

Chisholm Gazelle 32 State Com 1BS 4H MWD 0' to 13690' Survey



Geodetic Report

(Def Survey)

Report Date: September 16, 2019 - 02:32 PM
 Client: Chisholm
 Field: NM Lea County (NAD 83)
 Structure / Slot: Chisholm Gazelle 32 State Com 1BS 4H / New Slot
 Well: Chisholm Gazelle 32 State Com 1BS 4H
 Borehole: Chisholm Gazelle 32 State Com 1BS 4H
 UWI / API#: Unknown / Unknown
 Survey Name: Chisholm Gazelle 32 State Com 1BS 4H MWD 0' to 13690'
 Survey Date: August 19, 2019
 Tool / AHD / DDI / ERD Ratio: 204.525' / 5709.220' / 6.253' / 0.640
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 42' 38.1698" W 103° 41' 22.4200"
 Location Grid WUE YXZ: N 622950.900 RUS, E 739345.900 RUS
 CRS Grid Convergence Angle: 0.3478°
 Grid Scale Factor: 0.99985399
 Version / Patch: 2.10.780.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 179.560° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3791.000 ft above MSL
 Seabed / Ground Elevation: 3759.000 ft above MSL
 Magnetic Declination: 8.749°
 Total Gravity Field Strength: 998.5103mgm (9.80685 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48193.202 nT
 Magnetic Dip Angle: 60.850°
 Declination Date: August 19, 2019
 Magnetic Declination Model: GIDM 2019
 North Reference: Grid North
 Grid Convergence Used: 0.3478°
 Total Corr Mag North-Grid: 6.4011°
 North: Well Head
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)
SHL	0.00	0.00	173.71	0.00	0.00	0.00	0.00	N/A	622950.90	739345.90	N 32° 42' 38.17" W 103° 41' 22.42"		0.00	0.00
	173.00	0.30	1.05	173.00	-0.45	0.45	0.01	0.17	622951.35	739345.91	N 32° 42' 39.17" W 103° 41' 22.42"		0.45	1.05
	267.00	0.58	36.84	267.00	-1.06	1.07	0.29	0.39	622951.97	739346.19	N 32° 42' 39.18" W 103° 41' 22.42"		1.10	15.12
	361.00	0.45	357.42	360.89	-1.80	1.80	0.55	0.38	622952.70	739346.45	N 32° 42' 39.19" W 103° 41' 22.41"		1.88	16.88
	457.00	0.46	10.72	456.89	-2.55	2.56	0.60	0.11	622953.46	739346.50	N 32° 42' 39.20" W 103° 41' 22.41"		2.63	13.24
	551.00	0.29	358.49	550.69	-3.18	3.17	0.68	0.20	622954.07	739346.56	N 32° 42' 39.20" W 103° 41' 22.41"		3.23	11.73
	645.00	1.37	62.23	644.68	-3.91	3.93	1.64	1.36	622954.83	739347.54	N 32° 42' 39.21" W 103° 41' 22.40"		4.25	22.63
	740.00	1.40	58.47	739.95	-5.04	5.08	3.63	0.10	622955.98	739348.53	N 32° 42' 39.22" W 103° 41' 22.38"		6.23	35.65
	815.00	1.19	58.28	814.93	-5.95	5.95	5.07	0.28	622956.85	739350.97	N 32° 42' 39.23" W 103° 41' 22.38"		7.82	40.47
	910.00	1.20	62.82	909.91	-6.87	6.93	6.80	0.10	622957.62	739352.70	N 32° 42' 39.24" W 103° 41' 22.34"		9.70	44.47
	1005.00	1.07	45.12	1004.69	-7.94	8.01	8.31	0.39	622958.90	739354.21	N 32° 42' 39.25" W 103° 41' 22.32"		11.54	48.08
	1100.00	0.81	48.19	1099.88	-8.91	8.98	9.31	0.48	622959.88	739355.21	N 32° 42' 39.26" W 103° 41' 22.31"		12.83	46.02
	1194.00	0.45	334.88	1193.88	-9.59	9.66	9.51	0.67	622960.56	739355.41	N 32° 42' 39.27" W 103° 41' 22.31"		13.56	44.55
