

JUL 14 '88

 O. C. D.
 ARTESIA, OFFICE

PAGE No. 1

DATADRIL

 TERRA RESOURCES INC.
 TERRA FEDERAL 22 COM. 1
 CHAVES COUNTY, N.M.
 TOT#2
 06-07-88

 MAGNETIC MULTISHOT
 DECLINATION= 10 DEGREES EASTERLY
 HOLE DIRECTION= S07.13W
 K.B.= 18 FT.
 GARRY HENDRIX- SII SURVEYOR

File Name: 68806003

***** RECORD OF SURVEY *****
 Calculated by DATADRIL's CADDS System

 Radius of Curvature Method
 All Angles are Decimal
 Vertical Section Plane: S 7.13 W

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MMS	0.00	0.00	N 0.00 E	0.00	0.00	0.00 N 0.00 E	0.00	0.00
MMS	83.00	.25	N 69.00 W	83.00	83.00	.06 N .17 W	-.04	.30
MMS	170.00	.25	N 66.00 W	87.00	170.00	.21 N .52 W	-.14	.02
MMS	198.00	.25	N 6.00 W	28.00	198.00	.30 N .59 W	-.23	.89
MMS	212.00	.25	N 59.00 W	14.00	212.00	.35 N .62 W	-.27	1.59
MMS	227.00	.25	N 59.00 W	15.00	227.00	.39 N .68 W	-.30	0.00
MMS	249.00	.50	N 34.00 W	22.00	249.00	.49 N .78 W	-.39	1.33
MMS	343.00	.50	N 37.00 W	94.00	342.99	1.15 N 1.26 W	-.99	.03
MMS	436.00	.25	N 25.00 W	93.00	435.99	1.67 N 1.57 W	-1.47	.28
MMS	530.00	.25	N 59.00 W	94.00	529.99	1.98 N 1.84 W	-1.73	.16
MMS	624.00	.25	S 69.00 W	94.00	623.99	2.03 N 2.23 W	-1.74	.21
MMS	719.00	.50	S 35.00 E	95.00	718.99	1.53 N 2.42 W	-1.22	.66
MMS	813.00	.25	S 1.00 W	94.00	812.99	.95 N 2.24 W	-.67	.35
MMS	907.00	.25	S 63.00 E	94.00	906.99	.62 N 2.04 W	-.36	.28
MMS	1001.00	0.00	N 0.00 E	94.00	1000.99	.53 N 1.86 W	-.29	.27
MMS	1094.00	.25	S 71.00 W	93.00	1093.98	.46 N 2.05 W	-.20	.27
MMS	1189.00	.25	N 8.00 W	95.00	1188.98	.65 N 2.36 W	-.35	.41
MMS	1283.00	.25	N 37.00 W	94.00	1282.98	1.03 N 2.51 W	-.71	.13
MMS	1377.00	.25	N 17.00 E	94.00	1376.98	1.41 N 2.58 W	-1.08	.24
MMS	1471.00	.25	N 5.00 E	94.00	1470.98	1.82 N 2.50 W	-1.49	.06
MMS	1565.00	.50	N 11.00 E	94.00	1564.98	2.43 N 2.42 W	-2.11	.27

