30-015-44676

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 27 2018
RECEIVED

TRUEshot

Company:	Mesquite SWD	**Job Number**	02-1-18-2023	**Calculation Method**	Minimum Curvature
Well:	Mesa Verde SWD #3	**Mag (Grid):**	8.18	**Proposed Azimuth**	0.0
Location:	Lea, New Mexico	**Dir Driller:**	N/A	**Depth Reference**	25'
Rig:	McVay 2	**FST:**	L. Steward	**Tie Into:**	Assumed Vertical
Job Date:	2/25/18 - 4/30/18				

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
Tie In	**0.00**	**0.00**	**0.00**	0	**0.00**	**0.00**	**0.00 0**	**0.00 0**					
1	118	0.20	195.60	118	118.00	-0.20	0.20 S	0.06 W	0.21	195.60	0.17	0.17	165.76
2	272	0.50	66.50	154	272.00	-0.19	0.19 S	0.49 E	0.52	111.18	0.42	0.19	-83.83
3	394	0.40	168.20	122	394.00	-0.39	0.39 S	1.06 E	1.13	110.32	0.57	-0.08	83.36
4	456	0.50	213.20	62	455.99	-0.83	0.83 S	0.96 E	1.27	130.92	0.58	0.16	72.58
5	547	0.50	199.90	91	546.99	-1.54	1.54 S	0.61 E	1.65	158.45	0.13	0.00	-14.62
6	638	0.90	201.90	91	637.98	-2.57	2.57 S	0.21 E	2.58	175.43	0.44	0.44	2.20
7	729	0.30	202.40	91	728.98	-3.46	3.46 S	0.15 W	3.46	182.51	0.66	-0.66	0.55
8	820	0.80	160.10	91	819.97	-4.28	4.28 S	0.03 W	4.28	180.35	0.67	0.55	-46.48
9	910	0.50	149.40	90	909.97	-5.20	5.20 S	0.39 E	5.22	175.74	0.36	-0.33	-11.89
10	1002	0.60	160.20	92	1001.96	-6.00	6.00 S	0.76 E	6.05	172.83	0.16	0.11	11.74
11	1092	0.30	236.70	90	1091.96	-6.58	6.58 S	0.72 E	6.61	173.77	0.67	-0.33	85.00
12	1182	0.20	278.30	90	1181.96	-6.68	6.68 S	0.37 E	6.69	176.87	0.22	-0.11	46.22
13	1275	0.20	244.50	93	1274.96	-6.73	6.73 S	0.06 E	6.73	179.50	0.13	0.00	-36.34
14	1368	0.60	278.80	93	1367.96	-6.72	6.72 S	0.57 W	6.75	184.84	0.48	0.43	36.88
15	1462	0.60	310.40	94	1461.95	-6.33	6.33 S	1.43 W	6.49	192.74	0.35	0.00	33.62
16	1556	0.70	334.00	94	1555.95	-5.49	5.49 S	2.06 W	5.87	200.53	0.30	0.11	25.11
17	1652	0.30	255.60	96	1651.94	-5.03	5.03 S	2.56 W	5.64	206.95	0.73	-0.42	-81.67
18	1743	0.80	298.00	91	1742.94	-4.79	4.79 S	3.35 W	5.85	214.96	0.67	0.55	46.59
19	1838	1.00	324.10	95	1837.93	-3.81	3.81 S	4.42 W	5.84	229.26	0.47	0.21	27.47
20	1932	0.60	335.70	94	1931.92	-2.70	2.70 S	5.10 W	5.77	242.17	0.46	-0.43	12.34
21	2026	0.70	312.70	94	2025.91	-1.86	1.86 S	5.73 W	6.02	252.04	0.29	0.11	-24.47
22	2213	0.60	337.00	187	2212.90	-0.18	0.18 S	6.95 W	6.95	268.51	0.16	-0.05	12.99
23	2307	0.60	323.40	94	2306.90	0.67	0.67 N	7.44 W	7.47	275.12	0.15	0.00	-14.47
24	2402	0.60	12.60	95	2401.89	1.55	1.55 N	7.62 W	7.78	281.50	0.53	0.00	-327.16
25	2497	0.50	12.00	95	2496.89	2.44	2.44 N	7.43 W	7.82	288.20	0.11	-0.11	-0.63
26	2589	0.10	10.60	92	2588.89	2.91	2.91 N	7.33 W	7.89	291.68	0.43	-0.43	-1.52
27	2683	0.30	74.30	94	2682.89	3.06	3.06 N	7.08 W	7.71	293.38	0.29	0.21	67.77
28	2868	1.20	85.60	185	2867.87	3.34	3.34 N	4.68 W	5.75	305.51	0.49	0.49	6.11
29	2962	0.20	91.60	94	2961.86	3.41	3.41 N	3.54 W	4.91	313.97	1.07	-1.06	6.38
30	3055	1.30	77.70	93	3054.85	3.63	3.63 N	2.34 W	4.32	327.17	1.19	1.18	-14.95
31	3165	0.80	69.10	110	3164.83	4.17	4.17 N	0.41 W	4.19	354.42	0.48	-0.45	-7.82
32	3244	0.70	232.20	79	3243.83	4.07	4.07 N	0.27 W	4.08	356.16	1.88	-0.13	206.46
33	3338	0.30	301.20	94	3337.83	3.85	3.85 N	0.94 W	3.96	346.31	0.70	-0.43	73.40
34	3433	1.10	38.10	95	3432.82	4.69	4.69 N	0.59 W	4.73	352.87	1.24	0.84	-276.95
35	3521	1.70	90.90	88	3520.80	5.34	5.34 N	1.24 E	5.48	13.06	1.54	0.68	60.00

