



1724-B Townhurst Dr, Houston, Tx 77043
(713) 827-8302
www.nevisenergy.com

Job Number: 205-eee
Company: BHEP
Lease/Well: Many Canyons 30-04-24 #34H
Location: Rio Arriba Co., NM
Rig Name: ☐
RKB: ☐
G.L. or M.S.L.: ☐

State/Country: NM/USA
Declination: 10.22115
Grid: -0.32
File name: N:\BLACKH-1\2006\61221M-2\30042434.SVY
Date/Time: 20-Oct-06 / 12:20
Curve Name: Actual

30-039-30016

Surface: 2500/S 1100/E Md TVd
Origin - BH1 2428/S 1444/E 4225 3881
End - BH2 2042/S 1210/W 6879 3857

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 261.60
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

HOLD C104 FOR NSL

(App rec'd in Santa Fe)
12/14/06

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
Tie-In									
3810.00	1.12	60.70	3809.70	-2.88	-28.40	7.10	29.27	165.96	.00
First Nevis MWD Survey									
3848.00	20.70	247.70	3846.92	3.37	-30.80	1.14	30.82	177.88	57.40
3879.00	40.40	244.60	3873.49	18.45	-37.25	-13.15	39.50	199.44	63.73
3910.00	58.20	254.20	3893.65	41.33	-45.22	-35.10	57.24	217.82	61.91
3941.00	74.60	265.10	3906.05	69.58	-50.13	-62.93	80.45	231.46	61.85
3975.00	91.70	266.40	3910.09	103.12	-52.61	-96.47	109.88	241.39	50.44
4006.00	98.10	266.90	3907.44	133.87	-54.42	-127.29	138.43	246.85	20.71
4038.00	98.10	266.20	3902.93	165.43	-56.32	-158.91	168.60	250.48	2.17
4069.00	97.20	265.70	3898.81	196.07	-58.49	-189.56	198.38	252.85	3.31
4100.00	96.70	265.70	3895.05	226.76	-60.80	-220.24	228.48	254.57	1.61
4132.00	96.70	265.10	3891.32	258.47	-63.35	-251.92	259.76	255.88	1.86
4163.00	96.90	264.90	3887.65	289.20	-66.03	-282.58	290.20	256.85	.91
4194.00	96.70	264.70	3883.98	319.93	-68.82	-313.24	320.71	257.61	.91
4225.00	93.00	265.10	3881.36	350.77	-71.57	-344.00	351.37	258.25	12.00
4256.00	89.80	264.90	3880.60	381.70	-74.27	-374.87	382.76	258.79	10.34
4288.00	89.70	264.50	3880.74	413.65	-77.22	-406.73	414.00	259.25	1.29
4319.00	89.90	264.20	3880.85	444.62	-80.28	-437.58	444.88	259.60	1.16
4351.00	90.10	264.20	3880.85	476.58	-83.51	-469.42	476.79	259.91	.62
4382.00	90.10	263.80	3880.80	507.55	-86.75	-500.25	507.71	260.16	1.29
4413.00	90.10	263.60	3880.74	538.53	-90.15	-531.06	538.66	260.37	.65
4445.00	91.50	264.50	3880.30	570.50	-93.47	-562.88	570.59	260.57	5.20

