



MWD SURVEY CERTIFICATION
Gordon Technologies, LLC

HOBBS OCD

FEB 20 2020

RECEIVED

State Of New Mexico

County Of Lea

I, Bill Johnson certify that; I am employed by Gordon Technologies, LLC.;
that I did on the day(s) of November 10, 2019 through November 27, 2019 conduct
or supervise the taking of a MWD survey from a depth of 0 feet to a depth of
15,305 feet; that the data is true, correct, complete and within the limitations of the
tool set forth by Gordon Technologies, LLC.; that I am authorized and qualified to make this report;
that this survey was conducted at the request of Matador Production Co. for the
Brad Lummis Com #112H Well, A.P.I. No. 30-025-45440 in
Bone Springs Field and that I have reviewed this report and find that
it conforms to the principles and procedures set forth by Gordon Technologies, LLC.

Signature

MWD Coordinator

Title



Company: MATADOR PRODUCTION COMPANY
 Well: BRAD LUMMIS COM #112H
 County: LEA
 State: NEW MEXICO
 Field: RED HILLS;BONE SPRING,NORTH
 API: 30-025-45440
 Rig: PATTERSON 256
 Service Co: GTMWD
 Job #: GT191069
 Survey Calc: Minimum Curvature

Directional Survey Report

Well Surface Location
 Latitude: 32.209276
 Longitude: -103.441643
 Reference: NAD 1927
 Y (Northing): 440998.0
 X (Easting): 775794.0
 Field Engr: D.MADONNA
 O.SILVA
 C.BAXTER

Report Date: Dec 04 2019
 Time: 09:12
 Mag Reference: Grid North
 Mag Correction: 6.11
 Vert Sect. Azi: 179.60
 Perm Datum: Mean Sea Level
 Depth Ref: Rotary Table
 RKB Height: 25
 GL Elev: 3477