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TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MMS	1659.00	.50	N 15.00 E	94.00	1658.98	3.22 N 2.23 W	-2.92	.04
MMS	1682.00	.50	N 31.00 E	23.00	1681.97	3.41 N 2.15 W	-3.11	.61
MMS	1768.00	.50	N 10.00 E	86.00	1767.97	4.11 N 1.89 W	-3.84	.21
MMS	1861.00	.75	N 4.00 E	93.00	1860.97	5.11 N 1.77 W	-4.85	.28
MMS	1954.00	.50	N 75.00 E	93.00	1953.96	6.11 N 1.59 W	-5.87	.31
MMS	2048.00	.75	N 56.00 E	94.00	2047.95	6.92 N .99 W	-6.74	.51
MMS	2141.00	.75	N 54.00 E	93.00	2140.95	7.62 N .01 E	-7.56	.03
MMS	2234.00	1.00	N 47.00 E	93.00	2233.94	8.52 N 1.11 E	-8.59	.29
MMS	2327.00	1.00	N 20.00 E	93.00	2326.92	9.86 N 1.99 E	-10.03	.50
MMS	2421.00	1.00	N 45.00 E	94.00	2420.91	11.23 N 2.87 E	-11.50	.46
MMS	2514.00	.50	N 33.00 E	93.00	2513.90	12.18 N 3.63 E	-12.53	.56
MMS	2607.00	.50	N 29.00 E	93.00	2606.90	12.87 N 4.05 E	-13.28	.04
MMS	2700.00	.50	N 39.00 E	93.00	2699.89	13.54 N 4.50 E	-14.00	.09
MMS	2794.00	.50	N 39.00 E	94.00	2793.89	14.18 N 5.02 E	-14.69	0.00
MMS	2887.00	.50	N 25.00 E	93.00	2886.88	14.87 N 5.45 E	-15.43	.13
MMS	2980.00	.50	N 8.00 E	93.00	2979.88	15.64 N 5.68 E	-16.23	.16
MMS	3073.00	.50	N 4.00 W	93.00	3072.88	16.45 N 5.71 E	-17.03	.11
MMS	3167.00	.25	N 27.00 W	94.00	3166.88	17.04 N 5.54 E	-17.60	.31
MMS	3260.00	.50	N 39.00 W	93.00	3259.87	17.55 N 5.21 E	-18.06	.28
MMS	3353.00	.50	N 52.00 W	93.00	3352.87	18.12 N 4.63 E	-18.55	.12
MMS	3446.00	.75	N 62.00 W	93.00	3445.86	18.67 N 3.78 E	-19.00	.29
MMS	3540.00	.50	N 76.00 W	94.00	3539.86	19.04 N 2.83 E	-19.24	.31
MMS	3633.00	.75	N 84.00 W	93.00	3632.85	19.21 N 1.83 E	-19.29	.28
MMS	3726.00	1.00	S 78.00 W	93.00	3725.84	19.14 N .42 E	-19.04	.40
MMS	3819.00	1.00	S 70.00 W	93.00	3818.83	18.69 N 1.14 W	-18.41	.15
MMS	3913.00	1.00	S 85.00 W	94.00	3912.81	18.34 N 2.74 W	-17.86	.28
MMS	4006.00	1.00	N 69.00 W	93.00	4005.80	18.56 N 4.33 W	-17.88	.48
MMS	4099.00	.75	N 72.00 W	93.00	4098.79	19.04 N 5.67 W	-18.19	.27
MMS	4192.00	1.00	N 85.00 W	93.00	4191.78	19.32 N 7.06 W	-18.29	.34
MMS	4286.00	.50	S 77.00 W	94.00	4285.77	19.23 N 8.28 W	-18.06	.58
MMS	4379.00	.50	S 81.00 W	93.00	4378.77	19.08 N 9.08 W	-17.80	.04
MMS	4472.00	.50	S 52.00 W	93.00	4471.76	18.76 N 9.81 W	-17.40	.27
MMS	4565.00	.25	S 39.00 W	93.00	4564.76	18.33 N 10.25 W	-16.92	.28

