

WCDSC Permian NM

Lone Tree Draw 14-13 State Com 336H - Permit Plan 1

NM OIL CONSERVATION
ARTESIA DISTRICT

Eddy County (NAD 83 NM Eastern)

Sec 14-T21S-R27E

Your Ref:

30-015-45644

JAN 18 2019

RECEIVED

Measured			Vertical			Vertical	Dogleg
Depth	Incl.	Azim.	Depth	Northings	Eastings	Section	Rate
(ft)			(ft)	(ft)	(ft)	(ft)	(°/100ft)
0		0	0	0	0	0	0
100		0	0	100	0	0	0
200		0	0	200	0	0	0
300		0	0	300	0	0	0
400		0	0	400	0	0	0
500		0	0	500	0	0	0
600		0	0	600	0	0	0
700		0	0	700	0	0	0
800		0	0	800	0	0	0
900		0	0	900	0	0	0
1000		0	0	1000	0	0	0
1100		0	0	1100	0	0	0
1200		0	0	1200	0	0	0
1300		0	0	1300	0	0	0
1400		0	0	1400	0	0	0
1500		0	0	1500	0	0	0
1600		0	0	1600	0	0	0
1700		0	0	1700	0	0	0
1800		0	0	1800	0	0	0
1900		0	0	1900	0	0	0
2000		0	0	2000	0	0	0
2100		0	0	2100	0	0	0
2200		0	0	2200	0	0	0
2300		0	0	2300	0	0	0
2400		0	0	2400	0	0	0
2500		0	0	2500	0	0	0
2600		1	248.931	2599.99	-0.31	-0.81	-0.82
2638.92	1.389	248.931	2638.9	-0.61	-1.57	-1.58	1
2700	1.389	248.931	2699.97	-1.14	-2.95	-2.96	0
2800	1.389	248.931	2799.94	-2.01	-5.22	-5.23	0
2900	1.389	248.931	2899.91	-2.88	-7.48	-7.5	0
3000	1.389	248.931	2999.88	-3.75	-9.74	-9.77	0

3100	1.389	248.931	3099.85	-4.62	-12	-12.03	0
3200	1.389	248.931	3199.82	-5.5	-14.26	-14.3	0
3300	1.389	248.931	3299.79	-6.37	-16.53	-16.57	0
3400	1.389	248.931	3399.76	-7.24	-18.79	-18.84	0
3500	1.389	248.931	3499.73	-8.11	-21.05	-21.11	0
3600	1.389	248.931	3599.7	-8.98	-23.31	-23.37	0
3700	1.389	248.931	3699.67	-9.85	-25.58	-25.64	0
3800	1.389	248.931	3799.65	-10.72	-27.84	-27.91	0
3900	1.389	248.931	3899.62	-11.6	-30.1	-30.18	0
4000	1.389	248.931	3999.59	-12.47	-32.36	-32.45	0
4100	1.389	248.931	4099.56	-13.34	-34.63	-34.71	0
4200	1.389	248.931	4199.53	-14.21	-36.89	-36.98	0
4300	1.389	248.931	4299.5	-15.08	-39.15	-39.25	0
4400	1.389	248.931	4399.47	-15.95	-41.41	-41.52	0
4500	1.389	248.931	4499.44	-16.83	-43.67	-43.79	0
4600	1.389	248.931	4599.41	-17.7	-45.94	-46.05	0
4700	1.389	248.931	4699.38	-18.57	-48.2	-48.32	0
4800	1.389	248.931	4799.35	-19.44	-50.46	-50.59	0
4900	1.389	248.931	4899.32	-20.31	-52.72	-52.86	0
5000	1.389	248.931	4999.29	-21.18	-54.99	-55.13	0
5100	1.389	248.931	5099.26	-22.05	-57.25	-57.39	0
5200	1.389	248.931	5199.23	-22.93	-59.51	-59.66	0
5300	1.389	248.931	5299.2	-23.8	-61.77	-61.93	0
5400	1.389	248.931	5399.17	-24.67	-64.03	-64.2	0
5500	1.389	248.931	5499.15	-25.54	-66.3	-66.47	0
5600	1.389	248.931	5599.12	-26.41	-68.56	-68.74	0
5700	1.389	248.931	5699.09	-27.28	-70.82	-71	0
5800	1.389	248.931	5799.06	-28.16	-73.08	-73.27	0
5900	1.389	248.931	5899.03	-29.03	-75.35	-75.54	0
6000	1.389	248.931	5999	-29.9	-77.61	-77.81	0
6100	1.389	248.931	6098.97	-30.77	-79.87	-80.08	0
6200	1.389	248.931	6198.94	-31.64	-82.13	-82.34	0
6300	1.389	248.931	6298.91	-32.51	-84.39	-84.61	0
6400	1.389	248.931	6398.88	-33.38	-86.66	-86.88	0
6500	1.389	248.931	6498.85	-34.26	-88.92	-89.15	0
6600	1.389	248.931	6598.82	-35.13	-91.18	-91.42	0
6700	1.389	248.931	6698.79	-36	-93.44	-93.68	0
6800	1.389	248.931	6798.76	-36.87	-95.71	-95.95	0
6900	1.389	248.931	6898.73	-37.74	-97.97	-98.22	0
7000	1.389	248.931	6998.7	-38.61	-100.23	-100.49	0
7100	1.389	248.931	7098.68	-39.49	-102.49	-102.76	0
7200	1.389	248.931	7198.65	-40.36	-104.76	-105.02	0
7300	1.389	248.931	7298.62	-41.23	-107.02	-107.29	0
7400	1.389	248.931	7398.59	-42.1	-109.28	-109.56	0
7500	1.389	248.931	7498.56	-42.97	-111.54	-111.83	0
7600	1.389	248.931	7598.53	-43.84	-113.8	-114.1	0
7700	1.389	248.931	7698.5	-44.71	-116.07	-116.36	0