Survey Data: Minimum Offsets						Rectangular Offsets			Course		Closure		Source
Survey Tie In	MD	Inc	Azimuth	TVD	VS	NS	EW	Length	DLS	Temp	Distance	Azimuth	
	0	0	0	0	0	0	0	0	0	0	0	0	
1	322.00	0.04	346.32	322.00	-0.11	0.11	-0.03	322.00	0.01	65.53	0.11	346.32	MWD Run 1
2	413.00	0.20	129.46	413.00	-0.04	0.04	0.09	91.00	0.26	69.06	0.10	66.15	MWD Run 1
3	505.00	0.32	124.17	505.00	0.21	-0.21	0.43	92.00	0.13	70.82	0.47	115.99	MWD Run 1
4	597.00	0.06	183.05	597.00	0.40	-0.40	0.64	92.00	0.32	74.35	0.75	122.18	MWD Run 1
5	689.00	0.48	147.69	689.00	0.78	-0.77	0.84	92.00	0.47	79.65	1.14	132.69	MWD Run 1
6	782.00	0.53	117.99	781.99	1.31	-1.30	1.43	93.00	0.28	83.18	1.93	132.44	MWD Run 1
7	873.00	0.63	153.82	872.99	1.97	-1.95	2.02	91.00	0.41	86.71	2.81	134.02	MWD Run 1
8	964.00	0.54	165.51	963.98	2.83	-2.82	2.35	91.00	0.16	92.00	3.67	140.18	MWD Run 1
9	1020.00	0.69	159.48	1019.98	3.40	-3.39	2.53	56.00	0.29	92.00	4.23	143.22	MWD Run 1
10	1149.00	0.22	165.96	1148.98	4.37	-4.35	2.86	129.00	0.37	62.00	5.21	146.67	MWD Run 2
11	1240.00	0.30	228.71	1239.98	4.70	-4.68	2.73	91.00	0.31	65.53	5.42	149.78	MWD Run 2
12	1332.00	0.12	204.52	1331.98	4.94	-4.93	2.51	92.00	0.21	70.82	5.53	153.04	MWD Run 2
13	1424.00	0.09	221.31	1423.98	5.09	-5.07	2.42	92.00	0.05	79.65	5.62	154.50	MWD Run 2
14	1518.00	0.29	226.35	1517.97	5.30	-5.29	2.20	94.00	0.21	83.18	5.73	157.44	MWD Run 2
15	1612.00	0.34	242.13	1611.97	5.60	-5.58	1.78	94.00	0.11	83.18	5.86	162.33	MWD Run 2
16	1708.00	0.38	221.93	1707.97	5.96	-5.95	1.31	96.00	0.14	88.47	6.10	167.55	MWD Run 2
17	1803.00	0.17	169.91	1802.97	6.33	-6.33	1.13	95.00	0.32	92.00	6.43	169.89	MWD Run 2
18	1898.00	0.00	6.11	1897.97	6.47	-6.47	1.15	95.00	0.18	95.53	6.57	169.89	MWD Run 2
19	1993.00	0.08	78.43	1992.97	6.46	-6.45	1.22	95.00	0.08	84.94	6.57	169.31	MWD Run 2
20	2089.00	0.10	196.71	2088.97	6.53	-6.52	1.26	96.00	0.16	92.00	6.64	169.06	MWD Run 2
21	2184.00	0.06	238.60	2183.97	6.63	-6.62	1.19	95.00	0.07	95.53	6.73	169.79	MWD Run 2
22	2279.00	0.29	317.45	2278.97	6.48	-6.47	0.99	95.00	0.30	99.06	6.55	171.32	MWD Run 2
23	2374.00	0.24	253.64	2373.97	6.36	-6.35	0.63	95.00	0.30	100.82	6.38	174.29	MWD Run 2