	1289.00	0.51	357.49	1288.88	-10.35	10.42	9.33	0.21	622961.32	739355.23	N 32° 42' 39.27" W 103° 41' 22.31"		13.99	41.84
	1372.00	0.68	358.25	1371.87	-11.20	11.27	9.30	0.18	622962.17	739355.20	N 32° 42' 39.28" W 103° 41' 22.31"		14.61	39.54
	1478.00	1.16	6.45	1477.88	-12.87	12.95	9.40	0.49	622963.84	739355.30	N 32° 42' 39.30" W 103° 41' 22.31"		16.00	38.00
	1573.00	1.18	37.02	1572.84	-14.60	14.68	10.10	0.65	622965.58	739356.00	N 32° 42' 39.31" W 103° 41' 22.30"		17.82	34.53
	1668.00	1.86	60.16	1667.81	-16.14	16.23	12.03	0.95	622967.13	739357.93	N 32° 42' 39.33" W 103° 41' 22.28"		20.20	36.54
	1763.00	2.94	76.53	1762.72	-17.44	17.56	15.73	1.34	622968.66	739361.63	N 32° 42' 39.34" W 103° 41' 22.23"		23.58	41.85
	1858.00	3.87	74.65	1857.55	-18.82	18.98	21.20	0.99	622969.88	739367.09	N 32° 42' 39.36" W 103° 41' 22.17"		28.45	48.15
	1953.00	4.49	81.40	1952.30	-20.17	20.39	27.96	0.83	622971.28	739373.86	N 32° 42' 39.37" W 103° 41' 22.09"		34.61	53.91
	2048.00	4.96	85.94	2046.98	-20.98	21.23	35.74	0.83	622972.13	739381.64	N 32° 42' 39.38" W 103° 41' 22.00"		41.57	59.28
	2142.00	6.16	91.29	2140.53	-21.06	21.41	44.83	1.39	622972.31	739390.73	N 32° 42' 39.38" W 103° 41' 21.89"		49.68	64.46
	2237.00	6.56	91.74	2234.95	-20.70	21.13	55.35	0.42	622972.03	739401.25	N 32° 42' 39.38" W 103° 41' 21.77"		58.25	69.11
	2332.00	6.97	89.91	2329.29	-20.48	20.97	68.54	0.49	622971.87	739412.44	N 32° 42' 39.37" W 103° 41' 21.64"		69.77	72.51
	2427.00	7.27	88.28	2423.56	-20.56	21.16	78.31	0.38	622972.06	739424.21	N 32° 42' 39.37" W 103° 41' 21.50"		81.12	74.88
	2520.00	7.49	85.86	2515.78	-21.08	21.78	90.24	0.41	622972.87	739436.14	N 32° 42' 39.38" W 103° 41' 21.36"		92.83	76.43
	2615.00	7.66	84.33	2609.98	-22.08	22.85	102.72	0.28	622973.75	739448.61	N 32° 42' 39.39" W 103° 41' 21.22"		105.23	77.48
	2710.00	7.78	82.87	2704.09	-22.38	24.27	115.40	0.24	622975.17	739461.29	N 32° 42' 39.40" W 103° 41' 21.07"		117.92	78.12
	2805.00	7.77	81.24	2798.22	-25.06	26.05	128.12	0.23	622976.95	739474.02	N 32° 42' 39.42" W 103° 41' 20.92"		130.75	78.51
	2898.00	7.23	79.33	2890.43	-27.01	28.09	140.09	0.64	622978.69	739485.98	N 32° 42' 39.44" W 103° 41' 20.78"		142.88	78.66
	2992.00	6.48	78.33	2983.75	-29.10	30.26	151.10	0.81	622981.16	739496.99	N 32° 42' 39.46" W 103° 41' 20.65"		154.10	78.88
	3087.00	5.95	76.73	3078.18	-31.23	32.47	161.14	0.59	622983.37	739507.03	N 32° 42' 39.48" W 103° 41' 20.53"		164.38	78.61
	3182.00	5.78	75.58	3172.70	-33.48	34.79	170.58	0.22	622985.69	739516.46	N 32° 42' 39.50" W 103° 41' 20.42"		174.08	78.47
	3278.00	5.39	76.26	3268.24	-35.69	37.07	179.63	0.41	622987.97	739525.52	N 32° 42' 39.53" W 103° 41' 20.32"		183.41	78.34
	3372.00	5.42	83.61	3361.82	-37.16	38.61	188.33	0.74	622989.51	739534.22	N 32° 42' 39.54" W 103° 41' 20.21"		192.24	78.41
	3467.00	5.41	85.76	3456.40	-37.92	39.44	197.25	0.21	622990.34	739543.14	N 32° 42' 39.55" W 103° 41' 20.11"		201.16	78.69