7800	1.389	248.931	7798.47	-45.59	-118.33	-118.63	0
7900	1.389	248.931	7898.44	-46.46	-120.59	-120.9	0
7915.96	1.389	248.931	7914.4	-46.6	-120.95	-121.26	0
8000	0.129	248.931	7998.43	-47	-121.99	-122.3	1.5
8008.57	0	0	8007	-47	-122	-122.31	1.5
8100	0	0	8098.43	-47	-122	-122.31	0
8200	0	0	8198.43	-47	-122	-122.31	0
8300	0	0	8298.43	-47	-122	-122.31	0
8358.61	0	0	8357.04	-47	-122	-122.31	0
8400	4.139	89.365	8398.39	-46.98	-120.51	-120.82	10
8500	14.139	89.365	8497	-46.81	-104.64	-104.96	10
8600	24.139	89.365	8591.35	-46.45	-71.9	-72.21	10
8700	34.139	89.365	8678.58	-45.91	-23.28	-23.58	10
8800	44.139	89.365	8756.05	-45.21	39.76	39.46	10
8900	54.139	89.365	8821.39	-44.37	115.29	114.99	10
9000	64.139	89.365	8872.62	-43.42	201.02	200.72	10
9100	74.138	89.365	8908.18	-42.39	294.34	294.04	10
9200	84.138	89.365	8927	-41.3	392.41	392.13	10
9258.62	90	89.365	8930	-40.65	450.92	450.64	10
9300	90	89.365	8930	-40.2	492.31	492.02	0
9400	90	89.365	8930	-39.09	592.3	592.02	0
9500	90	89.365	8930	-37.98	692.29	692.02	0
9600	90	89.365	8930	-36.87	792.29	792.02	0
9700	90	89.365	8930	-35.77	892.28	892.02	0
9800	90	89.365	8930	-34.66	992.28	992.02	0
9900	90	89.365	8930	-33.55	1092.27	1092.02	0
10000	90	89.365	8930	-32.44	1192.26	1192.02	0
10100	90	89.365	8930	-31.34	1292.26	1292.02	0
10200	90	89.365	8930	-30.23	1392.25	1392.02	0
10300	90	89.365	8930	-29.12	1492.24	1492.01	0
10400	90	89.365	8930	-28.01	1592.24	1592.01	0
10500	90	89.365	8930	-26.91	1692.23	1692.01	0
10600	90	89.365	8930	-25.8	1792.23	1792.01	0
10700	90	89.365	8930	-24.69	1892.22	1892.01	0
10800	90	89.365	8930	-23.58	1992.21	1992.01	0
10900	90	89.365	8930	-22.48	2092.21	2092.01	0
11000	90	89.365	8930	-21.37	2192.2	2192.01	0
11100	90	89.365	8930	-20.26	2292.2	2292.01	0
11200	90	89.365	8930	-19.15	2392.19	2392.01	0
11300	90	89.365	8930	-18.05	2492.18	2492.01	0
11400	90	89.365	8930	-16.94	2592.18	2592	0
11500	90	89.365	8930	-15.83	2692.17	2692	0
11600	90	89.365	8930	-14.72	2792.16	2792	0
11700	90	89.365	8930	-13.62	2892.16	2892	0
11800	90	89.365	8930	-12.51	2992.15	2992	0
11900	90	89.365	8930	-11.4	3092.15	3092	0
12000	90	89.365	8930	-10.29	3192.14	3192	0