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4476.00	91.80	264.30	3879.40	601.45	-96.49	-593.72	601.51	260.77	1.16
4506.00	91.70	264.00	3878.49	631.41	-99.55	-623.55	631.45	260.93	1.05
4538.00	92.10	263.80	3877.43	663.36	-102.95	-655.35	663.39	261.07	1.40
4569.00	92.40	263.40	3876.21	694.32	-106.40	-686.14	694.34	261.19	1.61
4600.00	93.20	263.40	3874.69	725.27	-109.96	-716.90	725.28	261.28	2.58
4632.00	91.50	262.80	3873.38	757.23	-113.80	-748.64	757.24	261.36	5.63
4663.00	92.20	262.40	3872.38	788.21	-117.79	-779.36	788.21	261.41	2.60
4694.00	93.40	262.50	3870.87	819.17	-121.86	-810.06	819.17	261.44	3.88
4725.00	91.60	262.10	3869.51	850.13	-126.01	-840.74	850.14	261.48	5.95
4757.00	91.80	262.10	3868.57	882.12	-130.40	-872.43	882.12	261.50	.62
4788.00	91.90	261.90	3867.56	913.10	-134.72	-903.11	913.10	261.52	.72
4819.00	92.00	261.70	3866.51	944.08	-139.14	-933.77	944.08	261.53	.72
4850.00	91.70	261.40	3865.51	975.07	-143.69	-964.42	975.07	261.53	1.37
4882.00	90.70	261.70	3864.84	1007.06	-148.39	-996.07	1007.06	261.53	3.26
4914.00	91.20	261.70	3864.31	1039.05	-153.01	-1027.73	1039.06	261.53	1.56
4945.00	92.30	261.70	3863.36	1070.04	-157.48	-1058.39	1070.04	261.54	3.55
4976.00	93.40	261.00	3861.82	1101.00	-162.14	-1089.00	1101.00	261.53	4.20
5007.00	92.10	261.50	3860.33	1131.96	-166.85	-1119.60	1131.96	261.52	4.49
5039.00	91.10	261.00	3859.44	1163.95	-171.71	-1151.22	1163.95	261.52	3.49
5070.00	90.20	262.10	3859.09	1194.95	-176.27	-1181.88	1194.95	261.52	4.58
5101.00	90.00	261.60	3859.03	1225.95	-180.66	-1212.56	1225.95	261.53	1.74
5132.00	90.20	261.60	3858.98	1256.95	-185.19	-1243.23	1256.95	261.53	.65
5164.00	90.30	261.40	3858.84	1288.95	-189.92	-1274.88	1288.95	261.53	.70
5195.00	90.30	261.10	3858.68	1319.95	-194.64	-1305.52	1319.95	261.52	.97
5226.00	90.50	261.10	3858.46	1350.94	-199.43	-1336.14	1350.94	261.51	.65
5258.00	90.50	261.10	3858.18	1382.94	-204.38	-1367.76	1382.94	261.50	.00
5289.00	88.70	265.50	3858.40	1413.92	-208.00	-1398.54	1413.92	261.54	15.33
5320.00	88.70	265.50	3859.10	1444.84	-210.43	-1429.43	1444.84	261.63	.00
5352.00	89.50	259.90	3859.60	1476.81	-214.50	-1461.16	1476.82	261.65	17.68
5384.00	89.90	259.70	3859.77	1508.80	-220.16	-1492.65	1508.80	261.61	1.40
5415.00	90.80	259.40	3859.58	1539.78	-225.79	-1523.13	1539.78	261.57	3.06
5446.00	90.80	259.40	3859.15	1570.75	-231.49	-1553.60	1570.75	261.53	.00
5477.00	91.50	259.10	3858.53	1601.72	-237.27	-1584.05	1601.72	261.48	2.46
5508.00	92.40	258.70	3857.47	1632.67	-243.23	-1614.45	1632.67	261.43	3.18
5540.00	92.00	259.50	3856.24	1664.61	-249.28	-1645.85	1664.62	261.39	2.79
5571.00	92.50	259.20	3855.03	1695.56	-255.00	-1676.30	1695.58	261.35	1.88
5602.00	91.40	259.60	3853.97	1726.52	-260.70	-1706.75	1726.54	261.32	3.78
5633.00	92.00	259.70	3853.05	1757.49	-266.27	-1737.23	1757.52	261.29	1.96
5665.00	90.80	260.60	3852.27	1789.47	-271.74	-1768.75	1789.50	261.27	4.69
5706.00	91.50	260.90	3851.45	1830.46	-278.33	-1809.21	1830.49	261.25	1.86
5738.00	91.50	260.70	3850.61	1862.44	-283.45	-1840.78	1862.48	261.25	.62
5769.00	90.10	260.40	3850.18	1893.43	-288.53	-1871.36	1893.47	261.23	4.62
5800.00	90.00	260.40	3850.15	1924.43	-293.70	-1901.93	1924.47	261.22	.32
5832.00	90.00	262.20	3850.15	1956.43	-298.54	-1933.56	1956.47	261.22	5.63
5863.00	90.30	262.20	3850.07	1987.42	-302.75	-1964.27	1987.46	261.24	.97

