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AUG 12 2019

DISTRICT II-ARTESIA O.C.D.



Survey Report

Service Company: Wellbenders

Location:

Well: Huber Fed 11H

Rig: Akita 20

API or UWI:

Job Number: NM-19-1014

State: NM

Operating Company: Percusion

County: Eddy

Magnetic Declination: 0.00

Country: USA

Proposed Azimuth: 180.54

Comment

North Reference: GRID

Latitude: 32.611121

Longitude: -104.46795

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
136.00	0.97	193.38	135.99	-1.12	-0.27	193.38	1.15	1.12	0.71
227.00	1.01	210.08	226.98	-2.56	-0.85	198.28	2.70	2.57	0.32
319.00	1.67	215.17	318.95	-4.36	-2.03	204.91	4.81	4.38	0.73
410.00	2.90	277.05	409.89	-5.16	-5.07	224.51	7.24	5.21	2.83
501.00	4.70	294.80	500.69	-3.32	-10.74	252.85	11.24	3.42	2.34
592.00	6.42	306.14	591.26	1.25	-18.24	273.92	18.28	-1.08	2.23
681.00	9.19	311.77	679.43	8.92	-27.56	287.93	28.97	-8.66	3.23
772.00	11.52	317.13	768.94	20.42	-39.16	297.54	44.17	-20.05	2.77
862.00	13.41	322.84	856.82	35.33	-51.58	304.41	62.52	-34.84	2.50
954.00	14.81	326.18	946.05	53.60	-64.57	309.70	83.92	-52.99	1.76
1046.00	16.35	331.63	1034.67	74.76	-77.27	314.06	107.52	-74.03	2.31
1136.00	16.70	335.15	1120.95	97.65	-88.72	317.74	131.93	-96.80	1.18
1228.00	16.48	335.67	1209.12	121.53	-99.66	320.65	157.16	-120.59	0.29
1242.00	16.57	335.76	1222.54	125.16	-101.29	321.02	161.01	-124.20	0.67
1454.00	17.36	346.75	1425.37	183.53	-120.96	326.61	219.80	-182.38	1.56
1549.00	17.45	358.61	1516.05	211.57	-124.55	329.51	245.51	-210.39	3.73