24	2469.00	0.03	159.89	2468.97	6.43	-6.43	0.45	95.00	0.26	99.06	6.45	175.98	MWD Run 2
25	2564.00	0.08	10.19	2563.97	6.39	-6.39	0.47	95.00	0.11	102.59	6.41	175.77	MWD Run 2
26	2658.00	0.13	161.43	2657.97	6.43	-6.43	0.52	94.00	0.22	104.35	6.45	175.39	MWD Run 2
27	2754.00	0.13	135.36	2753.97	6.61	-6.61	0.63	96.00	0.06	106.12	6.64	174.56	MWD Run 2
28	2848.00	0.14	18.61	2847.97	6.58	-6.57	0.74	94.00	0.24	109.65	6.62	173.57	MWD Run 2
29	2942.00	0.10	59.34	2941.97	6.43	-6.42	0.85	94.00	0.10	106.12	6.48	172.48	MWD Run 2
30	3037.00	0.28	38.74	3036.97	6.21	-6.20	1.06	95.00	0.20	109.65	6.29	170.25	MWD Run 2
31	3132.00	0.19	54.66	3131.97	5.94	-5.93	1.34	95.00	0.12	109.65	6.08	167.27	MWD Run 2
32	3227.00	0.09	53.42	3226.97	5.80	-5.79	1.53	95.00	0.11	111.41	5.99	165.23	MWD Run 2
33	3322.00	0.22	16.61	3321.97	5.58	-5.57	1.64	95.00	0.17	113.18	5.81	163.61	MWD Run 2
34	3417.00	0.53	18.95	3416.96	5.00	-4.98	1.83	95.00	0.33	114.94	5.31	159.79	MWD Run 2
35	3512.00	1.38	335.81	3511.95	3.53	-3.52	1.51	95.00	1.11	116.71	3.83	156.83	MWD Run 2
36	3608.00	1.80	335.94	3607.91	1.10	-1.09	0.42	96.00	0.44	113.18	1.17	158.99	MWD Run 2
37	3703.00	2.24	337.18	3702.85	-1.99	1.98	-0.91	95.00	0.47	120.24	2.18	335.36	MWD Run 2
38	3798.00	3.50	339.35	3797.73	-6.42	6.41	-2.65	95.00	1.33	118.47	6.93	337.52	MWD Run 2
39	3893.00	4.21	341.78	3892.52	-12.47	12.43	-4.76	95.00	0.77	122.00	13.31	339.03	MWD Run 2
40	3988.00	4.57	337.75	3987.24	-19.30	19.25	-7.29	95.00	0.50	125.53	20.58	339.26	MWD Run 2
41	4083.00	4.92	333.97	4081.91	-26.48	26.41	-10.51	95.00	0.49	125.53	28.42	338.30	MWD Run 2
42	4179.00	7.40	330.01	4177.35	-35.57	35.47	-15.41	96.00	2.62	123.76	38.67	336.52	MWD Run 2
43	4274.00	7.87	327.74	4271.51	-46.42	46.26	-21.94	95.00	0.59	125.53	51.20	334.63	MWD Run 2
44	4369.00	7.65	325.91	4365.64	-57.20	57.00	-28.95	95.00	0.35	123.76	63.93	333.07	MWD Run 2
45	4464.00	7.39	325.39	4459.82	-67.52	67.27	-35.97	95.00	0.28	114.94	76.28	331.87	MWD Run 2
46	4559.00	7.08	324.94	4554.07	-77.38	77.09	-42.80	95.00	0.33	123.76	88.17	330.96	MWD Run 2
47	4654.00	5.91	332.29	4648.46	-86.55	86.21	-48.44	95.00	1.51	125.53	98.89	330.67	MWD Run 2
48	4750.00	5.17	343.23	4744.01	-95.09	94.73	-51.98	96.00	1.34	122.00	108.05	331.24	MWD Run 2

