

Directional Survey

Company: Mesquite SWD

Mesquite SWD

Well: Paduca 6y

State: NM

County: Lea

Report Date: 11/19/16 11:52:46

Location: Lea Co, NM

Rig: Cactus 129

Operator: Firethorne Downhole

Lat/Long: 32 4' 0.32" N 103 43' 0.12" E

Magnetic Declination: 7.12 East

Vertical Section Azimuth: 0.00

North Reference: Grid North (Grid Convergence: 0.330)

Tool Run #	Survey MD (ft)	Inclination (degrees)	Azimuth (degrees)	TVD (ft)	NS (ft)	EW (ft)	CA (degrees)	CD (ft)	VS (ft)	DLS (deg/100ft)
Tie In →	0.00	0.0	0.0	0.00	0.00	0.00				
2	818.00	1.8	327.6	817.87	10.61	-6.73	327.63	12.56	10.61	0.06
2	893.36	2.1	324.8	893.19	12.72	-8.14	327.37	15.11	12.72	0.14
2	1108.00	1.4	88.8	1107.78	16.01	-7.78	334.08	17.80	16.01	0.44
2	1296.00	0.3	137.4	1295.75	15.63	-5.08	342.00	16.44	15.63	0.19
2	1489.00	0.4	257.9	1488.75	15.04	-5.41	340.24	15.98	15.04	0.11
2	1678.00	0.8	272.0	1677.74	14.94	-7.42	333.59	16.68	14.94	0.06
2	1863.00	0.5	286.8	1862.73	15.23	-9.51	328.01	17.95	15.23	0.05
2	2057.00	0.3	252.3	2056.72	15.30	-10.93	324.46	18.81	15.30	0.05
2	2253.00	0.5	5.8	2252.72	16.02	-11.41	324.54	19.67	16.02	0.11
2	2437.00	0.8	78.9	2436.71	17.11	-10.08	329.50	19.86	17.11	0.13
2	2629.00	0.5	200.1	2628.70	16.53	-9.09	331.20	18.87	16.53	0.18
2	2735.00	1.1	217.0	2734.69	15.29	-9.85	327.22	18.19	15.29	0.16
2	2822.00	0.9	224.8	2821.68	14.17	-10.80	322.69	17.82	14.17	0.08
2	2914.00	1.1	218.4	2913.66	12.96	-11.87	317.51	17.57	12.96	0.09
2	3106.00	0.9	215.6	3105.63	10.26	-13.92	306.41	17.29	10.26	0.04
2	3293.00	0.9	71.2	3292.63	9.56	-13.39	305.51	16.45	9.56	0.27
2	3487.00	0.5	32.5	3486.61	10.79	-11.50	313.19	15.77	10.79	0.09
2	3677.00	1.0	78.9	3676.60	11.84	-9.45	321.41	15.15	11.84	0.11
2	3773.00	2.3	109.9	3772.56	11.35	-6.85	328.88	13.25	11.35	0.48
2	3867.00	1.7	135.3	3866.50	9.73	-4.12	337.05	10.57	9.73	0.34
2	3963.00	2.5	141.7	3962.44	7.06	-1.81	345.61	7.29	7.06	0.28
2	4057.00	3.1	138.8	4056.32	3.52	1.15	18.04	3.70	3.52	0.17
2	4134.00	3.7	142.4	4133.19	0.00	4.02	89.96	4.02	0.00	0.25
2	4153.00	3.9	132.5	4152.15	-0.91	4.87	100.64	4.95	-0.91	1.06
2	4172.00	3.8	5.8	4171.13	-0.72	5.41	97.63	5.45	-0.72	10.81
2	4249.00	3.4	5.8	4247.98	4.09	5.89	55.22	7.18	4.09	0.14
2	4346.00	2.5	143.8	4344.92	5.30	7.42	54.45	9.12	5.30	1.71
2	4441.00	1.7	148.0	4439.86	2.48	9.36	75.14	9.68	2.48	0.25
2	4536.00	1.7	148.0	4534.82	0.14	10.83	89.28	10.83	0.14	0.00
2	4632.00	1.4	143.1	4630.78	-1.99	12.28	99.23	12.44	-1.99	0.09
2	4726.00	1.3	148.7	4724.75	-3.84	13.53	105.85	14.07	-3.84	0.05
2	4821.00	1.3	144.5	4819.73	-5.67	14.74	111.04	15.79	-5.67	0.03
2	4914.00	1.0	142.2	4912.71	-7.16	15.84	114.33	17.39	-7.16	0.11
2	5198.00	0.9	149.4	5196.67	-10.94	18.43	120.69	21.43	-10.94	0.02
2	5483.00	0.3	202.2	5481.66	-13.42	19.30	124.82	23.51	-13.42	0.08
2	5767.00	0.6	256.5	5765.65	-14.38	17.56	129.31	22.69	-14.38	0.05
2	5858.00	1.1	231.8	5856.64	-15.05	16.37	132.60	22.24	-15.05	0.21
2	6176.00	1.5	308.2	6174.58	-14.45	10.63	143.65	17.94	-14.45	0.16
2	6785.00	1.0	218.4	6783.48	-13.59	1.21	174.93	13.64	-13.59	0.09