TRUEshot

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Well:	Mesa Verde SWD #3	**Mag (Grid):**	8.18	**Proposed Azimuth**	0.0
Location:	Lea, New Mexico	**Dir Driller:**	N/A	**Depth Reference**	25'
Rig:	McVay 2	**FST:**	L. Steward	**Tie Into:**	Assumed Vertical
Job Date:	2/25/18 - 4/30/18				

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
36	3614	1.10	74.50	93	3613.77	5.56	5.56 N	3.48 E	6.56	32.05	0.77	-0.65	-17.63
37	3709	0.70	94.20	95	3708.76	5.76	5.76 N	4.94 E	7.58	40.61	0.53	-0.42	20.74
38	3802	0.70	71.60	93	3801.75	5.90	5.90 N	6.04 E	8.44	45.70	0.29	0.00	-24.30
39	3895	2.40	104.90	93	3894.71	5.57	5.57 N	8.46 E	10.13	56.63	1.99	1.83	35.81
40	3990	2.70	111.40	95	3989.62	4.25	4.25 N	12.47 E	13.17	71.19	0.44	0.32	6.84
41	4177	2.80	140.10	187	4176.41	-0.87	0.87 S	19.50 E	19.52	92.54	0.73	0.05	15.35
42	4270	3.10	139.00	93	4269.29	-4.51	4.51 S	22.61 E	23.05	101.27	0.33	0.32	-1.18
43	4365	2.60	137.30	95	4364.17	-8.03	8.03 S	25.75 E	26.97	107.31	0.53	-0.53	-1.79
44	4458	2.00	139.10	93	4457.10	-10.81	10.81 S	28.25 E	30.24	110.93	0.65	-0.65	1.94
45	4547	2.00	130.10	89	4546.04	-12.98	12.98 S	30.45 E	33.10	113.09	0.35	0.00	-10.11
46	4641	1.60	145.00	94	4640.00	-15.11	15.11 S	32.46 E	35.80	114.96	0.65	-0.43	15.85
47	4736	1.40	144.10	95	4734.96	-17.14	17.14 S	33.90 E	37.98	116.82	0.21	-0.21	-0.95
48	4832	1.40	127.60	96	4830.94	-18.80	18.80 S	35.52 E	40.19	117.90	0.42	0.00	-17.19
49	4926	1.30	143.80	94	4924.91	-20.36	20.36 S	37.06 E	42.28	118.79	0.42	-0.11	17.23
50	5021	1.60	146.00	95	5019.88	-22.33	22.33 S	38.43 E	44.45	120.16	0.32	0.32	2.32
51	5115	1.00	166.00	94	5113.86	-24.22	24.22 S	39.37 E	46.22	121.60	0.79	-0.64	21.28
52	5207	1.10	137.20	92	5205.84	-25.64	25.64 S	40.16 E	47.65	122.56	0.58	0.11	-31.30
53	5305	0.80	143.50	98	5303.83	-26.88	26.88 S	41.21 E	49.20	123.12	0.32	-0.31	6.43