49	4845.00	4.60	344.42	4838.66	-102.87	102.50	-54.24	95.00	0.61	122.00	115.96	332.11	MWD Run 2
50	4940.00	4.59	344.67	4933.36	-110.22	109.83	-56.27	95.00	0.02	129.06	123.41	332.87	MWD Run 2
51	5035.00	4.08	353.43	5028.09	-117.25	116.85	-57.66	95.00	0.88	130.82	130.31	333.74	MWD Run 2
52	5130.00	3.28	4.82	5122.89	-123.32	122.92	-57.82	95.00	1.14	132.59	135.84	334.81	MWD Run 2
53	5226.00	3.62	352.05	5218.72	-129.06	128.66	-58.01	96.00	0.87	130.82	141.13	335.73	MWD Run 2
54	5320.00	4.29	346.50	5312.50	-135.43	135.02	-59.24	94.00	0.82	134.35	147.44	336.31	MWD Run 2
55	5365.00	3.92	345.03	5357.38	-138.55	138.14	-60.03	45.00	0.85	134.35	150.62	336.51	MWD Run 2
56	5515.00	3.33	345.95	5507.08	-147.75	147.32	-62.41	150.00	0.40	99.06	159.99	337.04	MWD Run 3
57	5610.00	4.58	342.19	5601.85	-154.05	153.61	-64.24	95.00	1.34	102.59	166.50	337.30	MWD Run 3
58	5705.00	5.73	341.97	5696.47	-162.19	161.73	-66.87	95.00	1.21	104.35	175.01	337.54	MWD Run 3
59	5799.00	6.63	328.72	5789.92	-171.32	170.83	-71.14	94.00	1.79	106.12	185.05	337.39	MWD Run 3
60	5895.00	7.15	325.42	5885.23	-181.02	180.48	-77.41	96.00	0.68	107.88	196.38	336.79	MWD Run 3
61	5990.00	7.24	326.00	5979.48	-190.90	190.31	-84.11	95.00	0.12	107.88	208.07	336.16	MWD Run 3
62	6084.00	7.38	325.67	6072.72	-200.84	200.21	-90.83	94.00	0.16	109.65	219.85	335.60	MWD Run 3
63	6179.00	7.45	324.53	6166.92	-210.94	210.26	-97.84	95.00	0.17	109.65	231.91	335.05	MWD Run 3
64	6274.00	7.82	322.81	6261.08	-221.16	220.43	-105.32	95.00	0.46	111.41	244.30	334.46	MWD Run 3
65	6369.00	7.52	321.76	6355.23	-231.24	230.46	-113.08	95.00	0.35	113.18	256.71	333.86	MWD Run 3
66	6464.00	7.10	319.61	6449.46	-240.65	239.81	-120.73	95.00	0.53	113.18	268.49	333.28	MWD Run 3
67	6560.00	7.24	318.99	6544.71	-249.79	248.90	-128.54	96.00	0.17	113.18	280.13	332.69	MWD Run 3
68	6653.00	6.13	325.34	6637.08	-258.34	257.40	-135.21	93.00	1.43	113.18	290.76	332.29	MWD Run 3
69	6748.00	4.29	328.06	6731.68	-265.56	264.59	-139.98	95.00	1.95	113.18	299.34	332.12	MWD Run 3
70	6843.00	2.86	323.39	6826.49	-270.50	269.51	-143.27	95.00	1.53	109.65	305.23	332.00	MWD Run 3
71	6939.00	2.76	317.82	6922.38	-274.16	273.15	-146.25	96.00	0.30	109.65	309.84	331.83	MWD Run 3
72	7033.00	2.25	309.26	7016.29	-277.03	275.99	-149.20	94.00	0.67	111.41	313.74	331.60	MWD Run 3
73	7129.00	0.20	271.03	7112.26	-278.23	277.19	-150.83	96.00	2.18	113.18	315.56	331.45	MWD Run 3
74	7224.00	0.34	163.39	7207.26	-277.97	276.92	-150.91	95.00	0.47	114.94	315.37	331.41	MWD Run 3
75	7319.00	0.34	187.89	7302.26	-277.42	276.37	-150.87	95.00	0.15	114.94	314.87	331.37	MWD Run 3
76	7415.00	0.53	211.94	7398.26	-276.76	275.71	-151.14	96.00	0.27	116.71	314.42	331.27	MWD Run 3
77	7510.00	0.71	225.18	7493.25	-275.98	274.92	-151.79	95.00	0.24	118.47	314.04	331.10	MWD Run 3
78	7605.00	1.85	148.19	7588.23	-274.25	273.20	-151.40	95.00	1.92	120.24	312.35	331.01	MWD Run 3
79	7699.00	2.43	146.97	7682.16	-271.28	270.24	-149.52	94.00	0.62	120.24	308.85	331.05	MWD Run 3
80	7794.00	2.23	148.79	7777.09	-268.00	266.98	-147.46	95.00	0.22	122.00	304.99	331.09	MWD Run 3
81	7889.00	2.39	145.09	7872.01	-264.78	263.77	-145.37	95.00	0.23	123.76	301.18	331.14	MWD Run 3
82	7984.00	2.08	147.95	7966.94	-261.68	260.68	-143.32	95.00	0.35	125.53	297.49	331.20	MWD Run 3