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
1643.00	17.23	9.69	1605.80	239.39	-122.55	332.89	268.94	-238.23	3.52
1738.00	18.42	20.85	1696.27	267.30	-114.84	336.75	290.92	-266.20	3.80
1833.00	19.52	24.89	1786.11	295.72	-102.82	340.83	313.09	-294.74	1.80
1927.00	17.01	22.17	1875.37	322.70	-91.02	344.25	335.29	-321.83	2.82
2020.00	12.97	28.41	1965.19	344.49	-80.91	346.78	353.87	-343.71	4.67
2115.00	8.53	46.69	2058.53	358.71	-70.71	348.85	365.62	-358.03	5.84
2209.00	6.86	87.91	2151.74	363.70	-60.01	350.63	368.62	-363.12	5.98
2305.00	4.75	122.98	2247.28	361.75	-50.95	351.98	365.32	-361.25	4.20
2400.00	10.64	143.37	2341.39	352.56	-42.41	353.14	355.10	-352.14	6.74
2494.00	13.45	150.05	2433.32	336.12	-31.77	354.60	337.62	-335.80	3.33
2587.00	19.74	156.38	2522.41	312.33	-20.06	356.32	312.98	-312.13	7.03
2682.00	27.03	164.99	2609.57	276.72	-8.02	358.34	276.84	-276.64	8.46
2777.00	34.20	169.73	2691.29	229.53	2.34	0.58	229.55	-229.55	7.96
2823.00	37.10	171.14	2728.66	203.10	6.78	1.91	203.21	-203.15	6.55
2871.00	40.40	173.51	2766.10	173.33	10.77	3.56	173.66	-173.42	7.54
2918.00	43.69	175.80	2801.00	142.00	13.69	5.51	142.66	-142.12	7.72
2966.00	47.30	178.00	2834.64	107.82	15.52	8.19	108.93	-107.96	8.20
3012.00	49.98	180.37	2865.03	73.31	15.99	12.31	75.03	-73.46	6.99
3060.00	52.84	182.57	2894.97	35.81	15.02	22.75	38.83	-35.95	6.95
3107.00	55.96	183.18	2922.33	-2.35	13.10	100.18	13.30	2.23	6.72
3154.00	59.65	183.97	2947.37	-42.04	10.61	165.84	43.36	41.94	7.98
3201.00	60.70	184.06	2970.74	-82.71	7.75	174.64	83.08	82.64	2.24
3248.00	60.92	184.15	2993.67	-123.64	4.82	177.77	123.73	123.59	0.50
3295.00	61.32	184.24	3016.36	-164.68	1.81	179.37	164.69	164.66	0.87
3343.00	61.80	184.32	3039.22	-206.77	-1.34	180.37	206.78	206.78	1.01
3390.00	62.24	184.59	3061.27	-248.15	-4.57	181.05	248.20	248.19	1.06
3438.00	64.84	184.85	3082.66	-290.98	-8.10	181.60	291.09	291.04	5.44
3485.00	68.92	185.82	3101.11	-334.00	-12.13	182.08	334.22	334.10	8.89
3533.00	72.18	187.23	3117.09	-378.96	-17.28	182.61	379.36	379.11	7.33
3580.00	76.31	187.05	3129.85	-423.84	-22.90	183.09	424.46	424.04	8.79
3627.00	80.31	187.05	3139.37	-469.51	-28.54	183.48	470.37	469.75	8.51
3674.00	84.31	186.26	3145.66	-515.76	-33.94	183.76	516.88	516.06	8.67
3722.00	88.75	184.41	3148.57	-563.45	-38.39	183.90	564.76	563.79	10.02
3769.00	89.49	182.13	3149.29	-610.36	-41.07	183.85	611.75	610.72	5.10
3816.00	90.02	180.90	3149.49	-657.35	-42.31	183.68	658.71	657.72	2.85
3911.00	91.47	180.81	3148.25	-752.33	-43.73	183.33	753.60	752.70	1.53
4006.00	90.37	180.63	3146.73	-847.30	-44.92	183.04	848.49	847.69	1.17