RCVD NOV17'06
 OIL CONS. DIV.
 DIST. 3

* Measured Depth FT	* Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT		CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
5894.00	90.80	261.90	3849.77	2018.42	-307.04	-1994.97	2018.46	261.25	1.88
5926.00	90.30	262.60	3849.47	2050.42	-311.35	-2026.68	2050.45	261.27	2.69
5957.00	88.60	261.70	3849.76	2081.41	-315.59	-2057.38	2081.45	261.28	6.20
5988.00	88.20	261.10	3850.63	2112.40	-320.22	-2088.02	2112.43	261.28	2.33
6019.00	88.10	261.40	3851.63	2143.38	-324.94	-2118.64	2143.42	261.28	1.02
6051.00	87.60	261.10	3852.83	2175.36	-329.80	-2150.25	2175.39	261.28	1.82
6082.00	87.60	260.90	3854.13	2206.33	-334.64	-2180.84	2206.37	261.28	.64
6113.00	87.00	260.70	3855.59	2237.29	-339.60	-2211.41	2237.33	261.27	2.04
6144.00	84.80	260.30	3857.80	2268.21	-344.70	-2241.90	2268.25	261.26	7.21
6176.00	86.20	260.70	3860.32	2300.10	-349.96	-2273.37	2300.15	261.25	4.55
6207.00	86.10	261.60	3862.40	2331.03	-354.72	-2303.93	2331.07	261.25	2.91
6239.00	91.60	261.90	3863.04	2363.01	-359.31	-2335.58	2363.05	261.25	17.21
6270.00	92.70	262.70	3861.88	2393.99	-363.46	-2366.28	2394.03	261.27	4.39
6301.00	92.10	262.70	3860.58	2424.95	-367.40	-2397.00	2424.99	261.29	1.94
6333.00	91.90	262.10	3859.46	2456.93	-371.63	-2428.70	2456.96	261.30	1.98
6364.00	91.90	261.70	3858.43	2487.91	-375.99	-2459.37	2487.95	261.31	1.29
6394.00	91.70	261.90	3857.49	2517.90	-380.27	-2489.05	2517.93	261.31	.94
6426.00	91.80	261.90	3856.51	2549.88	-384.78	-2520.72	2549.91	261.32	.31
6457.00	91.70	261.60	3855.57	2580.87	-389.22	-2551.38	2580.90	261.33	1.02
6488.00	91.40	261.10	3854.73	2611.86	-393.88	-2582.02	2611.89	261.33	1.88
6520.00	90.20	260.50	3854.28	2643.85	-399.00	-2613.60	2643.88	261.32	4.19
6551.00	89.80	260.20	3854.28	2674.84	-404.19	-2644.16	2674.88	261.31	1.61
6582.00	89.60	260.20	3854.44	2705.83	-409.47	-2674.71	2705.87	261.30	.65
6613.00	89.90	260.60	3854.58	2736.83	-414.64	-2705.27	2736.87	261.29	1.61
6645.00	90.00	260.60	3854.61	2768.82	-419.87	-2736.85	2768.86	261.28	.31
6676.00	90.20	260.90	3854.55	2799.82	-424.85	-2767.44	2799.86	261.27	1.16
6707.00	90.10	261.30	3854.47	2830.82	-429.65	-2798.07	2830.86	261.27	1.33
6738.00	89.80	260.70	3854.50	2861.81	-434.50	-2828.69	2861.86	261.27	2.16
6770.00	89.90	260.60	3854.58	2893.81	-439.69	-2860.26	2893.86	261.26	.44
6802.00	89.90	260.50	3854.64	2925.80	-444.95	-2891.83	2925.86	261.25	.31

Last Nevis MWD Survey									
6833.00	93.30	260.50	3853.77	2956.78	-450.06	-2922.39	2956.84	261.24	10.97
TD Projected									
6879.00	93.30	260.50	3851.12	3002.70	-457.64	-2967.68	3002.76	261.23	.00

NSL #34
 2500 FSL 1100 FEL
 -458 2968
 2042 FSL (2638+2640)
 1210' FWL

Many Canyons
 30-04-24 #34
 API #30-039-30016