83	8079.00	2.21	152.27	8061.87	-258.58	257.60	-141.55	95.00	0.22	122.00	293.93	331.21	MWD Run 3
84	8174.00	2.05	158.11	8156.80	-255.38	254.40	-140.07	95.00	0.28	123.76	290.41	331.16	MWD Run 3
85	8268.00	0.66	183.88	8250.78	-253.27	252.30	-139.48	94.00	1.58	123.76	288.29	331.07	MWD Run 3
86	8363.00	0.25	226.47	8345.77	-252.58	251.61	-139.67	95.00	0.53	123.76	287.78	330.97	MWD Run 3
87	8458.00	0.43	194.54	8440.77	-252.10	251.13	-139.91	95.00	0.27	125.53	287.47	330.88	MWD Run 3
88	8552.00	0.38	228.54	8534.77	-251.55	250.58	-140.23	94.00	0.26	125.53	287.15	330.77	MWD Run 3
89	8647.00	0.42	243.44	8629.77	-251.19	250.22	-140.78	95.00	0.12	125.53	287.10	330.64	MWD Run 3
90	8742.00	0.29	264.59	8724.77	-251.02	250.04	-141.33	95.00	0.19	125.53	287.21	330.52	MWD Run 3
91	8837.00	0.42	244.90	8819.76	-250.85	249.87	-141.88	95.00	0.19	127.29	287.34	330.41	MWD Run 3
92	8932.00	0.59	271.45	8914.76	-250.72	249.73	-142.69	95.00	0.30	127.29	287.62	330.26	MWD Run 3
93	9027.00	0.83	268.11	9009.75	-250.72	249.72	-143.86	95.00	0.26	116.71	288.20	330.05	MWD Run 4
94	9122.00	0.93	271.35	9104.74	-250.72	249.72	-145.32	95.00	0.12	118.47	288.92	329.80	MWD Run 4
95	9216.00	1.21	267.52	9198.72	-250.71	249.69	-147.07	94.00	0.31	122.00	289.79	329.50	MWD Run 4
96	9312.00	1.51	254.84	9294.70	-250.35	249.32	-149.31	96.00	0.44	123.76	290.61	329.08	MWD Run 4
97	9406.00	1.11	240.65	9388.67	-249.60	248.55	-151.30	94.00	0.54	127.29	290.97	328.67	MWD Run 4
98	9501.00	1.12	246.72	9483.66	-248.79	247.73	-152.95	95.00	0.12	129.06	291.14	328.31	MWD Run 4
99	9596.00	1.37	252.66	9578.63	-248.10	247.02	-154.89	95.00	0.30	130.82	291.57	327.91	MWD Run 4
100	9691.00	1.64	250.66	9673.60	-247.33	246.23	-157.26	95.00	0.29	129.06	292.17	327.44	MWD Run 4
101	9760.00	2.39	246.21	9742.56	-246.43	245.33	-159.50	69.00	1.11	116.71	292.62	326.97	MWD Run 5
102	9792.00	2.51	247.63	9774.53	-245.91	244.79	-160.76	32.00	0.42	116.71	292.86	326.71	MWD Run 5
103	9855.00	2.71	192.47	9837.47	-243.94	242.81	-162.36	63.00	3.85	120.24	292.09	326.23	MWD Run 5
104	9887.00	4.60	175.79	9869.41	-241.92	240.79	-162.43	32.00	6.72	120.24	290.46	326.00	MWD Run 5
105	9950.00	7.86	171.62	9932.03	-235.13	234.01	-161.62	63.00	5.22	122.00	284.39	325.37	MWD Run 5
106	9982.00	10.54	171.46	9963.61	-230.07	228.95	-160.86	32.00	8.38	122.00	279.81	324.91	MWD Run 5
107	10046.00	15.47	167.31	10025.95	-215.92	214.83	-158.12	64.00	7.84	122.00	266.74	323.65	MWD Run 5
108	10077.00	17.76	165.21	10055.66	-207.30	206.22	-156.00	31.00	7.64	118.47	258.58	322.89	MWD Run 6
109	10109.00	21.88	160.32	10085.76	-196.94	195.88	-152.74	32.00	13.87	118.47	248.40	322.05	MWD Run 6
110	10141.00	27.51	156.91	10114.82	-184.49	183.46	-147.83	32.00	18.14	120.24	235.61	321.14	MWD Run 6
111	10172.00	32.61	158.59	10141.64	-170.07	169.09	-141.97	31.00	16.67	120.24	220.79	319.98	MWD Run 6
112	10204.00	38.96	158.18	10167.59	-152.64	151.70	-135.08	32.00	19.86	122.00	203.12	318.32	MWD Run 6
113	10236.00	45.22	156.95	10191.32	-132.77	131.89	-126.88	32.00	19.73	122.00	183.02	316.11	MWD Run 6
114	10268.00	51.06	155.65	10212.67	-110.90	110.08	-117.30	32.00	18.50	120.24	160.86	313.18	MWD Run 7
115	10300.00	54.58	156.32	10232.00	-87.54	86.80	-106.93	32.00	11.13	120.24	137.72	309.07	MWD Run 7
116	10363.00	55.56	162.85	10268.10	-39.05	38.43	-88.94	63.00	8.64	120.24	96.89	293.37	MWD Run 7