	3561.00	5.24	83.57	3550.00	-38.67	40.25	205.94	0.28	622991.15	739551.83	N 32° 42' 39.56" W 103° 41' 20.01"		209.83	78.94
	3656.00	5.05	83.55	3644.61	-39.58	41.20	214.40	0.20	622992.10	739560.29	N 32° 42' 39.56" W 103° 41' 19.91"		218.33	79.12
	3751.00	4.90	82.00	3739.25	-40.53	42.24	222.57	0.21	622993.14	739568.46	N 32° 42' 39.57" W 103° 41' 19.81"		226.55	79.25
	3841.00	4.87	80.42	3834.91	-41.72	43.48	230.65	0.14	622994.39	739576.54	N 32° 42' 39.59" W 103° 41' 19.72"		234.72	79.32
	3941.00	4.67	79.54	3928.58	-44.95	44.95	238.01	0.23	622995.54	739584.24	N 32° 42' 39.60" W 103° 41' 19.53"		243.34	79.37
	4037.00	4.44	79.01	4024.28	-44.37	46.26	245.84	0.24	622997.16	739591.73	N 32° 42' 39.61" W 103° 41' 19.54"		250.18	79.34
	4132.00	4.78	79.90	4118.97	-45.71	47.66	253.35	0.37	622998.56	739598.24	N 32° 42' 39.63" W 103° 41' 19.45"		257.79	79.35
	4225.00	4.72	77.90	4211.65	-47.14	49.14	260.90	0.19	623000.04	739606.79	N 32° 42' 39.64" W 103° 41' 19.36"		265.49	79.33
	4319.00	4.82	76.93	4305.34	-48.75	50.81	268.37	0.14	623001.71	739614.26	N 32° 42' 39.66" W 103° 41' 19.28"		273.14	79.28
	4412.00	4.41	76.18	4388.05	-50.39	52.51	275.49	0.24	623003.41	739621.38	N 32° 42' 39.67" W 103° 41' 19.19"		280.45	79.21
	4506.00	4.24	76.08	4491.78	-51.89	54.03	282.41	0.31	623004.93	739628.30	N 32° 42' 39.68" W 103° 41' 19.11"		287.54	79.17
	4601.00	4.42	84.60	4586.51	-52.82	55.04	289.51	0.48	623005.94	739635.39	N 32° 42' 39.70" W 103° 41' 19.03"		294.69	79.24
	4696.00	4.32	86.78	4681.24	-53.31	55.59	296.72	0.20	623006.49	739642.61	N 32° 42' 39.70" W 103° 41' 18.94"		301.89	79.39
	4790.00	4.22	83.87	4774.97	-53.83	56.17	303.70	0.27	623007.07	739649.58	N 32° 42' 39.71" W 103° 41' 18.88"		308.85	79.52
	4886.00	5.80	88.37	4870.60	-54.30	56.97	312.06	1.70	623007.59	739657.84	N 32° 42' 39.71" W 103° 41' 18.78"		317.16	79.70
	4980.00	6.34	88.50	4964.08	-54.49	56.97	321.99	0.57	623007.88	739667.88	N 32° 42' 39.71" W 103° 41' 18.65"		326.99	79.97
	5075.00	6.06	87.51	5058.52	-54.72	57.32	332.72	0.32	623008.27	739676.13	N 32° 42' 39.72" W 103° 41' 18.53"		337.76	80.21
	5170.00	5.81	87.00	5153.01	-55.16	57.79	342.06	0.27	623008.69	739687.94	N 32° 42' 39.72" W 103° 41' 18.41"		348.90	80.41
	5263.00	5.76	86.92	5245.54	-55.59	58.29	351.42	0.05	623009.19	739697.30	N 32° 42' 39.73" W 103° 41' 18.30"		358.22	80.58
	5359.00	5.23	86.14	5341.10	-56.07	58.84	360.59	0.58	623009.74	739706.48	N 32° 42' 39.73" W 103° 41' 18.20"		365.36	80.73
	5453.00	4.92	85.93	5434.73	-56.58	59.42	368.89	0.33	623010.31	739714.77	N 32° 42' 39.74" W 103° 41' 18.10"		373.64	80.85
	5547.00	4.87	83.57	5528.40	-57.24	60.13	376.71	0.34	623011.03	739722.58	N 32° 42' 39.74" W 103° 41' 18.01"		381.48	80.93
	5643.00	4.58	81.58	5578.24	-57.71	60.83	380.55	0.38	623011.53	739728.43	N 32° 42' 39.75" W 103° 41' 17.98"		385.35	80.95
	5699.00	4.82	79.15	5679.89	-59.07	62.06	388.95	0.30	623012.96	739734.83	N 32° 42' 39.76" W 103° 41' 17.86"		393.87	80.83
