

HOBBS CCD

MAY 29 2019



Company: Ameredev

Well: Nandina Fed Com 25-36-31-125H

County: Lea

State: New Mexico

Field: Lea

API: 30-025-45244

Rig: H&P 616

Service Co: Gordon Technologies LLC

Job #: GT 180565

Survey Calc: Minimum Curvature

Directional Survey Report **RECEIVED**

Well Surface Location

Latitude: 32.080127

Longitude: -103.303003

Reference: NAD 1927

Y (Northing): 394411.22

X (Easting): 860456.94

Field Engr: Ted Montoya

Johnathan White

Report Date: Jan 30 2019

Time: 14:01

Mag Reference: Grid North

Mag Correction: 6.10

Vert Sect. Azi: 359.18

Perm Datum: Mean Sea Level

Depth Ref: Rotary Table

RKB Height: 27

GL Elev: 3041

Survey	MD	Inc	Azimuth	TVD	VS	Rectangular Offsets			Course	Closure			Source
Tie In	0	0	0	0	0	NS	EW	Length	DLS	Temp	Distance	Azimuth	
1	159.20	0.42	125.39	159.20	-0.34	-0.34	0.48	159.20	0.26	0.00	0.58	125.39	gyro survey.csv
2	253.98	0.54	110.98	253.98	-0.72	-0.70	1.18	94.78	0.18	0.00	1.37	120.73	gyro survey.csv
3	348.76	0.54	107.13	348.75	-1.02	-0.99	2.02	94.78	0.04	0.00	2.25	116.12	gyro survey.csv
4	443.54	0.39	113.77	443.53	-1.29	-1.25	2.74	94.78	0.17	0.00	3.01	114.54	gyro survey.csv
5	538.32	0.26	118.74	538.31	-1.53	-1.49	3.23	94.78	0.14	0.00	3.55	114.73	gyro survey.csv
6	633.10	0.11	261.39	633.09	-1.65	-1.60	3.32	94.78	0.37	0.00	3.69	115.74	gyro survey.csv
7	727.88	0.50	253.46	727.86	-1.77	-1.73	2.84	94.78	0.41	0.00	3.33	121.42	gyro survey.csv
8	791.06	0.62	271.68	791.04	-1.83	-1.80	2.23	63.18	0.34	0.00	2.87	128.92	gyro survey.csv
9	885.84	0.90	237.01	885.81	-2.21	-2.19	1.09	94.78	0.55	0.00	2.45	153.46	gyro survey.csv
10	980.62	1.21	252.93	980.58	-2.88	-2.89	-0.49	94.78	0.45	0.00	2.93	189.54	gyro survey.csv
11	1075.40	1.27	247.55	1075.34	-3.55	-3.59	-2.41	94.78	0.14	0.00	4.32	213.84	gyro survey.csv
12	1170.18	1.34	248.33	1170.09	-4.33	-4.40	-4.41	94.78	0.08	0.00	6.23	225.11	gyro survey.csv
13	1264.96	1.38	241.52	1264.84	-5.26	-5.35	-8.45	94.78	0.18	0.00	8.38	230.31	gyro survey.csv
14	1359.74	1.40	261.42	1359.60	-5.94	-6.07	-8.60	94.78	0.51	0.00	10.52	234.78	gyro survey.csv
15	1454.52	1.44	262.60	1454.35	-6.24	-6.39	-10.92	94.78	0.05	0.00	12.65	239.65	gyro survey.csv
16	1549.30	1.46	261.24	1549.10	-6.54	-6.73	-13.30	94.78	0.04	0.00	14.90	243.15	gyro survey.csv
17	1644.08	1.44	247.81	1643.85	-7.14	-7.36	-15.59	94.78	0.36	0.00	17.24	244.72	gyro survey.csv
18	1738.86	1.79	205.23	1738.59	-8.90	-9.15	-17.33	94.78	1.28	0.00	19.59	242.15	gyro survey.csv
19	1833.64	2.45	186.83	1833.31	-12.24	-12.50	-18.20	94.78	0.99	0.00	22.08	235.51	gyro survey.csv
20	1928.42	2.58	185.34	1928.00	-16.37	-16.64	-18.64	94.78	0.15	0.00	24.98	228.24	gyro survey.csv
21	2023.20	3.10	177.26	2022.66	-21.05	-21.32	-18.71	94.78	0.69	0.00	28.37	221.27	gyro survey.csv
22	2117.98	3.92	171.70	2117.28	-26.83	-27.09	-18.12	94.78	0.94	0.00	32.59	213.78	gyro survey.csv
23	2212.76	4.09	170.47	2211.81	-33.38	-33.63	-17.10	94.78	0.20	0.00	37.72	206.85	gyro survey.csv
24	2307.54	4.46	169.55	2306.33	-40.35	-40.59	-15.87	94.78	0.40	0.00	43.58	201.35	gyro survey.csv
25	2402.32	5.19	167.28	2400.77	-48.18	-48.39	-14.25	94.78	0.80	0.00	50.45	196.41	gyro survey.csv
26	2497.10	5.36	164.15	2495.15	-56.65	-56.83	-12.10	94.78	0.35	0.00	58.11	192.02	gyro survey.csv
27	2591.88	5.51	163.27	2589.50	-65.30	-65.45	-9.58	94.78	0.18	0.00	66.15	188.33	gyro survey.csv
28	2686.66	5.68	163.11	2683.83	-74.19	-74.29	-6.91	94.78	0.18	0.00	74.61	185.31	gyro survey.csv
29	2781.44	5.90	160.70	2778.13	-83.31	-83.38	-3.94	94.78	0.35	0.00	83.47	182.70	gyro survey.csv
30	2876.22	6.18	161.34	2872.38	-92.79	-92.81	-0.70	94.78	0.30	0.00	92.81	180.43	gyro survey.csv
31	2971.00	6.44	162.33	2966.59	-102.73	-102.71	2.55	94.78	0.30	0.00	102.74	178.58	gyro survey.csv
32	3065.78	6.89	161.70	3060.73	-113.24	-113.17	5.95	94.78	0.48	0.00	113.33	176.99	gyro survey.csv
33	3160.56	6.99	158.96	3154.81	-124.08	-123.95	9.80	94.78	0.36	0.00	124.34	175.48	gyro survey.csv
34	3255.34	7.07	159.69	3248.88	-134.99	-134.80	13.90	94.78	0.13	0.00	135.52	174.11	gyro survey.csv
35	3350.12	7.11	160.34	3342.94	-146.04	-145.80	17.90	94.78	0.09	0.00	146.89	173.00	gyro survey.csv
36	3444.90	7.14	160.78	3436.98	-157.18	-156.88	21.81	94.78	0.07	0.00	158.39	172.09	gyro survey.csv
37	3539.68	6.91	167.76	3531.05	-168.36	-168.02	24.96	94.78	0.93	0.00	169.86	171.55	gyro survey.csv
38	3634.46	7.12	169.13	3625.12	-179.73	-179.36	27.27	94.78	0.28	0.00	181.42	171.35	gyro survey.csv
39	3729.24	7.40	168.84	3719.14	-191.52	-191.11	29.56	94.78	0.30	0.00	193.39	171.21	gyro survey.csv
40	3824.02	7.78	166.88	3813.09	-203.79	-203.35	32.20	94.78	0.49	0.00	205.88	171.00	gyro survey.csv
41	3918.80	8.13	168.81	3906.96	-216.65	-216.17	34.96	94.78	0.46	0.00	218.98	170.81	gyro survey.csv
42	4013.58	8.19	170.46	4000.78	-229.92	-229.41	37.38	94.78	0.26	0.00	232.43	170.75	gyro survey.csv
43	4108.36	7.83	171.57	4094.64	-242.99	-242.45	39.44	94.78	0.41	0.00	245.64	170.76	gyro survey.csv
44	4203.14	8.23	174.91	4188.49	-256.15	-255.59	40.99	94.78	0.65	0.00	258.86	170.89	gyro survey.csv
45	4297.92	8.51	175.38	4282.26	-269.92	-269.34	42.16	94.78	0.30	0.00	272.62	171.10	gyro survey.csv
46	4392.70	8.91	175.26	4375.95	-284.24	-283.64	43.33	94.78	0.42	0.00	286.94	171.31	gyro survey.csv
47	4487.48	9.40	174.19	4469.52	-299.27	-298.66	44.72	94.78	0.55	0.00	301.99	171.48	gyro survey.csv
48	4582.26	9.88	175.34	4562.96	-315.09	-314.46	46.16	94.78	0.55	0.00	317.84	171.65	gyro survey.csv
49	4677.04	10.32	175.94	4656.27	-331.68	-331.04	47.43	94.78	0.48	0.00	334.42	171.85	gyro survey.csv