54	5400	0.70	158.50	95	5398.82	-27.96	27.96 S	41.81 E	50.30	123.77	0.23	-0.11	15.79
55	5495	0.80	146.70	95	5493.81	-29.05	29.05 S	42.39 E	51.39	124.42	0.19	0.11	-12.42
56	5589	0.50	116.60	94	5587.80	-29.78	29.78 S	43.12 E	52.40	124.64	0.47	-0.32	-32.02
57	5681	0.50	87.60	92	5679.80	-29.95	29.95 S	43.88 E	53.12	124.31	0.27	0.00	-31.52
58	5776	0.40	83.50	95	5774.80	-29.89	29.89 S	44.62 E	53.71	123.82	0.11	-0.11	-4.32
59	5869	0.10	96.20	93	5867.80	-29.86	29.86 S	45.02 E	54.03	123.56	0.33	-0.32	13.66
60	5963	0.40	139.00	94	5961.80	-30.12	30.12 S	45.32 E	54.42	123.61	0.35	0.32	45.53
61	6058	0.30	112.50	95	6056.79	-30.47	30.47 S	45.77 E	54.98	123.65	0.20	-0.11	-27.89
62	6152	0.20	168.10	94	6150.79	-30.72	30.72 S	46.03 E	55.34	123.72	0.27	-0.11	59.15
63	6246	0.40	128.80	94	6244.79	-31.09	31.09 S	46.32 E	55.78	123.87	0.29	0.21	-41.81
64	6339	0.40	98.40	93	6337.79	-31.34	31.34 S	46.89 E	56.40	123.75	0.23	0.00	-32.69
65	6433	0.20	111.70	94	6431.79	-31.45	31.45 S	47.37 E	56.86	123.58	0.22	-0.21	14.15
66	6527	0.50	92.40	94	6525.79	-31.52	31.52 S	47.93 E	57.37	123.33	0.34	0.32	-20.53
67	6620	0.10	183.50	93	6618.79	-31.62	31.62 S	48.33 E	57.76	123.19	0.55	-0.43	97.96
68	6714	0.30	125.00	94	6712.79	-31.84	31.84 S	48.53 E	58.04	123.27	0.28	0.21	-62.23
69	6807	0.00	92.60	93	6805.78	-31.98	31.98 S	48.73 E	58.29	123.28	0.32	-0.32	-34.84
70	6900	0.10	235.70	93	6898.78	-32.03	32.03 S	48.66 E	58.26	123.35	0.11	0.11	153.87
71	6993	0.20	120.80	93	6991.78	-32.16	32.16 S	48.73 E	58.39	123.42	0.28	0.11	-123.55
72	7087	0.10	60.10	94	7085.78	-32.20	32.20 S	48.95 E	58.59	123.34	0.19	-0.11	-64.57

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Well:	Mesa Verde SWD #3	**Mag (Grid):**	8.18	**Proposed Azimuth**	0.0
Location:	Lea, New Mexico	**Dir Driller:**	N/A	**Depth Reference**	25'
Rig:	McVay 2	**FST:**	L. Steward	**Tie Into:**	Assumed Vertical
Job Date:	2/25/18 - 4/30/18				

