N 36 46 54.052	W 107 39 55.733
4550.00	0.21	92.55	4440.01	836.01	5.35	836.01	0.50	2103894.43	2772246.37	N 36 46 54.052	W 107 39 55.729
4600.00	0.42	92.55	4490.01	836.28	5.34	836.28	0.41	2103894.42	2772246.64	N 36 46 54.051	W 107 39 55.726
4650.00	0.57	92.55	4540.01	836.71	5.32	836.71	0.30	2103894.40	2772247.07	N 36 46 54.051	W 107 39 55.720
4700.00	0.55	92.55	4590.01	837.20	5.30	837.20	0.04	2103894.38	2772247.55	N 36 46 54.051	W 107 39 55.714
4750.00	0.62	92.55	4640.00	837.70	5.28	837.70	0.15	2103894.36	2772248.06	N 36 46 54.051	W 107 39 55.708
4800.00	1.01	92.55	4690.00	838.41	5.24	838.41	0.77	2103894.33	2772248.77	N 36 46 54.051	W 107 39 55.699
4850.00	1.01	92.55	4739.99	839.29	5.20	839.29	0.00	2103894.29	2772249.65	N 36 46 54.050	W 107 39 55.689

Last SLB MWD Survey
Begin SLB Inclination Surveys

4900.00	1.08	92.55	4789.98	840.20	5.16	840.20	0.15	2103894.25	2772250.56	N 36 46 54.050	W 107 39 55.677
4950.00	1.21	92.55	4839.97	841.20	5.12	841.20	0.26	2103894.21	2772251.56	N 36 46 54.049	W 107 39 55.665
5000.00	1.38	92.55	4889.96	842.34	5.07	842.34	0.34	2103894.16	2772252.69	N 36 46 54.049	W 107 39 55.651
5050.00	1.31	92.55	4939.94	843.51	5.02	843.51	0.15	2103894.11	2772253.87	N 36 46 54.048	W 107 39 55.637
5100.00	1.31	92.55	4989.93	844.65	4.97	844.65	0.00	2103894.06	2772255.01	N 36 46 54.048	W 107 39 55.623
5150.00	1.33	92.55	5039.92	845.80	4.92	845.80	0.04	2103894.01	2772256.16	N 36 46 54.047	W 107 39 55.609
5200.00	1.09	92.55	5089.91	846.86	4.87	846.86	0.47	2103893.97	2772257.22	N 36 46 54.047	W 107 39 55.596
5250.00	1.13	92.55	5139.90	847.83	4.82	847.83	0.06	2103893.92	2772258.18	N 36 46 54.046	W 107 39 55.584
5300.00	1.24	92.55	5189.89	848.86	4.78	848.86	0.24	2103893.88	2772259.22	N 36 46 54.046	W 107 39 55.571
5350.00	1.19	92.55	5239.88	849.92	4.73	849.92	0.11	2103893.83	2772260.28	N 36 46 54.045	W 107 39 55.558
5400.00	1.24	92.55	5289.86	850.98	4.68	850.98	0.11	2103893.79	2772261.34	N 36 46 54.045	W 107 39 55.545
5450.00	1.44	92.55	5339.85	852.15	4.63	852.15	0.39	2103893.74	2772262.51	N 36 46 54.044	W 107 39 55.531
5500.00	1.36	92.55	5389.84	853.37	4.58	853.37	0.15	2103893.69	2772263.73	N 36 46 54.044	W 107 39 55.516
5550.00	1.44	92.55	5439.82	854.59	4.52	854.59	0.15	2103893.63	2772264.95	N 36 46 54.043	W 107 39 55.501
5600.00	1.56	92.55	5489.80	855.90	4.47	855.90	0.24	2103893.58	2772266.26	N 36 46 54.043	W 107 39 55.484