	5794.00	4.59	78.88	5774.57	-60.50	63.55	398.60	0.24	623014.44	739742.48	N 32° 42' 39.77" W 103° 41' 17.77"		401.66	80.90
	5889.00	5.82	82.89	5869.20	-61.78	64.87	404.94	1.14	623015.82	739750.82	N 32° 42' 39.78" W 103° 41' 17.66			

Comments	MD (ft)	Incl (°)	Azlm Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')	Closure (ft)	Closure Azimuth (°)
	8598.00	38.86	193.70	8540.88	55.67	-52.34	434.55	12.33	822868.57	739780.43	N 32 42 38.63 W 103 41 17.34		437.69	98.67
	8646.00	44.77	199.88	8578.64	88.94	-83.65	428.08	13.40	822867.25	739773.96	N 32 42 38.32 W 103 41 17.42		438.18	101.06
	8693.00	49.30	187.02	8608.67	120.90	-117.68	423.08	10.62	822833.25	739768.94	N 32 42 37.98 W 103 41 17.48		439.12	105.54
	8740.00	52.79	181.78	8638.23	157.30	-154.08	420.31	11.44	822786.83	739768.18	N 32 42 37.62 W 103 41 17.51		447.68	110.13
	8787.00	56.28	178.97	8665.50	195.55	-192.33	420.78	11.13	822756.58	739768.64	N 32 42 37.24 W 103 41 17.51		482.64	114.58
	8835.00	59.82	171.35	8690.88	236.09	-232.83	424.95	12.50	822718.08	739770.83	N 32 42 36.84 W 103 41 17.48		484.55	118.72
	8883.00	62.39	167.24	8714.04	277.44	-274.12	432.77	9.09	822678.79	739778.65	N 32 42 36.43 W 103 41 17.37		512.28	122.35
	8930.00	65.08	167.44	8734.84	318.63	-315.24	442.01	5.74	822635.67	739787.89	N 32 42 36.02 W 103 41 17.27		542.91	125.50
	8978.00	67.36	169.07	8754.19	381.70	-358.25	450.94	5.68	822592.67	739796.82	N 32 42 35.60 W 103 41 17.17		575.92	128.47
	9026.00	70.01	170.89	8771.84	405.79	-402.26	458.71	6.55	822548.84	739804.59	N 32 42 35.18 W 103 41 17.08		610.12	131.25
	9073.00	72.81	172.91	8788.82	449.93	-448.37	464.98	7.22	822504.55	739810.88	N 32 42 34.73 W 103 41 17.01		644.56	133.83
	9120.00	75.57	173.85	8799.43	494.88	-491.28	470.27	6.08	822459.64	739818.15	N 32 42 34.28 W 103 41 16.95		680.08	136.25
	9168.00	78.11	174.73	8809.95	541.50	-537.86	475.01	7.89	822413.06	739820.89	N 32 42 33.82 W 103 41 16.90		717.59	138.55
	9216.00	81.73	178.35	8817.93	588.70	-585.05	478.89	6.39	822385.88	739824.56	N 32 42 33.35 W 103 41 16.88		755.92	140.71
	9264.00	83.99	178.37	8823.90	636.25	-632.57	481.71	4.71	822318.38	739827.59	N 32 42 32.88 W 103 41 16.83		795.11	142.71
	9311.00	85.62	178.01	8828.15	682.98	-679.28	484.82	3.55	822271.66	739830.70	N 32 42 32.42 W 103 41 16.79		834.55	144.48
	9359.00	88.75	175.31	8831.35	730.78	-727.03	488.45	2.77	822223.90	739834.32	N 32 42 31.95 W 103 41 16.76		875.87	146.11
	9455.00	89.21	174.40	8834.73	826.37	-822.58	497.05	2.73	822128.38	739842.93	N 32 42 31.00 W 103 41 16.68		981.09	148.88
	9497.00	89.48	174.77	8835.21	868.21	-864.39	501.01	1.98	822086.56	739848.89	N 32 42 30.59 W 103 41 16.62		989.09	149.90
	9592.00	89.14	174.99	8836.38	962.88	-959.00	509.49	0.43	821991.05	739855.37	N 32 42 29.65 W 103 41 16.53		1085.94	152.02
	9686.00	89.00	174.72	8837.88	1058.58	-1052.61	517.82	0.32	821888.34	739863.79	N 32 42 28.72 W 103 41 16.43		1173.13	153.80