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
73	7180	0.10	245.80	93	7178.78	-32.19	32.19 S	48.94 E	58.58	123.34	0.21	0.00	199.68
74	7273	0.30	156.00	93	7271.78	-32.45	32.45 S	48.97 E	58.74	123.53	0.34	0.22	-96.56
75	7366	0.80	221.90	93	7364.78	-33.16	33.16 S	48.63 E	58.86	124.28	0.79	0.54	70.86
76	7460	0.80	228.00	94	7458.77	-34.08	34.08 S	47.71 E	58.63	125.54	0.09	0.00	6.49
77	7553	0.60	196.50	93	7551.76	-34.99	34.99 S	47.09 E	58.66	126.61	0.46	-0.22	-33.87
78	7645	1.10	188.90	92	7643.75	-36.32	36.32 S	46.81 E	59.25	127.81	0.56	0.54	-8.26
79	7739	0.80	168.20	94	7737.74	-37.85	37.85 S	46.81 E	60.20	128.96	0.48	-0.32	-22.02
80	7832	0.50	159.70	93	7830.73	-38.87	38.87 S	47.08 E	61.05	129.54	0.34	-0.32	-9.14
81	8020	0.60	142.00	188	8018.73	-40.41	40.41 S	47.97 E	62.73	130.11	0.10	0.05	-9.41
82	8114	0.50	160.40	94	8112.72	-41.19	41.19 S	48.41 E	63.56	130.39	0.21	-0.11	19.57
83	8207	0.50	184.90	93	8205.72	-41.98	41.98 S	48.51 E	64.15	130.87	0.23	0.00	26.34
84	8303	0.60	212.60	96	8301.71	-42.82	42.82 S	48.21 E	64.48	131.61	0.29	0.10	28.85
85	8397	0.70	208.70	94	8395.71	-43.73	43.73 S	47.67 E	64.69	132.54	0.12	0.11	-4.15
86	8492	0.70	241.40	95	8490.70	-44.52	44.52 S	46.88 E	64.65	133.52	0.41	0.00	34.42
87	8579	0.80	254.90	87	8577.69	-44.93	44.93 S	45.82 E	64.18	134.44	0.23	0.11	15.52
88	8673	0.30	253.30	94	8671.69	-45.18	45.18 S	44.96 E	63.73	135.14	0.53	-0.53	-1.70
89	8768	0.20	197.00	95	8766.69	-45.41	45.41 S	44.67 E	63.69	135.47	0.27	-0.11	-59.26
90	8862	1.20	184.60	94	8860.68	-46.54	46.54 S	44.54 E	64.42	136.26	1.07	1.06	-13.19
91	8957	1.60	195.50	95	8955.65	-48.81	48.81 S	44.11 E	65.79	137.90	0.50	0.42	11.47
92	9051	2.10	198.80	94	9049.60	-51.71	51.71 S	43.20 E	67.38	140.12	0.54	0.53	3.51
93	9146	1.60	228.90	95	9144.55	-54.23	54.23 S	41.64 E	68.37	142.48	1.13	-0.53	31.68
94	9240	1.30	215.20	94	9238.52	-55.96	55.96 S	40.04 E	68.81	144.42	0.49	-0.32	-14.57
95	9333	1.10	232.50	93	9331.50	-57.37	57.37 S	38.72 E	69.21	145.98	0.44	-0.22	18.60
96	9493	1.80	265.20	160	9491.45	-58.51	58.51 S	35.00 E	68.18	149.11	0.66	0.44	20.44
97	9681	1.50	241.20	188	9679.38	-59.94	59.94 S	29.90 E	66.99	153.49	0.40	-0.16	-12.77
98	9776	1.50	250.00	95	9774.35	-60.97	60.97 S	27.64 E	66.94	155.61	0.24	0.00	9.26
99	9870	1.60	228.50	94	9868.31	-62.26	62.26 S	25.50 E	67.28	157.72	0.62	0.11	-22.87
100	10059	1.40	268.90	189	10057.25	-64.05	64.05 S	21.22 E	67.48	161.67	0.56	-0.11	21.38
101	10153	0.80	279.80	94	10151.24	-63.96	63.96 S	19.42 E	66.85	163.11	0.67	-0.64	11.60
102	10246	0.90	295.60	93	10244.23	-63.54	63.54 S	18.13 E	66.07	164.08	0.27	0.11	16.99
103	10340	0.80	273.10	94	10338.21	-63.18	63.18 S	16.80 E	65.38	165.11	0.37	-0.11	-23.94
104	10435	0.90	258.90	95	10433.20	-63.29	63.29 S	15.41 E	65.14	166.32	0.24	0.11	-14.95
105	10530	1.20	266.10	95	10528.19	-63.50	63.50 S	13.69 E	64.96	167.84	0.34	0.32	7.58
106	10719	2.10	258.10	189	10717.11	-64.35	64.35 S	8.32 E	64.89	172.63	0.49	0.48	-4.23
107	10813	1.80	262.90	94	10811.05	-64.89	64.89 S	5.17 E	65.09	175.44	0.36	-0.32	5.11
108	10907	1.40	289.90	94	10905.02	-64.68	64.68 S	2.63 E	64.73	177.67	0.90	-0.43	28.72
109	11002	2.00	298.70	95	10999.98	-63.49	63.49 S	0.08 E	63.49	179.93	0.69	0.63	9.26