50	4771.82	11.01	177.33	4749.41	-349.20	-348.55	48.45	94.78	0.78	0.00	351.90	172.09	gyro survey.csv
51	4866.60	11.62	176.66	4842.35	-367.79	-367.12	49.43	94.78	0.66	0.00	370.43	172.33	gyro survey.csv
52	4961.38	12.01	178.44	4935.12	-387.18	-386.50	50.25	94.78	0.56	0.00	389.76	172.59	gyro survey.csv
53	5056.16	12.48	180.38	5027.75	-407.28	-406.60	50.45	94.78	0.66	0.00	409.72	172.93	gyro survey.csv
54	5150.94	13.05	179.91	5120.18	-428.22	-427.54	50.40	94.78	0.61	0.00	430.50	173.28	gyro survey.csv
55	5245.72	12.35	179.69	5212.64	-449.06	-448.38	50.47	94.78	0.74	0.00	451.21	173.58	gyro survey.csv
56	5340.50	10.29	181.49	5305.58	-467.65	-466.98	50.31	94.78	2.20	0.00	469.68	173.85	gyro survey.csv
57	5435.28	7.32	174.28	5399.23	-482.13	-481.45	50.69	94.78	3.34	0.00	484.12	173.99	gyro survey.csv
58	5530.06	5.49	170.70	5493.42	-492.63	-491.94	52.02	94.78	1.98	0.00	494.68	173.96	gyro survey.csv
59	5624.84	4.73	171.95	5587.82	-500.99	-500.28	53.30	94.78	0.81	0.00	503.11	173.92	gyro survey.csv
60	5719.62	3.06	184.83	5682.38	-507.39	-506.67	53.64	94.78	1.98	0.00	509.50	173.96	gyro survey.csv
61	5814.40	3.00	180.74	5777.03	-512.38	-511.67	53.39	94.78	0.24	0.00	514.45	174.04	gyro survey.csv
62	5909.18	2.83	185.86	5871.68	-517.19	-516.48	53.12	94.78	0.33	0.00	519.21	174.13	gyro survey.csv
63	6003.96	1.90	180.18	5966.38	-521.08	-520.38	52.88	94.78	1.01	0.00	523.06	174.20	gyro survey.csv
64	6098.74	0.52	132.87	6061.14	-522.95	-522.24	53.19	94.78	1.68	0.00	524.94	174.18	gyro survey.csv
65	6193.52	0.50	137.56	6155.92	-523.56	-522.84	53.78	94.78	0.05	0.00	525.60	174.13	gyro survey.csv
66	6288.30	0.52	147.68	6250.69	-524.23	-523.51	54.29	94.78	0.10	0.00	526.32	174.08	gyro survey.csv
67	6383.08	0.55	149.31	6345.47	-524.99	-524.26	54.75	94.78	0.04	0.00	527.12	174.04	gyro survey.csv
68	6477.86	0.53	146.59	6440.24	-525.76	-525.02	55.23	94.78	0.03	0.00	527.92	174.00	gyro survey.csv
69	6572.64	0.58	144.03	6535.02	-526.52	-525.78	55.75	94.78	0.06	0.00	528.72	173.95	gyro survey.csv
70	6667.42	0.59	127.66	6629.79	-527.22	-526.46	56.42	94.78	0.18	0.00	529.48	173.88	gyro survey.csv
71	6762.20	0.65	139.18	6724.57	-527.93	-527.17	57.15	94.78	0.15	0.00	530.26	173.81	gyro survey.csv
72	6856.98	0.64	139.14	6819.34	-528.75	-527.97	57.85	94.78	0.01	0.00	531.13	173.75	gyro survey.csv
73	6951.76	0.71	144.09	6914.12	-529.63	-528.85	58.54	94.78	0.10	0.00	532.08	173.68	gyro survey.csv
74	7046.54	0.70	136.79	7008.89	-530.54	-529.75	59.28	94.78	0.10	0.00	533.05	173.61	gyro survey.csv
75	7141.32	0.89	134.02	7103.66	-531.37	-530.57	60.09	94.78	0.04	0.00	533.96	173.54	gyro survey.csv
76	7236.10	0.77	136.84	7198.43	-532.25	-531.43	60.94	94.78	0.09	0.00	534.91	173.46	gyro survey.csv
77	7330.88	1.62	144.96	7293.19	-533.82	-532.99	62.14	94.78	0.91	0.00	536.60	173.35	gyro survey.csv
78	7425.66	0.89	154.81	7387.95	-535.60	-534.75	63.22	94.78	0.80	0.00	538.48	173.26	gyro survey.csv
79	7520.44	0.37	228.07	7482.72	-536.47	-535.62	63.31	94.78	0.91	0.00	539.35	173.26	gyro survey.csv
80	7615.22	0.43	174.84	7577.50	-537.03	-536.18	63.11	94.78	0.38	0.00	539.88	173.29	gyro survey.csv
81	7710.00	0.85	156.87	7672.28	-538.03	-537.18	63.42	94.78	0.49	0.00	540.91	173.27	gyro survey.csv
82	7804.78	0.67	167.86	7767.05	-539.23	-538.37	63.82	94.78	0.24	0.00	542.14	173.24	gyro survey.csv
83	7899.56	0.61	175.80	7861.82	-540.28	-539.42	63.97	94.78	0.11	0.00	543.20	173.24	gyro survey.csv