	9780.00	88.91	174.13	8839.60	1150.18	-1148.15	527.05	0.63	821804.81	739872.92	N 32 42 27.80 W 103 41 16.33		1281.52	155.30
	9875.00	88.85	175.55	8841.45	1244.82	-1240.74	535.59	1.50	821710.22	739881.46	N 32 42 26.88 W 103 41 16.24		1351.41	156.85
	9973.00	88.91	174.83	8843.37	1342.51	-1338.38	543.81	0.74	821612.59	739889.68	N 32 42 25.90 W 103 41 16.15		1444.64	157.89
	10068.00	87.94	173.88	8845.86	1437.07	-1432.86	553.33	1.60	821518.11	739899.20	N 32 42 24.98 W 103 41 16.05		1535.99	158.88
	10162.00	87.77	177.97	8848.50	1530.78	-1526.52	560.18	4.59	821424.45	739906.06	N 32 42 24.03 W 103 41 15.97		1626.06	159.85
	10258.00	86.14	178.25	8852.85	1624.69	-1620.41	563.28	0.49	821330.57	739909.15	N 32 42 23.10 W 103 41 15.94		1715.52	160.83
	10352.00	87.94	177.75	8856.14	1720.60	-1716.30	568.63	0.58	821234.69	739912.50	N 32 42 22.15 W 103 41 15.91		1807.41	161.73
	10447.00	88.34	177.88	8859.22	1815.50	-1811.18	570.25	0.44	821139.81	739916.12	N 32 42 21.22 W 103 41 15.88		1898.83	162.52
	10543.00	89.71	177.80	8860.85	1911.44	-1807.09	573.87	1.43	821043.90	739919.74	N 32 42 20.27 W 103 41 15.84		1991.56	163.25
	10638.00	89.57	177.34	8861.45	2006.38	-2002.01	577.89	0.51	820948.99	739923.77	N 32 42 19.33 W 103 41 15.80		2083.74	163.90
	10733.00	89.40	178.72	8862.31	2101.34	-2098.94	581.18	1.46	820854.08	739927.03	N 32 42 18.39 W 103 41 15.77		2175.99	164.51
	10828.00	90.34	181.28	8862.52	2196.33	-2191.93	581.18	2.87	820759.07	739927.03	N 32 42 17.45 W 103 41 15.77		2267.67	165.15
	10923.00	90.29	184.75	8862.00	2291.14	-2286.78	578.16	3.65	820684.22	739922.04	N 32 42 16.51 W 103 41 15.84		2358.25	165.88
	11018.00	90.40	187.32	8861.43	2385.53	-2381.25	568.18	2.71	820589.76	739912.05	N 32 42 15.58 W 103 41 15.96		2447.63	166.83
	11113.00	90.40	191.52	8860.76	2479.10	-2474.95	550.83	4.42	820478.07	739896.51	N 32 42 14.65 W 103 41 16.15		2535.46	167.48
	11208.00	91.18	188.19	8859.45	2572.55	-2568.52	534.38	3.60	820382.50	739880.25	N 32 42 13.72 W 103 41 16.35		2623.52	168.25
	11302.00	90.40	190.58	8858.18	2665.15	-2661.25	519.05	2.87	820289.78	739864.93	N 32 42 12.81 W 103 41 16.54		2711.39	168.96
	11398.00	90.52	190.05	8857.40	2757.36	-2753.59	501.48	0.41	820197.44	739847.37	N 32 42 11.80 W 103 41 16.75		2798.98	169.68
	11491.00	91.37	188.22	8855.93	2850.89	-2847.24	485.68	3.01	820103.80	739831.55	N 32 42 10.87 W 103 41 16.94		2888.37	170.32
	11540.53	91.40	188.88	8854.64	2899.92	-2896.33	479.17	2.71	820054.71	739825.05	N 32 42 10.48 W 103 41 17.02		2935.70	170.61
	11585.00	91.43	185.47	8853.54	2944.08	-2940.52	474.39	3.17	820010.52	739820.27	N 32 42 10.05 W 103 41 17.08		2978.54	170.84
	11680.00	91.37	182.67	8851.22	3038.75	-3035.25	467.85	2.95	819915.80	739813.53	N 32 42 9.11 W 103 41 17.16		3071.08	171.24
	11775.00	91.32	180.15	8848.99	3133.86	-3130.18	465.31	2.85	819820.87	739811.19	N 32 42 8.17 W 103 41 17.20		3164.58	171.54