TRUEshot

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Location:	Lea, New Mexico	**Dir Driller:**	N/A	**Depth Reference**	25'
Rig:	McVay 2	**FST:**	L. Steward	**Tie Into:**	Assumed Vertical
Job Date:	2/25/18 - 4/30/18				

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N/S (ft)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Direction Azimuth	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
110	11099	2.10	318.80	97	11096.92	-61.34	61.34 S	2.57 W	61.39	182.40	0.74	0.10	20.72
111	11193	2.20	309.60	94	11190.85	-58.89	58.89 S	5.10 W	59.11	184.95	0.38	0.11	-9.79
112	11291	1.40	303.30	98	11288.80	-57.04	57.04 S	7.55 W	57.53	187.54	0.84	-0.82	-6.43
113	11480	1.40	349.00	189	11477.75	-53.50	53.50 S	9.92 W	54.41	190.50	0.58	0.00	24.18
114	11573	1.60	333.70	93	11570.72	-51.22	51.22 S	10.71 W	52.33	191.81	0.48	0.22	-16.45
115	11762	1.10	333.70	189	11759.67	-47.23	47.23 S	12.68 W	48.90	195.03	0.26	-0.26	0.00
116	11950	1.00	310.40	188	11947.63	-44.55	44.55 S	14.73 W	46.92	198.30	0.23	-0.05	-12.39
117	12092	1.40	274.90	142	12089.60	-43.60	43.60 S	17.40 W	46.94	201.76	0.58	0.28	-25.00
118	12185	0.40	276.20	93	12182.59	-43.47	43.47 S	18.86 W	47.38	203.45	1.08	-1.08	1.40
119	12278	1.00	222.00	93	12275.59	-44.03	44.03 S	19.72 W	48.25	204.13	0.89	0.65	-58.28
120	12371	0.90	226.30	93	12368.57	-45.14	45.14 S	20.80 W	49.70	204.73	0.13	-0.11	4.62
121	12651	0.90	234.30	280	12648.54	-47.94	47.94 S	24.17 W	53.69	206.76	0.04	0.00	2.86
122	12744	0.30	223.10	93	12741.53	-48.55	48.55 S	24.93 W	54.58	207.18	0.65	-0.65	-12.04
123	12837	0.50	169.60	93	12834.53	-49.13	49.13 S	25.02 W	55.13	206.99	0.43	0.22	-57.53
124	12931	1.00	239.70	94	12928.52	-49.94	49.94 S	25.66 W	56.15	207.19	1.01	0.53	74.57
125	13024	1.30	257.90	93	13021.51	-50.57	50.57 S	27.39 W	57.51	208.44	0.50	0.32	19.57
126	13117	1.00	274.20	93	13114.49	-50.73	50.73 S	29.23 W	58.55	209.95	0.47	-0.32	17.53
127	13210	1.10	244.40	93	13207.47	-51.06	51.06 S	30.85 W	59.65	211.14	0.59	0.11	-32.04
128	13304	0.70	276.70	94	13301.46	-51.38	51.38 S	32.23 W	60.66	212.10	0.67	-0.43	34.36
129	13397	1.00	246.60	93	13394.45	-51.64	51.64 S	33.54 W	61.58	213.00	0.57	0.32	-32.37
130	13494	0.90	245.20	97	13491.44	-52.30	52.30 S	35.01 W	62.93	213.80	0.11	-0.10	-1.44