5650.00	1.65	92.55	5539.78	857.30	4.40	857.30	0.19	2103893.52	2772267.66	N 36 46 54.042	W 107 39 55.467
5700.00	1.64	92.55	5589.76	858.74	4.34	858.74	0.02	2103893.46	2772269.09	N 36 46 54.042	W 107 39 55.450
5750.00	1.98	92.55	5639.74	860.31	4.27	860.31	0.67	2103893.39	2772270.67	N 36 46 54.041	W 107 39 55.430
5800.00	1.98	92.55	5689.71	862.04	4.19	862.04	0.00	2103893.32	2772272.39	N 36 46 54.040	W 107 39 55.409
5850.00	1.79	92.55	5739.68	863.68	4.12	863.68	0.37	2103893.25	2772274.03	N 36 46 54.039	W 107 39 55.389
5900.00	1.54	92.55	5789.66	865.13	4.05	865.13	0.52	2103893.18	2772275.49	N 36 46 54.039	W 107 39 55.371
5950.00	1.62	92.55	5839.64	866.50	3.99	866.50	0.17	2103893.12	2772276.86	N 36 46 54.038	W 107 39 55.354
6000.00	1.50	92.55	5889.62	867.87	3.93	867.87	0.24	2103893.07	2772278.22	N 36 46 54.038	W 107 39 55.337
6050.00	1.56	92.55	5939.61	869.20	3.87	869.20	0.11	2103893.01	2772279.56	N 36 46 54.037	W 107 39 55.321
6100.00	1.95	92.55	5989.58	870.73	3.80	870.73	0.80	2103892.94	2772281.09	N 36 46 54.036	W 107 39 55.302
6150.00	2.21	92.55	6039.55	872.55	3.72	872.55	0.52	2103892.87	2772282.90	N 36 46 54.035	W 107 39 55.280
6200.00	2.23	92.55	6089.51	874.49	3.64	874.49	0.04	2103892.78	2772284.84	N 36 46 54.035	W 107 39 55.256
6250.00	1.84	92.55	6139.48	876.26	3.56	876.26	0.80	2103892.71	2772286.62	N 36 46 54.034	W 107 39 55.234
6300.00	1.54	92.55	6189.46	877.73	3.49	877.73	0.60	2103892.64	2772288.09	N 36 46 54.033	W 107 39 55.216
6350.00	1.14	92.55	6239.44	878.89	3.44	878.89	0.80	2103892.59	2772289.25	N 36 46 54.033	W 107 39 55.202
6400.00	0.93	92.55	6289.44	879.80	3.40	879.80	0.41	2103892.56	2772290.15	N 36 46 54.032	W 107 39 55.191
6450.00	0.73	92.55	6339.43	880.52	3.37	880.52	0.41	2103892.52	2772290.88	N 36 46 54.032	W 107 39 55.182
6500.00	0.68	92.55	6389.43	881.14	3.34	881.14	0.09	2103892.50	2772291.49	N 36 46 54.032	W 107 39 55.174
6550.00	0.41	92.55	6439.42	881.61	3.32	881.61	0.56	2103892.48	2772291.97	N 36 46 54.031	W 107 39 55.168
6600.00	0.42	92.55	6489.42	881.97	3.30	881.97	0.02	2103892.46	2772292.32	N 36 46 54.031	W 107 39 55.164
6650.00	0.35	92.55	6539.42	882.30	3.29	882.30	0.13	2103892.45	2772292.66	N 36 46 54.031	W 107 39 55.160
6700.00	0.25	92.55	6589.42	882.57	3.28	882.57	0.19	2103892.44	2772292.92	N 36 46 54.031	W 107 39 55.157