Tool Run #	Survey MD (ft)	Inclination (degrees)	Azimuth (degrees)	TVD (ft)	NS (ft)	EW (ft)	CA (degrees)	CD (ft)	VS (ft)	DLS (deg/100ft)
2	6973.00	1.5	221.3	6971.44	-16.68	-1.40	184.78	16.73	-16.68	0.08
2	7067.00	1.3	222.7	7065.41	-18.39	-2.93	189.07	18.62	-18.39	0.06
2	7106.00	1.2	240.3	7104.40	-18.93	-3.60	190.78	19.27	-18.93	0.31
2	7172.00	1.2	241.7	7170.38	-19.62	-4.84	193.86	20.20	-19.62	0.01
2	7266.00	1.0	280.4	7264.37	-19.95	-6.51	198.08	20.99	-19.95	0.25
2	7363.00	1.0	303.7	7361.35	-19.35	-8.00	202.47	20.94	-19.35	0.12
2	7545.00	1.0	250.1	7543.33	-19.01	-10.73	209.44	21.84	-19.01	0.14
2	8110.00	0.9	203.6	8108.26	-24.61	-16.97	214.59	29.90	-24.61	0.04
2	8493.00	1.3	217.0	8491.19	-30.83	-20.81	214.02	37.20	-30.83	0.04
2	8685.00	0.7	186.0	8683.16	-33.76	-22.26	213.40	40.44	-33.76	0.13
2	8871.00	0.8	220.6	8869.15	-35.87	-23.22	212.91	42.72	-35.87	0.07
2	9039.00	1.7	231.8	9037.11	-38.26	-25.89	214.09	46.20	-38.26	0.16
2	9326.00	1.3	205.1	9324.01	-43.84	-30.58	214.90	53.45	-43.84	0.08
2	9611.00	0.5	216.3	9608.97	-47.88	-32.75	214.38	58.01	-47.88	0.09
2	9706.00	0.8	220.6	9703.97	-48.73	-33.44	214.46	59.10	-48.73	0.08
2	9891.00	1.1	228.3	9888.94	-50.83	-35.54	214.96	62.03	-50.83	0.05
2	9985.00	1.1	258.6	9982.93	-51.58	-37.05	215.68	63.51	-51.58	0.18
2	10077.00	0.8	253.0	10074.92	-51.94	-38.49	216.54	64.64	-51.94	0.09
2	10173.00	0.8	270.6	10170.91	-52.13	-39.78	217.35	65.57	-52.13	0.08
2	10270.00	1.1	261.4	10267.89	-52.26	-41.40	218.39	66.68	-52.26	0.12
2	10363.00	0.9	255.8	10360.88	-52.58	-43.01	219.28	67.93	-52.58	0.09
2	10553.00	0.4	119.8	10550.87	-53.30	-43.79	219.41	68.98	-53.30	0.20
2	10647.00	0.5	100.1	10644.87	-53.55	-43.05	218.79	68.71	-53.55	0.06
2	10841.00	0.8	113.5	10838.86	-54.24	-40.94	217.04	67.96	-54.24	0.05
2	11024.00	1.0	143.1	11021.84	-55.98	-38.85	214.76	68.15	-55.98	0.08
2	11122.00	1.2	157.9	11119.82	-57.62	-37.96	213.37	69.00	-57.62	0.12
2	11311.00	1.7	136.0	11308.76	-61.48	-35.28	209.85	70.88	-61.48	0.11
2	11405.00	1.6	136.7	11402.72	-63.41	-33.44	207.80	71.69	-63.41	0.03
2	11595.00	1.5	142.4	11592.65	-67.27	-30.13	204.13	73.71	-67.27	0.03