	11870.00	89.89	177.95	8848.18	3228.85	-3225.18	466.89	2.89	819725.80	739812.77	N 32 42 7.23 W 103 41 17.19		3258.78	171.76
	11965.00	88.71	177.05	8848.49	3323.57	-3320.06	471.03	1.39	819631.00	739818.91	N 32 42 6.29 W 103 41 17.14		3353.30	171.83
	12060.00	88.63	176.57	8851.70	3418.44	-3414.88	476.32	0.51	819536.18	739822.19	N 32 42 5.35 W 103 41 17.09		3447.94	172.06
	12155.00	88.18	177.96	8854.33	3513.32	-3509.73	480.85	1.53	819441.33	739826.73	N 32 42 4.42 W 103 41 17.04		3542.52	172.20
	12249.00	87.82	175.63	8857.61	3607.15	-3603.52	486.10	2.51	819347.55	739831.98	N 32 42 3.49 W 103 41 16.99		3636.16	172.32
	12344.00	87.51	175.00	8861.48	3701.81	-3698.13	493.85	0.74	819252.95	739839.73	N 32 42 2.55 W 103 41 16.90		3730.96	172.39
	12439.00	87.22	175.41	8865.84	3796.44	-3792.69	501.79	0.53	819158.39	739847.68	N 32 42 1.61 W 103 41 16.82		3825.74	172.46
	12533.00	87.68	174.77	8870.03	3890.08	-3886.20	509.62	0.64	819064.83	739855.70	N 32 42 0.69 W 103 41 16.73		3919.55	172.53
	12628.00	87.39	175.09	8874.11	3984.68	-3980.80	518.21	0.45	818970.29	739864.09	N 32 41 59.75 W 103 41 16.64		4014.39	172.58
	12722.00	86.68	174.87	8878.98	4078.23	-4074.31	526.43	0.79	818878.79	739872.30	N 32 41 58.83 W 103 41 16.55		4108.18	172.64
	12817.00	86.14	174.99	8883.27	4172.82	-4168.84	534.61	1.54	818782.26	739880.69	N 32 41 57.89 W 103 41 16.46		4203.00	172.69
	12913.00	87.45	175.90	8886.96	4268.50	-4264.46	542.43	1.19	818688.64	739888.30	N 32 41 56.94 W 103 41 16.38		4298.82	172.75
	13005.00	86.99	176.69	8891.42	4360.25	-4356.16	548.37	0.99	818594.95	739894.24	N 32 41 56.04 W 103 41 16.31		4390.54	172.83
	13100.00	86.40	177.95	8895.24	4455.09	-4450.88	552.81	1.99	818500.14	739898.68	N 32 41 55.10 W 103 41 16.27		4480.18	172.92
	13195.00	87.65	178.04	8899.52	4550.00	-4545.86	556.13	0.80	818405.26	739902.00	N 32 41 54.16 W 103 41 16.24		4579.75	173.03
	13290.00	87.45	179.00	8902.58	4644.90	-4640.74	558.58	1.03	818310.38	739904.45	N 32 41 53.22 W 103 41 16.21		4674.24	173.14
	13385.00	87.51	179.68	8906.78	4739.80	-4735.65	559.52	0.91	818215.48	739905.40	N 32 41 52.28 W 103 41 16.21		4768.58	173.26
	13480.00	87.45	179.54	8910.93	4834.71	-4830.55	560.02	0.34	818120.58	739905.89	N 32 41 51.34 W 103 41 16.21		4862.91	173.39
Last SLB MWD	13575.00	87.71	180.61	8914.95	4929.62	-4925.47	559.90	1.18	818025.67	739905.77	N 32 41 50.40 W 103 41 16.22		4957.19	173.51
Survey Proj to Bit	13690.00	87.71	180.61	8919.54	5044.51	-5040.37	558.67	0.00	817910.77	739904.55	N 32 41 49.27 W 103 41 16.24		5071.23	173.68

Survey Type:

Def Survey

Survey Error Model:

ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	32.000	1/98 425	30.000	30.000	NAL_MWD_1_0_DEG-Depth Only	Chisholm Gazele 32 State Com 18S 4H / Chisholm Gazele 32 State Com 18S 4H MWD 0' to Chisholm Gazele 32 State Com 18S 4H / Chisholm Gazele 32 State Com 18S 4H MWD 0' to Chisholm Gazele 32 State Com 18S 4H / Chisholm Gazele 32 State Com