84	7994.34	0.28	160.45	7956.60	-541.00	-540.14	64.08	94.78	0.37	0.00	543.92	173.23	gyro survey.csv
85	8089.12	0.26	41.39	8051.38	-541.06	-540.19	64.30	94.78	0.49	0.00	544.01	173.21	gyro survey.csv
86	8183.90	0.69	78.66	8146.16	-540.80	-539.92	65.00	94.78	0.54	0.00	543.82	173.13	gyro survey.csv
87	8278.68	1.86	82.61	8240.91	-540.51	-539.61	67.09	94.78	1.24	0.00	543.76	172.91	gyro survey.csv
88	8373.46	1.80	92.66	8335.64	-540.43	-539.48	70.10	94.78	0.34	0.00	544.02	172.60	gyro survey.csv
89	8468.24	1.89	110.40	8430.37	-541.09	-540.10	73.05	94.78	0.61	0.00	545.01	172.30	gyro survey.csv
90	8563.02	2.00	118.87	8525.10	-542.47	-541.44	75.97	94.78	0.32	0.00	546.74	172.01	gyro survey.csv
91	8657.80	1.66	119.42	8619.83	-543.98	-542.91	78.61	94.78	0.36	0.00	548.57	171.76	gyro survey.csv
92	8752.58	1.91	115.32	8714.57	-545.37	-544.26	81.23	94.78	0.30	0.00	550.29	171.51	gyro survey.csv
93	8847.36	1.71	132.28	8809.30	-547.03	-545.89	83.71	94.78	0.60	0.00	552.27	171.28	gyro survey.csv
94	8942.14	1.68	144.22	8904.04	-549.14	-547.97	85.57	94.78	0.37	0.00	554.61	171.12	gyro survey.csv
95	9036.92	2.32	158.38	8998.76	-552.07	-550.88	87.09	94.78	0.85	0.00	557.72	171.02	gyro survey.csv
96	9131.70	2.50	172.31	9093.46	-555.91	-554.71	88.07	94.78	0.64	0.00	561.66	170.98	gyro survey.csv
97	9226.48	2.79	183.96	9188.14	-560.26	-559.06	88.19	94.78	0.64	0.00	565.97	171.04	gyro survey.csv
98	9321.26	3.21	195.32	9282.79	-565.11	-563.92	87.33	94.78	0.77	0.00	570.64	171.20	gyro survey.csv
99	9416.04	2.73	194.70	9377.44	-569.84	-568.66	86.05	94.78	0.51	0.00	575.14	171.39	gyro survey.csv
100	9510.82	2.36	197.18	9472.13	-573.87	-572.71	84.90	94.78	0.41	0.00	578.97	171.57	gyro survey.csv
101	9605.60	2.64	218.55	9566.82	-577.41	-576.28	82.97	94.78	1.02	0.00	582.22	171.81	gyro survey.csv
102	9700.38	2.30	225.28	9661.51	-580.42	-579.33	80.26	94.78	0.47	0.00	584.86	172.11	gyro survey.csv
103	9795.16	2.07	230.36	9756.22	-582.81	-581.76	77.59	94.78	0.32	0.00	586.91	172.40	gyro survey.csv
104	9889.94	1.93	234.85	9850.94	-584.78	-583.77	74.96	94.78	0.22	0.00	588.56	172.68	gyro survey.csv
105	9984.72	1.97	236.78	9945.67	-586.55	-585.58	72.29	94.78	0.08	0.00	590.03	172.96	gyro survey.csv
106	10079.50	1.97	237.03	10040.39	-588.29	-587.36	69.57	94.78	0.01	0.00	591.46	173.25	gyro survey.csv
107	10174.28	2.30	251.90	10135.11	-589.73	-588.84	66.39	94.78	0.68	0.00	592.57	173.57	gyro survey.csv
108	10269.06	2.42	265.11	10229.81	-590.43	-589.60	62.59	94.78	0.59	0.00	592.91	173.94	gyro survey.csv
109	10363.84	2.46	270.82	10324.50	-590.52	-589.74	58.56	94.78	0.26	0.00	592.64	174.33	gyro survey.csv
110	10458.62	2.59	277.93	10419.19	-590.13	-589.41	54.41	94.78	0.36	0.00	591.92	174.73	gyro survey.csv
111	10553.40	2.94	282.63	10513.86	-589.24	-588.59	49.91	94.78	0.44	0.00	590.70	175.15	gyro survey.csv
112	10648.18	3.04	279.18	10608.51	-588.24	-587.65	45.06	94.78	0.22	0.00	589.38	175.62	gyro survey.csv
113	10742.96	2.99	269.78	10703.16	-587.78	-587.26	40.11	94.78	0.52	0.00	588.63	176.09	gyro survey.csv
114	10837.74	3.15	253.98	10797.81	-588.43	-587.99	35.13	94.78	0.91	0.00	589.04	176.58	gyro survey.csv
115	10932.52	3.23	253.63	10892.44	-589.83	-589.46	30.07	94.78	0.09	0.00	590.23	177.08	gyro survey.csv
116	11027.30	3.27	251.24	10987.07	-591.38	-591.08	24.95	94.78	0.15	0.00	591.61	177.58	gyro survey.csv
117	11122.08	3.01	254.38	11081.70	-592.85	-592.62	19.99	94.78	0.33	0.00	592.96	178.07	gyro survey.csv

118	11216.86	2.71	257.91	11176.37	-593.92	-593.76	15.40	94.78	0.37	0.00	593.96	178.51	gyro survey.csv
119	11311.64	2.44	260.48	11271.05	-594.67	-594.57	11.22	94.78	0.31	0.00	594.67	178.92	gyro survey.csv
120	11406.42	2.00	276.98	11365.76	-594.75	-594.70	7.59	94.78	0.81	0.00	594.75	179.27	gyro survey.csv
121	11559.00	14.80	354.87	11516.57	-574.85	-574.86	3.18	152.58	9.51	141.41	574.87	179.68	MWD Run 1
122	11591.00	18.10	355.14	11547.25	-565.81	-565.83	2.40	32.00	10.32	139.65	565.84	179.76	MWD Run 1
123	11685.00	33.23	1.08	11631.75	-525.26	-525.29	1.64	94.00	16.31	143.18	525.29	179.82	MWD Run 1
124	11779.00	41.97	1.03	11706.15	-467.99	-468.00	2.69	94.00	9.30	146.71	468.01	179.67	MWD Run 1
125	11811.00	48.19	359.45	11728.74	-445.35	-445.36	2.77	32.00	19.75	148.47	445.36	179.64	MWD Run 1
126	11843.00	52.64	357.51	11749.12	-420.70	-420.71	2.10	32.00	14.67	148.47	420.72	179.71	MWD Run 1
127	11874.00	54.77	356.45	11767.47	-395.73	-395.76	0.78	31.00	7.40	144.94	395.76	179.89	MWD Run 1
128	11906.00	57.13	355.47	11785.39	-369.26	-369.32	-1.09	32.00	7.80	148.47	369.32	180.17	MWD Run 1
129	11937.00	58.66	354.66	11801.86	-343.07	-343.16	-3.35	31.00	5.41	150.24	343.17	180.56	MWD Run 1
130	11969.00	60.72	353.38	11818.01	-315.56	-315.68	-6.23	32.00	7.31	152.00	315.75	181.13	MWD Run 1
131	12000.00	62.78	352.16	11832.69	-288.43	-288.60	-9.67	31.00	7.49	152.00	288.76	181.92	MWD Run 1
132	12032.00	64.91	351.41	11846.79	-259.95	-260.17	-13.77	32.00	6.98	152.00	260.53	183.03	MWD Run 1
133	12063.00	65.39	352.67	11859.82	-232.04	-232.31	-17.67	31.00	4.00	153.76	232.98	184.35	MWD Run 1
134	12095.00	66.16	354.44	11872.95	-203.00	-203.32	-20.94	32.00	5.59	153.76	204.39	185.88	MWD Run 1
135	12126.00	68.14	356.04	11884.99	-174.50	-174.85	-23.31	31.00	7.96	153.76	176.40	187.59	MWD Run 1
136	12158.00	70.40	357.35	11896.32	-144.60	-144.97	-25.03	32.00	8.03	153.76	147.12	189.80	MWD Run 1
137	12189.00	73.78	358.84	11905.85	-115.11	-115.50	-26.01	31.00	11.82	153.76	118.39	192.69	MWD Run 1
138	12221.00	77.68	0.16	11913.73	-84.11	-84.49	-26.28	32.00	12.83	155.53	88.48	197.28	MWD Run 1
139	12252.00	81.36	0.54	11919.37	-53.64	-54.02	-26.09	31.00	11.93	155.53	59.99	205.78	MWD Run 1
140	12284.00	85.99	1.64	11922.90	-21.86	-22.23	-25.48	32.00	14.87	155.53	33.81	228.91	MWD Run 1
141	12315.00	89.66	1.82	11924.07	9.08	8.73	-24.55	31.00	11.85	157.29	26.06	289.58	MWD Run 1
142	12347.00	91.49	1.75	11923.75	41.05	40.71	-23.55	32.00	5.72	153.76	47.04	329.95	MWD Run 1
143	12442.00	90.98	2.28	11921.70	135.91	135.63	-20.21	95.00	0.77	160.82	137.13	351.52	MWD Run 1
144	12536.00	93.25	2.05	11918.24	229.71	229.50	-16.66	94.00	2.43	160.82	230.10	355.85	MWD Run 1
145	12631.00	92.61	0.46	11913.38	324.52	324.35	-14.59	95.00	1.80	162.59	324.67	357.42	MWD Run 1
146	12728.00	92.22	359.56	11909.29	421.42	421.26	-14.57	97.00	1.01	156.29	421.51	358.02	MWD Run 2
147	12823.00	92.38	359.47	11905.48	516.35	516.18	-15.37	95.00	0.19	156.29	516.41	358.29	MWD Run 2
148	12917.00	92.33	359.34	11901.62	610.27	610.09	-16.35	94.00	0.15	163.43	610.31	358.46	MWD Run 2
149	13011.00	91.32	359.36	11898.62	704.22	704.04	-17.42	94.00	1.07	170.57	704.25	358.58	MWD Run 2
150	13106.00	91.60	359.56	11896.20	799.18	799.00	-18.31	95.00	0.36	170.57	799.21	358.69	MWD Run 2
151	13201.00	91.60	359.18	11893.55	894.15	893.96	-19.35	95.00	0.40	170.57	894.17	358.76	MWD Run 2
152	13295.00	92.38	359.91	11890.29	988.09	987.90	-20.10	94.00	1.14	163.43	988.10	358.83	MWD Run 2
153	13389.00	91.91	358.66	11886.77	1082.02	1081.82	-21.27	94.00	1.42	156.29	1082.03	358.87	MWD Run 3
154	13484.00	90.22	357.43	11885.00	1176.98	1176.75	-24.51	95.00	2.20	163.43	1177.00	358.81	MWD Run 3
155	13578.00	89.66	357.30	11885.10	1270.93	1270.65	-28.83	94.00	0.61	170.57	1270.97	358.70	MWD Run 3
156	13673.00	88.37	357.63	11886.73	1365.87	1365.54	-33.04	95.00	1.40	170.57	1365.94	358.61	MWD Run 3
157	13767.00	88.18	358.32	11889.56	1459.81	1459.44	-36.36	94.00	0.76	170.57	1459.89	358.57	MWD Run 3
158	13861.00	88.40	357.46	11892.37	1553.74	1553.33	-39.82	94.00	0.94	170.57	1553.84	358.53	MWD Run 3
159	13956.00	88.32	0.18	11895.09	1648.69	1648.26	-41.77	95.00	2.86	170.57	1648.79	358.55	MWD Run 3
160	14050.00	89.22	359.81	11897.10	1742.66	1742.24	-41.78	94.00	1.04	170.57	1742.74	358.63	MWD Run 3
161	14144.00	87.09	357.15	11900.13	1836.59	1836.14	-44.27	94.00	3.62	170.57	1836.68	358.62	MWD Run 3
162	14238.00	88.01	358.43	11904.15	1930.42	1929.91	-49.53	94.00	1.24	177.71	1930.54	358.53	MWD Run 3
163	14332.00	90.62	359.43	11905.27	2024.37	2023.82	-52.92	94.00	4.23	177.71	2024.51	358.50	MWD Run 3
164	14426.00	89.30	357.82	11905.34	2118.36	2117.79	-55.18	94.00	2.21	177.71	2118.51	358.51	MWD Run 3
165	14520.00	89.41	358.09	11906.40	2212.33	2211.72	-58.53	94.00	0.31	177.71	2212.50	358.48	MWD Run 3
166	14614.00	89.47	357.34	11907.32	2306.30	2305.64	-62.28	94.00	0.80	177.71	2306.48	358.45	MWD Run 3
167	14708.00	89.36	357.27	11908.28	2400.24	2399.53	-66.70	94.00	0.14	177.71	2400.46	358.41	MWD Run 3
168	14802.00	88.82	358.99	11909.77	2494.21	2493.47	-69.77	94.00	1.92	177.71	2494.44	358.40	MWD Run 3
169	14896.00	88.26	359.94	11912.16	2588.18	2587.43	-70.64	94.00	1.17	177.71	2588.40	358.44	MWD Run 3
170	14990.00	88.99	359.85	11914.42	2682.14	2681.41	-70.82	94.00	0.78	177.71	2682.34	358.49	MWD Run 3
171	15083.00	87.00	359.54	11917.67	2775.08	2774.34	-71.31	93.00	2.17	177.71	2775.26	358.53	MWD Run 3
172	15177.00	89.97	358.39	11920.16	2869.03	2868.28	-73.01	94.00	3.39	177.71	2869.21	358.54	MWD Run 3
173	15272.00	91.34	359.77	11919.07	2964.02	2963.26	-74.53	95.00	2.05	177.71	2964.20	358.56	MWD Run 3
174	15366.00	91.74	358.90	11916.55	3057.99	3057.22	-75.62	94.00	1.02	177.71	3058.15	358.58	MWD Run 3
175	15460.00	91.85	359.60	11913.60	3151.94	3151.16	-76.85	94.00	0.75	184.86	3152.10	358.60	MWD Run 3
176	15554.00	90.34	358.40	11911.81	3245.92	3245.13	-78.49	94.00	2.05	177.71	3246.08	358.61	MWD Run 3
177	15648.00	90.36	1.42	11911.23	3339.90	3339.11	-78.64	94.00	3.21	184.86	3340.04	358.65	MWD Run 3
178	15741.00	90.56	359.75	11910.48	3432.86	3432.10	-77.69	93.00	1.81	184.86	3432.98	358.70	MWD Run 3
179	15836.00	90.34	1.05	11909.74	3527.84	3527.10	-77.03	95.00	1.39	184.86	3527.94	358.75	MWD Run 3
180	15931.00	91.29	1.08	11908.39	3622.77	3622.07	-75.26	95.00	1.00	177.71	3622.85	358.81	MWD Run 3
181	16025.00	91.40	359.38	11906.18	3716.73	3716.04	-74.89	94.00	1.81	184.86	3716.79	358.85	MWD Run 3
182	16120.00	92.02	358.65	11903.35	3811.69	3810.98	-76.52	95.00	1.01	184.86	3811.75	358.85	MWD Run 3
183	16215.00	91.77	359.17	11900.20	3906.63	3905.91	-78.32	95.00	0.61	184.86	3906.70	358.85	MWD Run 3
184	16309.00	91.65	0.30	11897.40	4000.58	3999.87	-78.76	94.00	1.21	184.86	4000.64	358.87	MWD Run 3
185	16404.00	91.91	359.21	11894.45	4095.53	4094.82	-79.17	95.00	1.18	184.86	4095.58	358.89	MWD Run 3

186	16498.00	89.72	359.03	11893.11	4189.52	4188.79	-80.61	94.00	2.34	184.86	4189.57	358.90	MWD Run 3
187	16593.00	91.68	359.78	11891.95	4284.50	4283.77	-81.60	95.00	2.21	184.86	4284.55	358.91	MWD Run 3
188	16687.00	90.48	359.97	11890.18	4378.48	4377.76	-81.80	94.00	1.29	184.86	4378.52	358.93	MWD Run 3
189	16782.00	89.19	359.77	11890.45	4473.47	4472.75	-82.02	95.00	1.37	177.71	4473.51	358.95	MWD Run 3
190	16877.00	93.67	1.03	11888.08	4568.39	4567.70	-81.35	95.00	4.90	170.57	4568.42	358.98	MWD Run 4
191	16972.00	94.09	1.05	11881.65	4663.12	4662.46	-79.63	95.00	0.44	177.71	4663.14	359.02	MWD Run 4
192	17067.00	93.84	0.36	11875.08	4757.86	4757.23	-78.47	95.00	0.77	177.71	4757.87	359.06	MWD Run 4
193	17161.00	94.09	1.67	11868.58	4851.59	4850.98	-76.81	94.00	1.42	177.71	4851.59	359.09	MWD Run 4
194	17256.00	92.78	359.09	11862.89	4946.39	4945.80	-76.18	95.00	3.04	177.71	4946.39	359.12	MWD Run 4
195	17351.00	94.04	357.71	11857.24	5041.20	5040.59	-78.83	95.00	1.97	184.86	5041.21	359.10	MWD Run 4
196	17445.00	94.91	0.74	11849.90	5134.91	5134.29	-80.10	94.00	3.34	177.71	5134.91	359.11	MWD Run 4
197	17540.00	94.74	0.77	11841.91	5229.53	5228.94	-78.85	95.00	0.18	177.71	5229.53	359.14	MWD Run 4
198	17634.00	94.46	0.32	11834.38	5323.20	5322.63	-77.96	94.00	0.56	170.57	5323.20	359.16	MWD Run 5
199	17728.00	94.46	359.05	11827.07	5416.91	5416.34	-78.47	94.00	1.35	170.57	5416.91	359.17	MWD Run 5
200	17823.00	95.45	358.43	11818.86	5511.55	5510.97	-80.55	95.00	1.23	170.57	5511.55	359.16	MWD Run 5
201	17917.00	96.07	358.23	11809.43	5605.07	5604.45	-83.28	94.00	0.69	170.57	5605.07	359.15	MWD Run 5
202	18012.00	95.62	357.37	11799.75	5699.55	5698.89	-86.91	95.00	1.02	177.71	5699.55	359.13	MWD Run 5
203	18107.00	95.75	358.86	11790.34	5794.06	5793.36	-90.02	95.00	1.57	177.71	5794.06	359.11	MWD Run 5
204	18201.00	95.44	357.88	11781.18	5887.60	5886.88	-92.68	94.00	1.09	177.71	5887.61	359.10	MWD Run 5
205	18296.00	95.22	356.81	11772.35	5982.14	5981.36	-97.06	95.00	1.15	177.71	5982.15	359.07	MWD Run 5
206	18390.00	93.95	357.87	11764.84	6075.79	6074.96	-101.41	94.00	1.76	177.71	6075.81	359.04	MWD Run 5
207	18485.00	93.03	356.92	11759.05	6170.56	6169.68	-105.72	95.00	1.39	177.71	6170.59	359.02	MWD Run 5
208	18580.00	92.94	357.20	11754.11	6265.37	6264.43	-110.58	95.00	0.31	177.71	6265.40	358.99	MWD Run 5
209	18674.00	92.75	357.72	11749.44	6359.21	6358.22	-114.74	94.00	0.59	177.71	6359.26	358.97	MWD Run 5
210	18769.00	91.88	357.96	11745.60	6454.11	6453.07	-118.32	95.00	0.95	177.71	6454.16	358.95	MWD Run 5
211	18863.00	91.40	358.34	11742.91	6548.05	6546.99	-121.35	94.00	0.85	177.71	6548.11	358.94	MWD Run 5
212	18958.00	91.03	358.13	11740.90	6643.02	6641.92	-124.28	95.00	0.45	177.71	6643.08	358.93	MWD Run 5
213	19052.00	91.70	358.90	11738.66	6736.98	6735.86	-126.71	94.00	1.09	177.71	6737.05	358.92	MWD Run 5
214	19147.00	92.13	358.28	11735.48	6831.93	6830.78	-129.05	95.00	0.79	177.71	6832.00	358.92	MWD Run 5
215	19241.00	90.45	357.29	11733.37	6925.87	6924.68	-132.68	94.00	2.07	177.71	6925.95	358.90	MWD Run 6
216	19336.00	92.24	357.93	11731.14	7020.80	7019.57	-136.64	95.00	2.00	177.71	7020.90	358.88	MWD Run 6
217	19430.00	91.82	0.37	11727.81	7114.74	7113.49	-138.04	94.00	2.63	177.71	7114.83	358.89	MWD Run 6
218	19525.00	90.59	359.68	11725.81	7209.70	7208.47	-138.00	95.00	1.48	177.71	7209.79	358.90	MWD Run 6
219	19620.00	90.92	359.06	11724.56	7304.69	7303.45	-139.04	95.00	0.74	184.86	7304.77	358.91	MWD Run 6
220	19714.00	94.93	0.48	11719.76	7398.54	7397.31	-139.42	94.00	4.52	184.86	7398.62	358.92	MWD Run 6
221	19809.00	94.06	1.12	11712.32	7493.21	7492.00	-138.10	95.00	1.14	184.86	7493.28	358.94	MWD Run 6
222	19903.00	91.93	0.25	11707.41	7587.05	7585.86	-136.97	94.00	2.45	184.86	7587.10	358.97	MWD Run 6
223	19998.00	92.61	359.79	11703.64	7681.96	7680.79	-136.94	95.00	0.86	177.71	7682.01	358.98	MWD Run 6
224	20093.00	92.01	0.24	11699.81	7776.87	7775.71	-136.92	95.00	0.79	177.71	7776.91	358.99	MWD Run 6
225	20188.00	91.23	0.63	11697.13	7871.81	7870.67	-136.20	95.00	0.92	177.71	7871.85	359.01	MWD Run 6
226	20282.00	91.48	0.39	11694.91	7965.76	7964.64	-135.36	94.00	0.37	177.71	7965.79	359.03	MWD Run 6
227	20377.00	90.89	0.72	11692.94	8060.71	8059.61	-134.44	95.00	0.71	177.71	8060.73	359.04	MWD Run 6
228	20472.00	90.42	1.14	11691.85	8155.66	8154.59	-132.90	95.00	0.66	184.86	8155.68	359.07	MWD Run 6
229	20566.00	90.67	359.74	11690.96	8249.63	8248.58	-132.18	94.00	1.51	177.71	8249.64	359.08	MWD Run 6
230	20661.00	90.30	0.28	11690.16	8344.62	8343.58	-132.16	95.00	0.69	184.86	8344.63	359.09	MWD Run 6
231	20756.00	89.83	0.44	11690.05	8439.60	8438.58	-131.56	95.00	0.52	184.86	8439.60	359.11	MWD Run 6
232	20851.00	89.55	0.29	11690.56	8534.57	8533.57	-130.96	95.00	0.33	177.71	8534.58	359.12	MWD Run 6
233	20945.00	89.66	0.72	11691.21	8628.55	8627.57	-130.13	94.00	0.47	184.86	8628.55	359.14	MWD Run 6
234	21040.00	89.72	0.57	11691.72	8723.51	8722.56	-129.06	95.00	0.17	184.86	8723.51	359.15	MWD Run 6
235	21135.00	91.29	0.59	11690.89	8818.48	8817.55	-128.10	95.00	1.65	184.86	8818.48	359.17	MWD Run 6
236	21231.00	91.60	0.06	11688.47	8914.43	8913.52	-127.55	96.00	0.64	177.71	8914.43	359.18	MWD Run 7
237	21325.00	90.56	355.56	11686.69	9008.36	9007.41	-131.14	94.00	4.91	177.71	9008.36	359.17	MWD Run 7
238	21420.00	90.50	350.56	11685.81	9102.78	9101.68	-142.62	95.00	5.26	177.71	9102.79	359.10	MWD Run 7
239	21515.00	88.09	349.56	11686.98	9196.57	9195.23	-159.01	95.00	2.75	177.71	9196.61	359.01	MWD Run 7
240	21609.00	89.02	354.03	11689.36	9289.73	9288.22	-172.42	94.00	4.86	177.71	9289.82	358.94	MWD Run 7
241	21703.00	89.83	359.63	11690.30	9383.61	9382.03	-177.62	94.00	6.02	184.86	9383.71	358.92	MWD Run 7
242	21798.00	90.06	0.26	11690.39	9478.60	9477.03	-177.71	95.00	0.71	184.86	9478.70	358.93	MWD Run 7
243	21893.00	90.64	0.14	11689.81	9573.59	9572.03	-177.38	95.00	0.62	177.71	9573.67	358.94	MWD Run 7
244	21987.00	90.39	2.76	11688.97	9667.50	9665.99	-175.00	94.00	2.80	184.86	9667.57	358.96	MWD Run 7
245	22081.00	89.75	3.37	11688.85	9761.28	9759.85	-169.97	94.00	0.94	184.86	9761.33	359.00	MWD Run 7
246	22176.00	90.08	3.86	11688.99	9856.00	9854.66	-163.98	95.00	0.62	177.71	9856.02	359.05	MWD Run 7
247	22269.00	90.11	3.42	11688.84	9948.72	9947.47	-158.08	93.00	0.47	184.86	9948.73	359.09	MWD Run 7
248	22364.00	90.92	4.02	11687.98	10043.41	10042.27	-151.91	95.00	1.06	184.86	10043.42	359.13	MWD Run 7
249	22458.00	90.67	2.89	11686.68	10137.14	10136.09	-146.25	94.00	1.23	177.71	10137.14	359.17	MWD Run 7
250	22553.00	92.83	0.65	11683.78	10231.99	10230.98	-143.32	95.00	3.27	184.86	10231.99	359.20	MWD Run 7
251	22596.00	93.14	0.32	11681.54	10274.92	10273.92	-142.95	43.00	1.05	184.86	10274.92	359.20	MWD Run 7
PTB	22635.00	93.14	0.32	11679.40	10313.85	10312.87	-142.74	39.00	0.00	0.00	10313.85	359.21	PTB

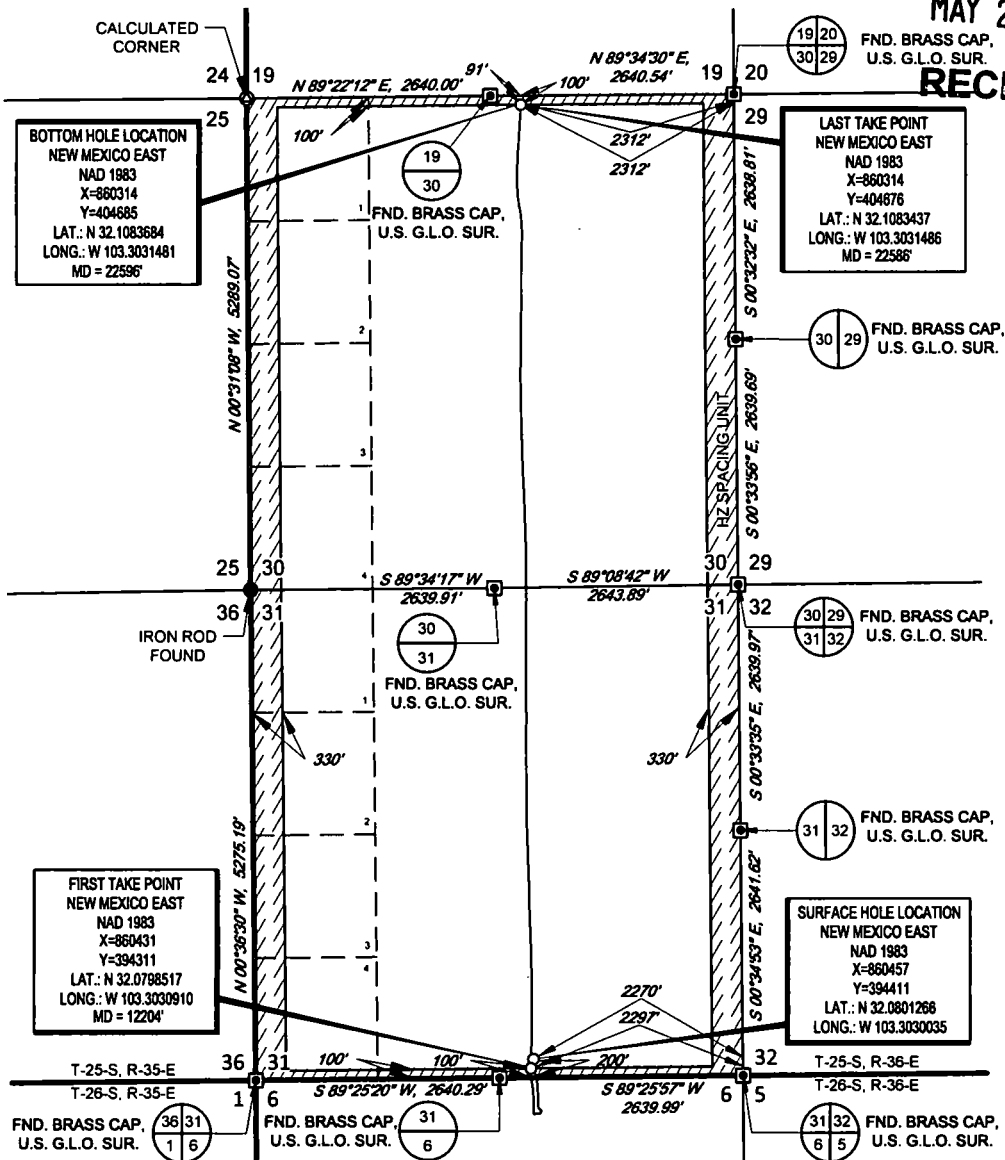
SCALE: 1" = 2000'
0' 1000' 2000'

SECTION 31, TOWNSHIP 25-S, RANGE 36-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

HOBBS OCD

MAY 29 2019

RECEIVED



LEASE NAME & WELL NO.: NANDINA FED COM 25 36 31 125H
SECTION 31 TWP 25-S RGE 36-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3014'
DESCRIPTION 200' FSL & 2270' FEL

AMEREDEV
AMEREDEV OPERATING, LLC

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 148 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
TEXAS FIRM REGISTRATION NO. 10042504
WWW.TOPOGRAPHIC.COM



John Trevor Carnegie, P.S. No. 11401
MAY 22, 2019

NANDINA 25 36 31 125H AS-COMPLETED		REVISION:	NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. 3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY AMEREDEV OPERATING, LLC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
DATE:	05/22/2019		
FILE:	AD_NANDINA_FED_COM_25_36_31_125H		
DRAWN BY:	IMU		
SHEET:	1 OF 1		