2	11691.00	1.3	142.4	11688.62	-69.14	-28.70	202.54	74.86	-69.14	0.05
2	11875.00	1.3	143.1	11872.57	-72.51	-26.13	199.82	77.07	-72.51	0.00
2	11899.00	1.2	241.7	11896.57	-72.85	-26.19	199.77	77.42	-72.85	2.42
2	12280.00	0.7	105.7	12277.54	-75.42	-27.55	200.07	80.30	-75.42	0.14
2	13405.00	0.3	114.2	13402.50	-78.69	-17.80	192.75	80.68	-78.69	0.01
2	13789.00	0.4	7.8	13786.49	-77.71	-16.53	192.01	79.45	-77.71	0.05
2	14629.00	2.2	53.6	14626.25	-64.94	-3.12	182.75	65.02	-64.94	0.07
2	14915.00	2.9	59.9	14911.96	-58.06	7.56	172.58	58.55	-58.06	0.08
2	14979.00	3.0	61.3	14975.88	-56.44	10.43	169.53	57.40	-56.44	0.05
2	15255.00	5.2	56.4	15251.16	-46.08	27.14	149.50	53.48	-46.08	0.24
2	15320.00	5.0	57.8	15315.90	-42.94	31.99	143.31	53.55	-42.94	0.10
2	15417.00	4.1	57.8	15412.59	-38.83	38.53	135.22	54.70	-38.83	0.27
2	15511.00	3.7	61.3	15506.37	-35.57	44.05	128.92	56.62	-35.57	0.16
2	15606.00	3.4	65.6	15601.19	-32.93	49.32	123.73	59.30	-32.93	0.12
2	15801.00	4.0	59.9	15795.78	-27.07	60.58	114.08	66.35	-27.07	0.11
2	16008.00	6.5	40.2	16001.90	-14.45	74.46	100.98	75.85	-14.45	0.44
2	16101.00	6.6	32.5	16094.29	-5.92	80.74	94.19	80.95	-5.92	0.29
2	16196.00	6.6	38.1	16188.66	2.99	87.03	88.03	87.08	2.99	0.20
2	16240.00	6.6	38.8	16232.37	6.95	90.18	85.59	90.44	6.95	0.06
2	16291.00	6.7	43.0	16283.03	11.40	94.04	83.09	94.72	11.40	0.29
2	16384.00	6.1	53.6	16375.46	18.28	101.68	79.81	103.31	18.28	0.43

Tool Run #	Survey MD (ft)	Inclination (degrees)	Azimuth (degrees)	TVD (ft)	NS (ft)	EW (ft)	CA (degrees)	CD (ft)	VS (ft)	DLS (deg/100ft)
2 16480.00		5.2	61.3	16471.00	23.37	109.58	77.96	112.04	23.37	0.36
2 16576.00		4.4	68.4	16566.66	26.81	116.81	77.07	119.85	26.81	0.31
2 16682.00		3.5	82.5	16672.41	28.74	123.82	76.93	127.11	28.74	0.37
2 16773.00		4.0	94.4	16763.22	28.86	129.72	77.46	132.89	28.86	0.29
2 16870.00		3.4	96.6	16860.01	28.27	135.94	78.25	138.85	28.27	0.17
2 16963.00		3.2	78.2	16952.86	28.48	141.22	78.60	144.07	28.48	0.35
2 17058.00		3.2	100.8	17047.72	28.52	146.38	78.97	149.13	28.52	0.39
2 17155.00		3.1	109.9	17144.58	27.13	151.46	79.84	153.87	27.13	0.16