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
4100.00	88.04	180.02	3148.03	-941.29	-45.46	182.76	942.38	941.67	2.56
4194.00	89.36	180.11	3150.17	-1035.26	-45.56	182.52	1036.26	1035.64	1.41
4289.00	87.43	180.02	3152.83	-1130.22	-45.67	182.31	1131.14	1130.60	2.03
4384.00	88.66	179.75	3156.07	-1225.16	-45.48	182.13	1226.01	1225.54	1.33
4479.00	89.67	180.19	3157.45	-1320.15	-45.43	181.97	1320.93	1320.52	1.16
4574.00	88.70	180.19	3158.80	-1415.14	-45.75	181.85	1415.88	1415.51	1.02
4668.00	89.32	180.28	3160.43	-1509.12	-46.13	181.75	1509.83	1509.49	0.67
4762.00	87.65	180.02	3162.91	-1603.09	-46.38	181.66	1603.76	1603.45	1.80
4886.00	87.60	180.72	3168.05	-1726.98	-47.18	181.56	1727.62	1727.34	0.57
4980.00	87.74	181.34	3171.87	-1820.88	-48.87	181.54	1821.54	1821.26	0.68
5075.00	87.03	180.19	3176.21	-1915.77	-50.13	181.50	1916.43	1916.16	1.42
5169.00	87.16	180.37	3180.97	-2009.65	-50.59	181.44	2010.29	2010.04	0.24
5264.00	87.52	180.72	3185.38	-2104.55	-51.50	181.40	2105.18	2104.94	0.53
5358.00	88.18	180.90	3188.91	-2198.47	-52.82	181.38	2199.10	2198.87	0.73
5453.00	86.81	180.11	3193.06	-2293.37	-53.66	181.34	2294.00	2293.78	1.66
5548.00	87.38	180.37	3197.87	-2388.25	-54.06	181.30	2388.86	2388.65	0.66
5643.00	88.53	180.37	3201.26	-2483.18	-54.67	181.26	2483.79	2483.59	1.21
5738.00	90.59	179.84	3201.99	-2578.18	-54.85	181.22	2578.76	2578.58	2.24
5833.00	90.81	180.19	3200.83	-2673.17	-54.87	181.18	2673.73	2673.57	0.44
5928.00	91.08	180.63	3199.26	-2768.15	-55.55	181.15	2768.71	2768.55	0.54
6023.00	89.14	179.67	3199.08	-2863.15	-55.80	181.12	2863.69	2863.55	2.28
6117.00	89.67	180.11	3200.06	-2957.14	-55.62	181.08	2957.66	2957.53	0.73
6211.00	89.93	180.28	3200.39	-3051.14	-55.94	181.05	3051.65	3051.53	0.33
6305.00	90.42	180.90	3200.10	-3145.13	-56.91	181.04	3145.65	3145.53	0.84
6396.00	90.59	180.63	3199.30	-3236.12	-58.12	181.03	3236.64	3236.53	0.35
6488.00	91.21	180.98	3197.85	-3328.10	-59.41	181.02	3328.63	3328.51	0.77
6580.00	91.25	180.02	3195.88	-3420.07	-60.22	181.01	3420.60	3420.49	1.04
6671.00	91.30	179.84	3193.85	-3511.05	-60.10	180.98	3511.57	3511.46	0.21
6762.00	91.47	180.72	3191.65	-3602.02	-60.55	180.96	3602.53	3602.43	0.98
6853.00	90.68	180.28	3189.95	-3693.00	-61.34	180.95	3693.51	3693.42	0.99
6942.00	91.08	180.19	3188.58	-3781.99	-61.71	180.93	3782.50	3782.41	0.46
7033.00	91.25	180.46	3186.73	-3872.97	-62.22	180.92	3873.47	3873.39	0.35
7123.00	90.07	179.40	3185.69	-3962.96	-62.11	180.90	3963.45	3963.37	1.76
7215.00	90.55	178.96	3185.19	-4054.95	-60.80	180.86	4055.41	4055.34	0.71
7307.00	91.21	179.05	3183.78	-4146.93	-59.20	180.82	4147.35	4147.30	0.72
7396.00	91.30	179.14	3181.83	-4235.89	-57.79	180.78	4236.29	4236.25	0.14
7488.00	91.60	179.05	3179.50	-4327.85	-56.34	180.75	4328.22	4328.19	0.34

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
7583.00	89.71	179.05	3178.42	-4422.83	-54.77	180.71	4423.17	4423.15	1.99
7677.00	89.41	179.05	3179.14	-4516.81	-53.21	180.67	4517.13	4517.11	0.32
7772.00	90.46	178.96	3179.25	-4611.80	-51.56	180.64	4612.09	4612.08	1.11
7866.00	90.81	178.44	3178.21	-4705.77	-49.43	180.60	4706.03	4706.02	0.67
7961.00	91.21	178.79	3176.53	-4800.72	-47.13	180.56	4800.96	4800.95	0.56
8055.00	91.43	179.31	3174.37	-4894.69	-45.57	180.53	4894.90	4894.90	0.60
8149.00	92.13	179.67	3171.45	-4988.64	-44.74	180.51	4988.84	4988.84	0.84
8244.00	91.21	181.16	3168.68	-5083.59	-45.42	180.51	5083.79	5083.79	1.84
8337.00	91.69	181.34	3166.32	-5176.54	-47.45	180.53	5176.75	5176.75	0.55
8432.00	92.13	181.86	3163.16	-5271.45	-50.10	180.54	5271.68	5271.68	0.72
8526.00	92.04	180.72	3159.74	-5365.36	-52.22	180.56	5365.61	5365.61	1.22
8620.00	91.78	180.72	3156.60	-5459.30	-53.40	180.56	5459.56	5459.56	0.28
8714.00	91.96	181.07	3153.54	-5553.24	-54.87	180.57	5553.51	5553.51	0.42
8798.00	92.48	181.25	3150.28	-5637.16	-56.57	180.57	5637.44	5637.44	0.66

Projected Survey

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
8865.00	92.48	181.25	3147.38	-5704.08	-58.03	180.58	5704.37	5704.37	0.00