

MULTI-SHOT, INC.
 11450 FM 1960 WEST, Suite 304
 HOUSTON, TEXAS 77065

(713) 894-5157
 (800) 641-SHOT

REPORT OF SURVEY

VOGEL HORIZONTAL & DIRECTIONAL

DUNN, WELL #B-38

EDDY COUNTY, NEW MEXICO

JOB NUMBER: SRG-196C-95 07/18/95 J. BOLGIANO

DECLINATION: 10 DEGREES EAST (TRUE)

Radius of Curvature Calculations

MEASURED Depth Feet	B O R E - H O L E		TRUE		R E C T A N G U L A R		C O O R D I N A T E S		VERTICAL SECTION Feet	C L O S U R E S		DLS Deg/100'
	Incl. D M	Direction D M	Depth Feet	Vertical Feet	North/South	East/West	Feet	Feet		Distance Feet	Direction D M	
0.00	0 0	N 0 0 E	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N 0 0 E	0.00
100.00	0 16	N 60 21 W	100.00		.12 N	.21 W	.12	.12	.24	.24	N60 24W	.27
200.00	0 12	N 3 17 W	200.00		.46 N	.42 W	.46	.46	.62	.62	N42 19W	.23
300.00	0 14	N 82 30 E	300.00		.74 N	.19 W	.74	.74	.76	.76	N14 34W	.30
400.00	0 47	S 79 10 E	399.99		.71 N	.69 E	.71	.71	.99	.99	N44 23E	.58
500.00	0 45	S 82 55 E	499.98		.50 N	2.02 E	.50	.50	2.08	2.08	N76 3E	.06
600.00	0 45	N 87 46 E	599.98		.45 N	3.31 E	.45	.45	3.34	3.34	N82 20E	.12
700.00	0 39	N 54 52 E	699.97		.84 N	4.47 E	.84	.84	4.55	4.55	N79 23E	.41
800.00	0 41	N 37 4 E	799.96		1.66 N	5.32 E	1.66	1.66	5.57	5.57	N72 42E	.21
900.00	0 44	N 27 46 E	899.95		2.70 N	5.98 E	2.70	2.70	6.57	6.57	N65 40E	.13
1000.00	0 44	N 10 32 W	999.95		3.96 N	6.17 E	3.96	3.96	7.33	7.33	N57 19E	.49
1100.00	0 52	N 22 51 W	1099.94		5.30 N	5.77 E	5.30	5.30	7.83	7.83	N47 26E	.22
1200.00	1 11	N 36 23 W	1199.92		6.86 N	4.88 E	6.86	6.86	8.42	8.42	N35 27E	.40
1300.00	1 30	N 43 8 W	1299.89		8.66 N	3.38 E	8.66	8.66	9.30	9.30	N21 20E	.35
1400.00	1 39	N 42 52 W	1399.85		10.67 N	1.51 E	10.67	10.67	10.78	10.78	N 8 2E	.15

VOGEL HORIZONTAL & DIRECTIONAL
DUNN, WELL #B-38
EDDY COUNTY, NEW MEXICO

MEASURED Depth Feet	B O R E - H O L E		TRUE Vertical Depth Feet	R E C T A N G U L A R C O O R D I N A T E S		VERTICAL SECTION Feet	C L O S U R E S		DLS Deg/100'
	Incl. D M	Direction D M		North/South Feet	East/West Feet		Distance Feet	Direction D M	
1500.00	1 45	N 45 57 W	1499.81	12.80 N	.57 W	12.80	12.81	N 2 34W	.14
1600.00	1 47	N 43 19 W	1599.76	14.99 N	2.74 W	14.99	15.24	N10 22W	0.09
1700.00	1 47	N 43 58 W	1699.71	17.24 N	4.89 W	17.24	17.92	N15 49W	.02
1800.00	2 8	N 43 17 W	1799.65	19.72 N	7.25 W	19.72	21.01	N20 11W	.36
1900.00	1 53	N 41 4 W	1899.59	22.32 N	9.61 W	22.32	24.30	N23 17W	.26
2000.00	1 49	N 44 26 W	1999.54	24.70 N	11.80 W	24.70	27.37	N25 32W	.13
2100.00	1 41	N 44 37 W	2099.49	26.88 N	13.95 W	26.88	30.29	N27 26W	.13
2200.00	1 44	N 51 12 W	2199.45	28.89 N	16.17 W	28.89	33.10	N29 14W	.20
2300.00	1 34	N 40 16 W	2299.41	30.89 N	18.23 W	30.89	35.87	N30 32W	.35
2400.00	1 36	N 52 17 W	2399.37	32.81 N	20.23 W	32.81	38.54	N31 39W	.34
2500.00	1 30	N 34 44 W	2499.33	34.77 N	22.09 W	34.77	41.19	N32 26W	.49
2600.00	1 6	N 28 48 W	2599.30	36.70 N	23.29 W	36.70	43.47	N32 24W	.41
2700.00	1 9	N 49 21 W	2699.28	38.24 N	24.54 W	38.24	45.43	N32 41W	.41
2787.00	1 29	N 40 38 W	2786.26	39.66 N	25.96 W	39.66	47.40	N33 12W	.44
PROJECTED TO:									
3100.00	1 29	N 40 38 W	3099.16	45.84 N	31.26 W	45.84	55.48	N34 17W	0.00

Final Station Closure Distance: 55.48 Feet; Direction: N34 17W