

Provide Signature Page for Directional Survey

Customer: Tap Rock O LLC Creation D: 9/1/2017
Project: Eddy Count NM
Field: Eddy Count NM North Ref: Grid
Structure: Sec 36-T26 Job Numbe
EPSG Proj (North Ame New Mexii Latitude: 32° 0' 6.97 Longitude: 104° 9' 6.862 W
Wellhead: Nailed IT St Ground Lev 3037.8 Kelly Bushii 3058.8
Profile: Survey #1 Print Date: 9/5/2017 Vertical Ser 0 BHL TVD: 3822.79

*Nailed It State Com #1
30-015-44384*

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 04 2018

RECEIVED

MD	Incl.	Azim.	Sub-Sea	TVD	Local N Coc	Local E Coc	Global N Cc	Global E Cc	Latitude	Longitude	Dogleg	Vertical Ser	Build	Turn	Comment
(ft)	Deg.	Deg.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	DD:MM:SS	DD:MM:SS	(°/100ft)	(ft)	(°/100ft)	(°/100ft)	-----
809	0	0	-2249.8	809	0	0	364491.7	597576.6	32° 0' 6.97	104° 9' 6.8	0	0	0	0	
909	0.4	202.9	-2149.8	908.999	-0.322	-0.136	364491.4	597576.5	32° 0' 6.97	104° 9' 6.8	0.4	-0.32	0.4		0 1st MWD Survey
1004	0.2	214	-2054.8	1003.998	-0.764	-0.358	364490.9	597576.2	32° 0' 6.96	104° 9' 6.8	0.218	-0.76	-0.211	11.684	
1098	1.2	342.6	-1960.81	1097.991	0.039	-0.744	364491.7	597575.8	32° 0' 6.97	104° 9' 6.8	1.419	0.04	1.064	136.809	
1193	3.1	359.7	-1865.88	1192.921	3.557	-1.055	364495.3	597575.5	32° 0' 7.01	104° 9' 6.8	2.089	3.56	2	18	
1288	3.5	3.2	-1771.04	1287.763	9.021	-0.906	364500.7	597575.7	32° 0' 7.06	104° 9' 6.8	0.471	9.02	0.421	3.684	
1383	3.5	4.6	-1676.21	1382.586	14.807	-0.512	364506.5	597576.1	32° 0' 7.12	104° 9' 6.8	0.09	14.81	0	1.474	
1477	3.7	8.3	-1582.4	1476.401	20.668	0.156	364512.4	597576.7	32° 0' 7.18	104° 9' 6.8	0.326	20.67	0.213	3.936	
1572	3.6	9.6	-1487.59	1571.208	26.642	1.096	364518.3	597577.7	32° 0' 7.24	104° 9' 6.8	0.137	26.64	-0.105	1.368	
1666	2.9	358.6	-1393.74	1665.057	31.929	1.53	364523.6	597578.1	32° 0' 7.29	104° 9' 6.8	0.994	31.93	-0.745	-11.702	
1761	3	2.4	-1298.87	1759.931	36.815	1.576	364528.5	597578.2	32° 0' 7.34	104° 9' 6.8	0.231	36.82	0.105	4	
1856	2.1	5.1	-1203.96	1854.836	41.033	1.834	364532.7	597578.4	32° 0' 7.38	104° 9' 6.8	0.956	41.03	-0.947	2.842	
1951	1.8	3.7	-1109.02	1949.781	44.256	2.085	364536	597578.7	32° 0' 7.41	104° 9' 6.8	0.32	44.26	-0.316	-1.474	
2046	1.8	6.5	-1014.07	2044.735	47.227	2.351	364538.9	597578.9	32° 0' 7.44	104° 9' 6.8	0.093	47.23	0	2.947	
2141	1.8	8.6	-919.112	2139.688	50.185	2.743	364541.9	597579.3	32° 0' 7.47	104° 9' 6.8	0.069	50.18	0	2.211	
2236	1.8	8	-824.159	2234.641	53.137	3.173	364544.8	597579.8	32° 0' 7.50	104° 9' 6.8	0.02	53.14	0	-0.632	
2331	1.8	10.1	-729.206	2329.594	56.084	3.643	364547.8	597580.2	32° 0' 7.53	104° 9' 6.8	0.069	56.08	0	2.211	
2425	1.8	19.8	-635.252	2423.548	58.926	4.402	364550.6	597581	32° 0' 7.55	104° 9' 6.8	0.324	58.93	0	10.319	
2519	1.8	20.3	-541.299	2517.501	61.7	5.414	364553.4	597582	32° 0' 7.58	104° 9' 6.7	0.017	61.7	0	0.532	
2614	1.7	21.9	-446.343	2612.457	64.407	6.457	364556.1	597583	32° 0' 7.61	104° 9' 6.7	0.117	64.41	-0.105	1.684	
2709	1.6	16.6	-351.382	2707.418	66.985	7.362	364558.7	597584	32° 0' 7.63	104° 9' 6.7	0.192	66.99	-0.105	-5.579	
2804	1.6	22.7	-256.419	2802.381	69.48	8.252	364561.2	597584.8	32° 0' 7.66	104° 9' 6.7	0.179	69.48	0	6.421	
2899	1.6	22.8	-161.456	2897.344	71.926	9.278	364563.6	597585.9	32° 0' 7.68	104° 9' 6.7	0.003	71.93	0	0.105	

2993	1.7	34.5	-67.495	2991.305	74.285	10.576	364566	597587.2	32° 0' 7.71"	104° 9' 6.7"	0.373	74.28	0.106	12.447
3088	1.9	52	27.459	3086.259	76.416	12.616	364568.1	597589.2	32° 0' 7.73"	104° 9' 6.7"	0.613	76.42	0.211	18.421
3183	1.8	57.7	122.409	3181.209	78.182	15.118	364569.9	597591.7	32° 0' 7.75"	104° 9' 6.6"	0.22	78.18	-0.105	6
3278	2.4	69.6	217.346	3276.146	79.673	18.243	364571.4	597594.8	32° 0' 7.76"	104° 9' 6.6"	0.778	79.67	0.632	12.526
3373	2.8	81.2	312.248	3371.048	80.721	22.401	364572.4	597599	32° 0' 7.77"	104° 9' 6.6"	0.694	80.72	0.421	12.211
3468	2.3	73.4	407.154	3465.954	81.621	26.521	364573.3	597603.1	32° 0' 7.78"	104° 9' 6.5"	0.64	81.62	-0.526	-8.211
3563	2	62.2	502.088	3560.888	82.939	29.814	364574.6	597606.4	32° 0' 7.79"	104° 9' 6.5"	0.542	82.94	-0.316	-11.789
3659	1.9	63.8	598.032	3656.832	84.423	32.724	364576.1	597609.3	32° 0' 7.81"	104° 9' 6.4"	0.119	84.42	-0.104	1.667
3767	0.9	62.1	705.998	3764.798	85.61	35.08	364577.3	597611.7	32° 0' 7.82"	104° 9' 6.4"	0.927	85.61	-0.926	-1.574
3825	0.9	62.1	763.991	3822.791	86.036	35.885	364577.7	597612.5	32° 0' 7.82"	104° 9' 6.4"	0	86.04	0	0

Last MWD Survey 3767
0 PTB 3825 MD/3822.8 1

' MD/3764.8 TVD 85.6 N 35.1 E N: 364577.3 E: 597611.6

VD 86 N 35.9 E N: 364577.7 E: 597612.4

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(ft)	Deg.	Deg.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	DD:MM:SS	DD:MM:SS	(°/100ft)	(ft)	(°/100ft)	(°/100ft)	-----
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909	0.4	202.9	-2149.8	908.999	-0.322	-0.136	364491.4	597576.5	32° 0' 6.97	104° 9' 6.86	0.4	-0.32	0.4	0	1st MWD Survey
1004	0.2	214	-2054.8	1003.998	-0.764	-0.358	364490.9	597576.2	32° 0' 6.96	104° 9' 6.86	0.218	-0.76	-0.211	11.684	
1098	1.2	342.6	-1960.81	1097.991	0.039	-0.744	364491.7	597575.8	32° 0' 6.97	104° 9' 6.86	1.419	0.04	1.064	136.809	
1193	3.1	359.7	-1865.88	1192.921	3.557	-1.055	364495.3	597575.5	32° 0' 7.01	104° 9' 6.86	2.089	3.56	2	18	
1288	3.5	3.2	-1771.04	1287.763	9.021	-0.906	364500.7	597575.7	32° 0' 7.06	104° 9' 6.86	0.471	9.02	0.421	3.684	
1383	3.5	4.6	-1676.21	1382.586	14.807	-0.512	364506.5	597576.1	32° 0' 7.12	104° 9' 6.86	0.09	14.81	0	1.474	
1477	3.7	8.3	-1582.4	1476.401	20.668	0.156	364512.4	597576.7	32° 0' 7.18	104° 9' 6.86	0.326	20.67	0.213	3.936	
1572	3.6	9.6	-1487.59	1571.208	26.642	1.096	364518.3	597577.7	32° 0' 7.24	104° 9' 6.86	0.137	26.64	-0.105	1.368	
1666	2.9	358.6	-1393.74	1665.057	31.929	1.53	364523.6	597578.1	32° 0' 7.29	104° 9' 6.86	0.994	31.93	-0.745	-11.702	
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1856	2.1	5.1	-1203.96	1854.836	41.033	1.834	364532.7	597578.4	32° 0' 7.38	104° 9' 6.86	0.956	41.03	-0.947	2.842	
1951	1.8	3.7	-1109.02	1949.781	44.256	2.085	364536	597578.7	32° 0' 7.41	104° 9' 6.86	0.32	44.26	-0.316	-1.474	
2046	1.8	6.5	-1014.07	2044.735	47.227	2.351	364538.9	597578.9	32° 0' 7.44	104° 9' 6.86	0.093	47.23	0	2.947	
2141	1.8	8.6	-919.112	2139.688	50.185	2.743	364541.9	597579.3	32° 0' 7.47	104° 9' 6.86	0.069	50.18	0	2.211	
2236	1.8	8	-824.159	2234.641	53.137	3.173	364544.8	597579.8	32° 0' 7.50	104° 9' 6.86	0.02	53.14	0	-0.632	
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2614	1.7	21.9	-446.343	2612.457	64.407	6.457	364556.1	597583	32° 0' 7.61	104° 9' 6.76	0.117	64.41	-0.105	1.684	
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2804	1.6	22.7	-256.419	2802.381	69.48	8.252	364561.2	597584.8	32° 0' 7.66	104° 9' 6.76	0.179	69.48	0	6.421	
2899	1.6	22.8	-161.456	2897.344	71.926	9.278	364563.6	597585.9	32° 0' 7.68	104° 9' 6.76	0.003	71.93	0	0.105	

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3767	0.9	62.1	705.998	3764.798	85.61	35.08	364577.3	597611.7	32° 0' 7.82" 104° 9' 6.4"	0.927	85.61	-0.926	-1.574 Last MWD Survey 3767
3825	0.9	62.1	763.991	3822.791	86.036	35.885	364577.7	597612.5	32° 0' 7.82" 104° 9' 6.4"	0	86.04	0	0 PTB 3825 MD/3822.81

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