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 TERRA FEDERAL 22 COM. 1

 CHAVES COUNTY, N.M.
 TOT#2

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MMS	4659.00	.25	S 4.00 W	94.00	4658.76	17.96 N 10.39 W	-16.53	.16
MMS	4752.00	.75	S 66.00 E	93.00	4751.76	17.30 N 10.00 W	-15.93	.76
MMS	4845.00	1.75	S 77.00 E	93.00	4844.73	16.66 N 8.08 W	-15.53	1.10
MMS	4938.00	2.50	S 77.00 E	93.00	4937.67	15.89 N 4.72 W	-15.18	.81
MMS	5032.00	2.75	S 69.00 E	94.00	5031.57	14.63 N .61 W	-14.44	.47
MMS	5125.00	3.25	S 54.00 E	93.00	5124.44	12.31 N 3.66 E	-12.67	1.00
MMS	5218.00	2.50	S 48.00 E	93.00	5217.32	9.38 N 7.28 E	-10.21	.87
MMS	5294.00	2.50	S 39.00 E	76.00	5293.25	6.98 N 9.56 E	-8.11	.52
MMS	5314.00	3.75	S 30.00 E	20.00	5313.22	6.08 N 10.18 E	-7.29	6.70
MMS	5407.00	4.75	S 8.00 W	93.00	5405.96	.56 S 11.47 E	-.86	3.14
MMS	5500.00	5.25	S 26.00 W	93.00	5498.61	8.28 S 9.11 E	7.09	1.76
MMS	5593.00	6.25	S 28.00 W	93.00	5591.14	16.59 S 4.88 E	15.85	1.10
MMS	5686.00	8.25	S 28.00 W	93.00	5683.39	26.95 S .63 W	26.82	2.15
MMS	5779.00	9.50	S 26.00 W	93.00	5775.28	39.73 S 7.14 W	40.31	1.38
MMS	5872.00	10.00	S 24.00 W	93.00	5866.93	54.00 S 13.80 W	55.30	.65
MMS	5965.00	12.50	S 19.00 W	93.00	5958.14	70.88 S 20.45 W	72.87	2.88
MMS	6058.00	13.50	S 19.00 W	93.00	6048.75	90.66 S 27.26 W	93.34	1.08
MMS	6151.00	13.75	S 18.00 W	93.00	6139.14	111.43 S 34.21 W	114.82	.37
MMS	6244.00	13.75	S 19.00 W	93.00	6229.47	132.40 S 41.22 W	136.49	.26
MMS	6337.00	13.50	S 20.00 W	93.00	6319.85	153.05 S 48.54 W	157.89	.37
MMS	6430.00	13.25	S 20.00 W	93.00	6410.33	173.26 S 55.89 W	178.86	.27
MMS	6523.00	10.75	S 3.00 E	93.00	6501.29	192.26 S 58.73 W	198.06	5.75
MMS	6616.00	10.50	S 2.00 E	93.00	6592.70	209.39 S 57.98 W	214.96	.33
MMS	6709.00	10.00	S 2.00 W	93.00	6684.21	225.93 S 57.98 W	231.38	.94
MMS	6802.00	9.25	S 4.00 W	93.00	6775.90	241.46 S 58.80 W	246.89	.88
MMS	6895.00	8.25	S 8.00 W	93.00	6867.82	255.53 S 60.28 W	261.03	1.26
MMS	6988.00	8.25	S 9.00 W	93.00	6959.86	268.72 S 62.25 W	274.37	.15
MMS	7081.00	6.50	S 13.00 W	93.00	7052.09	280.44 S 64.53 W	286.28	1.96
MMS	7174.00	6.50	S 12.00 W	93.00	7144.49	290.72 S 66.80 W	296.76	.12
MMS	7267.00	7.00	S 15.00 W	93.00	7236.84	301.35 S 69.36 W	307.62	.66
MMS	7360.00	8.00	S 15.00 W	93.00	7329.05	313.07 S 72.50 W	319.65	1.08
MMS	7453.00	8.00	S 15.00 W	93.00	7421.14	325.57 S 75.85 W	332.47	0.00
MMS	7546.00	8.25	S 17.00 W	93.00	7513.21	338.21 S 79.47 W	345.46	.41

7970 IS A PROJECTED SURVEY

MMS	7970.00	9.50	S 19.00 W	17.00	7952.00	400.77 S 101.03 W	410.21	0.00
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BOTTOM HOLE CLOSURE: 413.30 Feet at S 14.15 Degrees W

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DATADRIL

 TERRA RESOURCES INC.
 TERRA FEDERAL 22 COM. 1

 CHAVES COUNTY, N.M.
 TOT#2

TYPE OF SURVEY	MEASURED DEPTH (FT)	INCL ANGLE (DEG)	D R I F T DIRECTION (DEG)	COURSE LENGTH (FT)	TOTAL VERTICAL DEPTH	T O T A L RECTANGULAR COORDINATES (FT)	VERTICAL SECTION (FT)	DOGLEG SEVERITY (DEG/100')
MMS	7639.00	8.75	S 19.00 W	93.00	7605.19	351.28 S 83.72 W	358.95	.62
MMS	7732.00	9.00	S 19.00 W	93.00	7697.07	364.85 S 88.39 W	373.00	.27
MMS	7825.00	9.00	S 20.00 W	93.00	7788.93	378.56 S 93.25 W	387.21	.17
MMS	7918.00	9.50	S 19.00 W	93.00	7880.72	392.65 S 98.24 W	401.81	.56
MMS	7953.00	9.50	S 19.00 W	35.00	7915.24	398.11 S 100.12 W	407.46	0.00