6750.00	0.25	92.55	6639.42	882.79	3.27	882.79	0.00	2103892.43	2772293.14	N 36 46 54.031	W 107 39 55.154
6800.00	0.25	92.55	6689.42	883.01	3.26	883.01	0.00	2103892.42	2772293.37	N 36 46 54.031	W 107 39 55.151
6850.00	0.25	92.55	6739.42	883.23	3.25	883.23	0.00	2103892.41	2772293.59	N 36 46 54.031	W 107 39 55.148
6900.00	0.28	92.55	6789.42	883.46	3.24	883.46	0.04	2103892.40	2772293.82	N 36 46 54.031	W 107 39 55.146
6950.00	0.19	92.55	6839.42	883.67	3.23	883.67	0.17	2103892.39	2772294.02	N 36 46 54.031	W 107 39 55.143
7000.00	0.35	92.55	6889.42	883.90	3.22	883.90	0.32	2103892.38	2772294.26	N 36 46 54.030	W 107 39 55.140
7050.00	0.59	92.55	6939.42	884.31	3.20	884.31	0.47	2103892.36	2772294.67	N 36 46 54.030	W 107 39 55.135
7100.00	0.29	92.55	6989.42	884.69	3.18	884.69	0.60	2103892.35	2772295.05	N 36 46 54.030	W 107 39 55.131
7150.00	0.32	92.55	7039.41	884.96	3.17	884.96	0.06	2103892.33	2772295.31	N 36 46 54.030	W 107 39 55.127
7200.00	0.35	92.55	7089.41	885.25	3.16	885.25	0.06	2103892.32	2772295.61	N 36 46 54.030	W 107 39 55.124
7250.00	0.20	92.55	7139.41	885.49	3.15	885.49	0.30	2103892.31	2772295.85	N 36 46 54.030	W 107 39 55.121
7300.00	0.11	92.55	7189.41	885.63	3.14	885.63	0.17	2103892.31	2772295.98	N 36 46 54.030	W 107 39 55.119
7350.00	0.32	92.55	7239.41	885.82	3.13	885.82	0.41	2103892.30	2772296.17	N 36 46 54.030	W 107 39 55.117
7400.00	0.21	92.55	7289.41	886.05	3.12	886.05	0.22	2103892.29	2772296.40	N 36 46 54.030	W 107 39 55.114
7450.00	0.37	92.55	7339.41	886.30	3.11	886.30	0.32	2103892.28	2772296.66	N 36 46 54.029	W 107 39 55.111
7496.00	0.37	92.55	7385.41	886.60	3.10	886.60	0.01	2103892.26	2772296.96	N 36 46 54.029	W 107 39 55.107

Survey Error Model: Topographic 3-D 95.00% Confidence 2.7955 sigma

Surveying Programme:

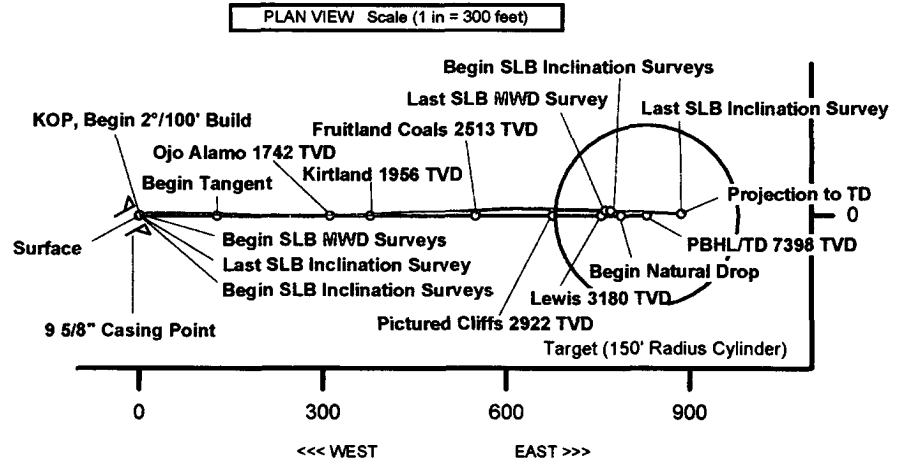
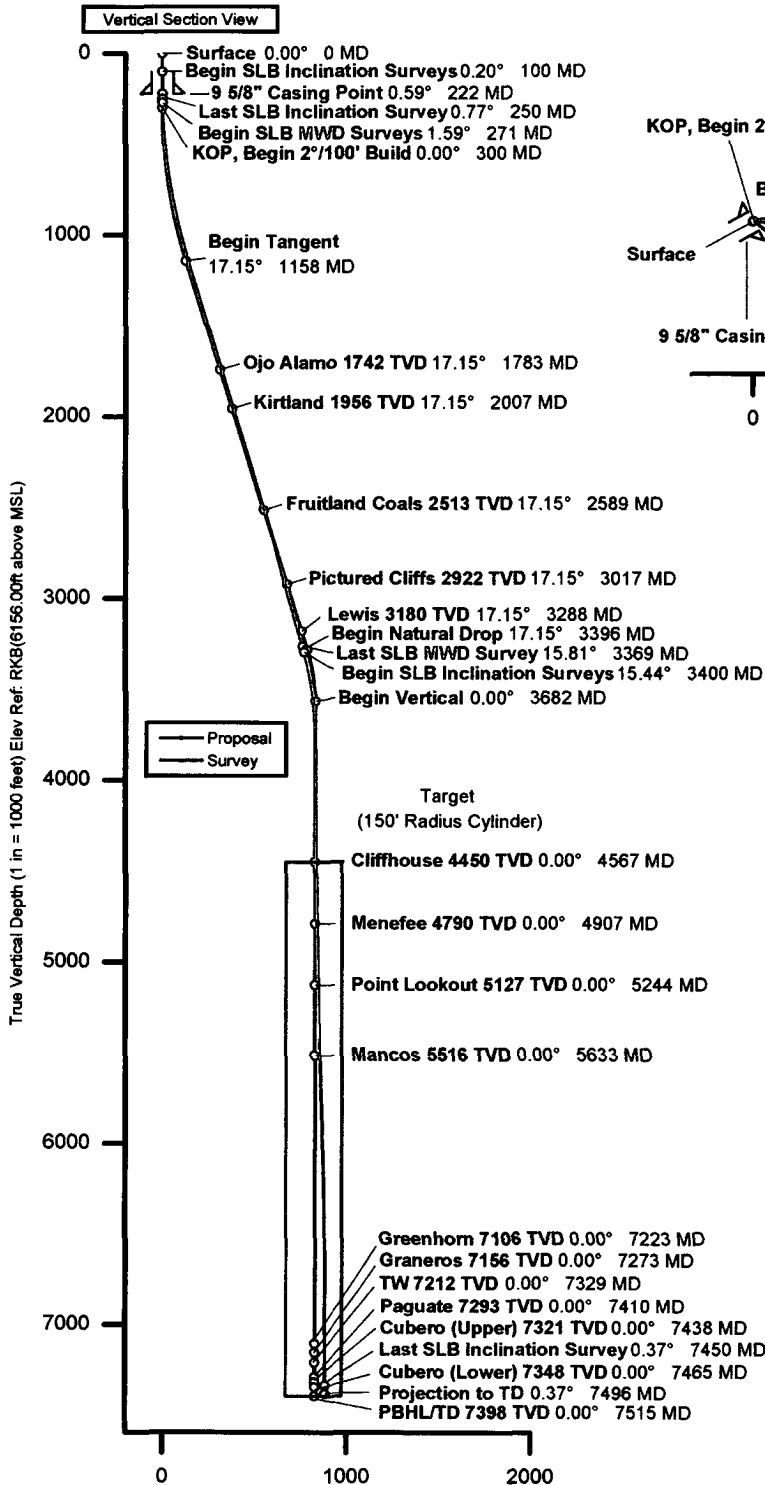
MD From (ft)	MD To (ft)	EOU Freq	Survey Tool Type
0.00	100.00	Act-Stns	Blind Drilling
100.00	271.00	Act-Stns	Inclination Only
271.00	3369.00	Act-Stns	MWD1
3369.00	7450.00	Act-Stns	Inclination Only
7450.00	7496.00	Act-Stns	Blind Drilling

Last SLB Inclination Survey

Projection to TD



WELL	FIELD	RIG
Gartner A 5M	San Juan County, New Mexico	Aztec 184
Magnetic Parameters Model: BGGM 2002 Dip: 63.706° Mag Dec: 10.859° Date: March 04, 2003 FS: 51521.6 nT	Surface Location Lat: N36 46 54.000 Lon: W107 40 6.000 North: 2103887.64 ftUS East: 2771410.44 ftUS Grid Conv: 0.0988° Scale Fact: 0.9999	Plan# : Rev0 jok 26-Jul-02 Slot : Gartner A 5M Elev Ref : RKB(6156.00ft above MSL) Date Drawn : 04:02:25PM 04-Mar-2003



True North
 Tot Corr (E 10.86°)
 Mag Dec (E 10.86°)

Vertical Section Departure at 90.00 deg from (0.0, 0.0). (1 in = 1000 feet)

Quality Control
 Date Drawn: 04-Mar-2003
 Drawn by: James Wimberg
 Checked by: John O'Keefe
 Client OK: