

DEC 06 2017

RECEIVED



Survey Report

Service Company: WELLBENDERS

Location: Artesia

Well: GOODMAN 22-2H

Rig: SILVER OAK #1

API or UWI: 30-015-44383

Job Number: WTDX 2017-1100

State: NM

Operating Company: PERCUSSION PETROLEUM

County: Eddy

Magnetic Declination: 0.00

Country: USA

Proposed Azimuth: 90.24

Comment

North Reference: GRID

Latitude: 32.651463

Longitude: -104.474539

Tie-In Data

MD	Inclination	Azimuth	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00

Survey Data

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
103.63	0.14	78.21	103.63	0.03	0.12	78.21	0.13	0.12	0.14
195.35	0.17	229.15	195.35	-0.04	0.13	107.11	0.14	0.13	0.33
286.37	0.28	216.15	286.37	-0.31	-0.10	198.42	0.32	-0.10	0.13
374.34	0.49	223.32	374.34	-0.76	-0.49	212.84	0.90	-0.48	0.24
469.10	0.53	233.94	469.09	-1.31	-1.12	220.56	1.72	-1.11	0.11
563.56	0.51	234.67	563.55	-1.81	-1.82	225.12	2.56	-1.81	0.02
657.84	0.57	235.51	657.83	-2.32	-2.54	227.69	3.44	-2.54	0.06
752.19	0.66	235.31	752.17	-2.89	-3.38	229.44	4.45	-3.37	0.10
847.64	0.80	228.37	847.61	-3.65	-4.33	229.88	5.66	-4.31	0.17
942.09	0.85	228.20	942.05	-4.55	-5.34	229.57	7.02	-5.32	0.05
1035.58	0.91	226.51	1035.53	-5.53	-6.40	229.19	8.45	-6.38	0.07
1129.26	0.94	225.80	1129.20	-6.57	-7.49	228.73	9.96	-7.46	0.03
1225.40	0.99	227.30	1225.33	-7.69	-8.67	228.43	11.58	-8.63	0.06
1350.00	0.90	231.60	1349.91	-9.02	-10.22	228.57	13.64	-10.19	0.09
1443.00	1.10	226.50	1442.89	-10.09	-11.44	228.59	15.26	-11.40	0.24
1538.00	1.00	228.70	1537.88	-11.27	-12.73	228.48	17.00	-12.68	0.11

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
1632.00	1.00	217.20	1631.86	-12.46	-13.84	228.00	18.62	-13.79	0.21
1725.00	1.00	220.70	1724.85	-13.72	-14.86	227.28	20.23	-14.80	0.07
1818.00	1.20	218.70	1817.83	-15.10	-16.00	226.66	22.00	-15.93	0.22
1912.00	1.20	215.80	1911.81	-16.67	-17.19	225.89	23.94	-17.12	0.06
2006.00	1.20	224.50	2005.79	-18.17	-18.45	225.45	25.90	-18.38	0.19
2099.00	1.00	170.80	2098.78	-19.66	-19.01	224.03	27.35	-18.92	1.09
2145.00	2.50	114.10	2144.76	-20.47	-18.03	221.37	27.27	-17.94	4.61
2192.00	5.30	95.70	2191.64	-21.10	-14.93	215.28	25.85	-14.84	6.45
2238.00	8.30	88.00	2237.32	-21.20	-9.50	204.14	23.23	-9.41	6.80
2285.00	11.80	86.30	2283.59	-20.77	-1.31	183.61	20.81	-1.22	7.47
2331.00	15.00	86.00	2328.33	-20.05	9.33	155.05	22.11	9.41	6.96
2350.00	16.40	87.00	2346.62	-19.74	14.46	143.78	24.47	14.54	7.50
2377.00	18.40	87.30	2372.38	-19.34	22.52	130.65	29.68	22.60	7.41
2412.00	21.80	88.00	2405.25	-18.85	34.54	118.62	39.35	34.62	9.74
2443.00	26.40	89.50	2433.54	-18.59	47.19	111.50	50.72	47.27	14.97
2470.00	30.80	91.20	2457.24	-18.68	60.11	107.26	62.94	60.19	16.57
2506.00	35.60	93.10	2487.35	-19.44	79.80	103.69	82.13	79.88	13.64
2537.00	40.50	94.50	2511.76	-20.72	98.86	101.84	101.00	98.94	16.05
2565.00	45.20	93.80	2532.28	-22.09	117.84	100.62	119.90	117.93	16.87
2601.00	49.40	94.40	2556.69	-23.99	144.23	99.44	146.21	144.32	11.73
2632.00	52.30	95.20	2576.26	-26.00	168.18	98.79	170.18	168.29	9.57
2660.00	54.70	95.10	2592.91	-28.02	190.59	98.36	192.64	190.71	8.58
2695.00	57.50	96.10	2612.43	-30.86	219.50	98.00	221.66	219.63	8.34
2727.00	60.70	97.40	2628.86	-34.09	246.76	97.87	249.11	246.90	10.59
2754.00	63.50	98.10	2641.50	-37.31	270.41	97.86	272.97	270.56	10.62
2789.00	67.30	98.90	2656.06	-42.02	301.87	97.92	304.78	302.05	11.05
2821.00	70.70	100.20	2667.53	-46.98	331.33	98.07	334.64	331.52	11.28
2848.00	74.00	100.80	2675.72	-51.67	356.62	98.24	360.34	356.83	12.40
2884.00	77.60	101.30	2684.55	-58.36	390.87	98.49	395.20	391.11	10.09
2915.00	81.10	101.80	2690.27	-64.46	420.71	98.71	425.62	420.98	11.40
2942.00	84.40	102.10	2693.68	-70.00	446.91	98.90	452.36	447.20	12.27
2977.00	86.10	102.10	2696.58	-77.31	481.02	99.13	487.19	481.34	4.86
3036.00	86.20	101.10	2700.54	-89.15	538.68	99.40	546.01	539.05	1.70
3131.00	85.90	100.30	2707.09	-106.75	631.81	99.59	640.76	632.25	0.90
3225.00	87.00	98.70	2712.91	-122.23	724.33	99.58	734.57	724.84	2.06
3320.00	88.30	96.70	2716.80	-134.95	818.39	99.36	829.44	818.95	2.51
3415.00	88.90	94.00	2719.12	-143.80	912.94	98.95	924.20	913.53	2.91

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
3510.00	89.10	92.50	2720.78	-149.18	1007.77	98.42	1018.75	1008.39	1.59
3605.00	88.80	90.80	2722.52	-151.92	1102.71	97.84	1113.13	1103.34	1.82
3699.00	88.90	88.70	2724.41	-151.51	1196.69	97.22	1206.24	1197.31	2.24
3793.00	90.70	88.20	2724.74	-148.97	1290.65	96.58	1299.22	1291.26	1.99
3886.00	90.90	88.80	2723.44	-146.53	1383.61	96.05	1391.34	1384.21	0.68
3981.00	89.80	88.70	2722.86	-144.46	1478.58	95.58	1485.62	1479.17	1.16
4073.00	88.40	88.70	2724.30	-142.37	1570.54	95.18	1576.98	1571.13	1.52
4166.00	85.50	88.50	2729.25	-140.10	1663.37	94.81	1669.26	1663.95	3.13
4260.00	86.90	88.70	2735.48	-137.81	1757.14	94.48	1762.53	1757.70	1.50
4288.00	87.50	88.90	2736.85	-137.23	1785.10	94.40	1790.36	1785.66	2.26
4381.00	86.00	88.30	2742.12	-134.96	1877.92	94.11	1882.76	1878.47	1.74
4475.00	85.30	88.70	2749.25	-132.51	1971.61	93.84	1976.06	1972.15	0.86
4569.00	86.30	88.30	2756.14	-130.05	2065.33	93.60	2069.42	2065.85	1.15
4663.00	86.10	88.30	2762.36	-127.27	2159.08	93.37	2162.83	2159.59	0.21
4759.00	84.90	88.70	2769.90	-124.76	2254.75	93.17	2258.20	2255.25	1.32
4853.00	86.00	89.50	2777.35	-123.29	2348.44	93.01	2351.67	2348.93	1.45
4946.00	85.70	90.30	2784.08	-123.13	2441.19	92.89	2444.30	2441.69	0.92
5039.00	87.10	90.10	2789.92	-123.45	2534.01	92.79	2537.01	2534.50	1.52
5133.00	88.70	90.50	2793.37	-123.95	2627.94	92.70	2630.86	2628.44	1.75
5228.00	87.80	90.40	2796.27	-124.69	2722.89	92.62	2725.74	2723.39	0.95
5321.00	88.80	90.20	2799.03	-125.18	2815.85	92.55	2818.63	2816.35	1.10
5415.00	88.30	90.20	2801.41	-125.51	2909.82	92.47	2912.52	2910.32	0.53
5508.00	87.10	90.90	2805.14	-126.40	3002.73	92.41	3005.39	3003.24	1.49
5603.00	88.40	90.40	2808.87	-127.48	3097.65	92.36	3100.27	3098.16	1.47
5697.00	88.20	91.50	2811.66	-129.03	3191.60	92.32	3194.20	3192.11	1.19
5790.00	87.40	89.50	2815.23	-129.84	3284.52	92.26	3287.09	3285.03	2.31
5883.00	89.00	89.50	2818.15	-129.03	3377.47	92.19	3379.93	3377.98	1.72
5977.00	88.10	90.00	2820.53	-128.62	3471.44	92.12	3473.82	3471.94	1.10
6072.00	88.70	89.90	2823.18	-128.54	3566.40	92.06	3568.71	3566.90	0.64
6165.00	88.00	90.40	2825.86	-128.78	3659.36	92.02	3661.62	3659.87	0.92
6258.00	86.70	89.50	2830.16	-128.70	3752.26	91.96	3754.46	3752.76	1.70
6352.00	88.30	89.70	2834.26	-128.05	3846.16	91.91	3848.29	3846.66	1.72
6443.00	88.60	89.70	2836.72	-127.57	3937.13	91.86	3939.19	3937.63	0.33
6536.00	87.80	89.90	2839.64	-127.25	4030.08	91.81	4032.09	4030.58	0.89
6628.00	89.90	89.60	2841.49	-126.84	4122.05	91.76	4124.01	4122.55	2.31
6719.00	89.00	90.70	2842.36	-127.08	4213.05	91.73	4214.96	4213.54	1.56
6812.00	89.90	90.70	2843.25	-128.22	4306.03	91.71	4307.94	4306.53	0.97

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
6905.00	89.60	90.30	2843.66	-129.03	4399.03	91.68	4400.92	4399.53	0.54
6997.00	86.70	91.60	2846.63	-130.55	4490.96	91.67	4492.86	4491.47	3.45
7089.00	87.80	90.90	2851.04	-132.56	4582.83	91.66	4584.74	4583.34	1.42
7180.00	87.30	90.80	2854.93	-133.91	4673.73	91.64	4675.65	4674.25	0.56
7272.00	87.50	91.20	2859.11	-135.51	4765.63	91.63	4767.55	4766.15	0.49
7364.00	89.10	91.50	2861.83	-137.68	4857.56	91.62	4859.51	4858.09	1.77
7455.00	88.40	91.20	2863.82	-139.82	4948.51	91.62	4950.48	4949.05	0.84
7548.00	88.80	90.70	2866.09	-141.36	5041.47	91.61	5043.45	5042.02	0.69
7639.00	87.90	90.50	2868.71	-142.32	5132.42	91.59	5134.40	5132.98	1.01
7731.00	88.10	91.00	2871.92	-143.52	5224.36	91.57	5226.33	5224.92	0.59
7824.00	87.50	90.20	2875.49	-144.49	5317.29	91.56	5319.25	5317.84	1.07
7916.00	88.30	90.90	2878.86	-145.37	5409.22	91.54	5411.17	5409.78	1.16
8009.00	89.80	90.20	2880.41	-146.27	5502.20	91.52	5504.14	5502.76	1.78
8101.00	89.20	91.10	2881.21	-147.31	5594.19	91.51	5596.13	5594.75	1.18
8192.00	89.60	90.90	2882.16	-148.90	5685.17	91.50	5687.12	5685.74	0.49
8284.00	91.10	90.90	2881.60	-150.34	5777.15	91.49	5779.11	5777.73	1.63

Projected Survey

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
8355.00	91.10	90.90	2880.24	-151.46	5848.13	91.48	5850.09	5848.71	0.00