12100	90	89.365	8930	-9.19	3292.13	3292	0
12200	90	89.365	8930	-8.08	3392.13	3392	0
12300	90	89.365	8930	-6.97	3492.12	3492	0
12400	90	89.365	8930	-5.86	3592.12	3591.99	0
12500	90	89.365	8930	-4.76	3692.11	3691.99	0
12600	90	89.365	8930	-3.65	3792.1	3791.99	0
12700	90	89.365	8930	-2.54	3892.1	3891.99	0
12800	90	89.365	8930	-1.43	3992.09	3991.99	0
12900	90	89.365	8930	-0.33	4092.08	4091.99	0
13000	90	89.365	8930	0.78	4192.08	4191.99	0
13100	90	89.365	8930	1.89	4292.07	4291.99	0
13200	90	89.365	8930	3	4392.07	4391.99	0
13300	90	89.365	8930	4.1	4492.06	4491.99	0
13400	90	89.365	8930	5.21	4592.05	4591.99	0
13500	90	89.365	8930	6.32	4692.05	4691.98	0
13600	90	89.365	8930	7.43	4792.04	4791.98	0
13700	90	89.365	8930	8.53	4892.04	4891.98	0
13800	90	89.365	8930	9.64	4992.03	4991.98	0
13900	90	89.365	8930	10.75	5092.02	5091.98	0
14000	90	89.365	8930	11.86	5192.02	5191.98	0
14100	90	89.365	8930	12.96	5292.01	5291.98	0
14200	90	89.365	8930	14.07	5392.01	5391.98	0
14300	90	89.365	8930	15.18	5492	5491.98	0
14400	90	89.365	8930	16.29	5591.99	5591.98	0
14500	90	89.365	8930	17.39	5691.99	5691.98	0
14600	90	89.365	8930	18.5	5791.98	5791.97	0
14700	90	89.365	8930	19.61	5891.97	5891.97	0
14800	90	89.365	8930	20.72	5991.97	5991.97	0
14900	90	89.365	8930	21.82	6091.96	6091.97	0
15000	90	89.365	8930	22.93	6191.96	6191.97	0
15100	90	89.365	8930	24.04	6291.95	6291.97	0
15200	90	89.365	8930	25.15	6391.94	6391.97	0
15300	90	89.365	8930	26.25	6491.94	6491.97	0
15400	90	89.365	8930	27.36	6591.93	6591.97	0
15500	90	89.365	8930	28.47	6691.93	6691.97	0
15600	90	89.365	8930	29.58	6791.92	6791.96	0
15700	90	89.365	8930	30.68	6891.91	6891.96	0
15800	90	89.365	8930	31.79	6991.91	6991.96	0
15900	90	89.365	8930	32.9	7091.9	7091.96	0
16000	90	89.365	8930	34.01	7191.89	7191.96	0
16100	90	89.365	8930	35.11	7291.89	7291.96	0
16200	90	89.365	8930	36.22	7391.88	7391.96	0
16300	90	89.365	8930	37.33	7491.88	7491.96	0
16400	90	89.365	8930	38.44	7591.87	7591.96	0
16500	90	89.365	8930	39.54	7691.86	7691.96	0
16600	90	89.365	8930	40.65	7791.86	7791.96	0
16700	90	89.365	8930	41.76	7891.85	7891.95	0

16800	90	89.365	8930	42.87	7991.85	7991.95	0
16900	90	89.365	8930	43.97	8091.84	8091.95	0
17000	90	89.365	8930	45.08	8191.83	8191.95	0
17100	90	89.365	8930	46.19	8291.83	8291.95	0
17200	90	89.365	8930	47.3	8391.82	8391.95	0
17300	90	89.365	8930	48.4	8491.82	8491.95	0
17400	90	89.365	8930	49.51	8591.81	8591.95	0
17500	90	89.365	8930	50.62	8691.8	8691.95	0
17600	90	89.365	8930	51.72	8791.8	8791.95	0
17700	90	89.365	8930	52.83	8891.79	8891.94	0
17800	90	89.365	8930	53.94	8991.78	8991.94	0
17900	90	89.365	8930	55.05	9091.78	9091.94	0
18000	90	89.365	8930	56.15	9191.77	9191.94	0
18100	90	89.365	8930	57.26	9291.77	9291.94	0
18200	90	89.365	8930	58.37	9391.76	9391.94	0
18300	90	89.365	8930	59.48	9491.75	9491.94	0
18400	90	89.365	8930	60.58	9591.75	9591.94	0
18500	90	89.365	8930	61.69	9691.74	9691.94	0
18600	90	89.365	8930	62.8	9791.74	9791.94	0
18700	90	89.365	8930	63.91	9891.73	9891.94	0
18800	90	89.365	8930	65.01	9991.72	9991.93	0
18900	90	89.365	8930	66.12	10091.72	10091.93	0
19000	90	89.365	8930	67.23	10191.71	10191.93	0
19100	90	89.365	8930	68.34	10291.7	10291.93	0
19200	90	89.365	8930	69.44	10391.7	10391.93	0
19300	90	89.365	8930	70.55	10491.69	10491.93	0
19310.65	90	89.365	8930	70.67	10502.34	10502.58	0

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to RKB. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 89.614° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.

Central meridian is -104.333°.

Grid Convergence at Surface is 0.088°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 19310.65ft.,
the Bottom Hole Displacement is 10502.58ft., in the Direction of 89.614° (Grid).