117	10458.00	62.02	166.18	10317.31	39.37	-39.84	-67.34	95.00	7.43	120.24	78.25	239.39	MWD Run 7
118	10522.00	69.25	165.11	10343.70	95.90	-96.27	-52.89	64.00	11.40	122.00	109.84	208.78	MWD Run 7
119	10554.00	72.65	165.49	10354.14	125.21	-125.53	-45.21	32.00	10.68	122.00	133.42	199.81	MWD Run 7
120	10617.00	75.12	165.26	10371.63	183.87	-184.09	-29.93	63.00	3.94	123.76	186.50	189.23	MWD Run 7
121	10648.00	74.92	164.85	10379.64	212.86	-213.02	-22.21	31.00	1.43	125.53	214.17	185.95	MWD Run 7
122	10712.00	76.33	164.85	10395.53	272.81	-272.86	-6.01	64.00	2.20	125.53	272.93	181.26	MWD Run 7
123	10743.00	78.91	167.12	10402.17	302.24	-302.23	1.32	31.00	10.97	127.29	302.24	179.75	MWD Run 7
124	10838.00	82.47	168.83	10417.54	394.04	-393.91	20.84	95.00	4.15	129.06	394.46	176.97	MWD Run 7
125	10901.00	83.17	169.65	10425.42	455.53	-455.31	32.51	63.00	1.70	129.06	456.47	175.92	MWD Run 7
126	10933.00	83.82	172.64	10429.04	486.98	-486.73	37.41	32.00	9.50	129.06	488.16	175.61	MWD Run 7
127	11028.00	87.36	177.55	10436.35	581.36	-581.05	45.49	95.00	6.36	130.82	582.83	175.52	MWD Run 7
128	11124.00	89.05	177.66	10439.36	677.25	-676.92	49.50	96.00	1.76	132.59	678.73	175.82	MWD Run 7
129	11219.00	88.74	178.90	10441.19	772.20	-771.86	52.35	95.00	1.35	134.35	773.63	176.12	MWD Run 7
130	11313.00	89.55	179.15	10442.59	866.19	-865.83	53.95	94.00	0.90	136.12	867.51	176.43	MWD Run 7
131	11407.00	87.05	180.77	10445.38	960.13	-959.78	54.02	94.00	3.17	125.53	961.30	176.78	MWD Run 8
132	11502.00	87.79	181.24	10449.66	1055.01	-1054.67	52.35	95.00	0.92	127.29	1055.97	177.16	MWD Run 8
133	11597.00	85.94	180.86	10454.85	1149.83	-1149.51	50.61	95.00	1.99	129.06	1150.62	177.48	MWD Run 8
134	11690.00	86.16	180.87	10461.26	1242.59	-1242.27	49.21	93.00	0.24	130.82	1243.25	177.73	MWD Run 8
135	11785.00	87.64	180.44	10466.40	1337.43	-1337.13	48.13	95.00	1.62	132.59	1337.99	177.94	MWD Run 8
136	11880.00	85.40	181.80	10472.16	1432.21	-1431.93	46.28	95.00	2.76	136.12	1432.67	178.15	MWD Run 8
137	11975.00	85.17	182.02	10479.97	1526.81	-1526.55	43.12	95.00	0.33	137.88	1527.16	178.38	MWD Run 8
138	12068.00	86.09	181.63	10487.06	1619.47	-1619.23	40.17	93.00	1.07	137.88	1619.73	178.58	MWD Run 8
139	12162.00	86.33	181.25	10493.27	1713.22	-1713.00	37.81	94.00	0.48	139.65	1713.41	178.74	MWD Run 8
140	12257.00	86.77	181.19	10498.99	1808.01	-1807.80	35.79	95.00	0.47	141.41	1808.16	178.87	MWD Run 8
141	12352.00	86.97	180.67	10504.18	1902.84	-1902.65	34.25	95.00	0.59	143.18	1902.96	178.97	MWD Run 8
142	12448.00	87.23	180.19	10509.03	1998.71	-1998.52	33.53	96.00	0.57	144.94	1998.80	179.04	MWD Run 8
143	12542.00	87.50	179.83	10513.35	2092.61	-2092.42	33.52	94.00	0.48	144.94	2092.69	179.08	MWD Run 8
144	12636.00	88.04	179.72	10517.01	2186.53	-2186.35	33.89	94.00	0.59	144.94	2186.61	179.11	MWD Run 8
145	12731.00	88.88	178.96	10519.56	2281.50	-2281.31	34.98	95.00	1.19	144.94	2281.58	179.12	MWD Run 8
146	12826.00	89.97	178.93	10520.52	2376.48	-2376.29	36.73	95.00	1.15	134.35	2376.57	179.11	MWD Run 9
147	12920.00	90.93	178.86	10519.78	2470.47	-2470.26	38.54	94.00	1.02	137.88	2470.57	179.11	MWD Run 9
148	13016.00	91.54	178.76	10517.71	2566.44	-2566.22	40.54	96.00	0.64	139.65	2566.54	179.10	MWD Run 9
149	13110.00	88.51	179.55	10517.67	2660.43	-2660.20	41.92	94.00	3.33	139.65	2660.53	179.10	MWD Run 9
150	13205.00	88.99	179.43	10519.74	2755.40	-2755.17	42.77	95.00	0.52	143.18	2755.50	179.11	MWD Run 9
151	13300.00	90.14	179.67	10520.46	2850.40	-2850.17	43.51	95.00	1.24	144.94	2850.50	179.13	MWD Run 9
152	13394.00	91.29	180.16	10519.29	2944.39	-2944.16	43.65	94.00	1.33	146.71	2944.48	179.15	MWD Run 9
153	13488.00	89.05	180.48	10519.01	3038.38	-3038.15	43.13	94.00	2.41	144.94	3038.45	179.19	MWD Run 9
154	13583.00	89.10	180.34	10520.54	3133.35	-3133.13	42.45	95.00	0.16	146.71	3133.42	179.22	MWD Run 9
155	13678.00	91.12	179.32	10520.36	3228.35	-3228.13	42.73	95.00	2.38	144.94	3228.41	179.24	MWD Run 9
156	13773.00	92.10	179.00	10517.69	3323.30	-3323.08	44.12	95.00	1.09	146.71	3323.37	179.24	MWD Run 9
157	13867.00	93.28	178.84	10513.28	3417.19	-3416.96	45.89	94.00	1.27	148.47	3417.26	179.23	MWD Run 9
158	13962.00	91.23	178.92	10509.54	3512.11	-3511.86	47.75	95.00	2.16	148.47	3512.18	179.22	MWD Run 9
159	14057.00	92.13	178.98	10506.76	3607.06	-3606.80	49.49	95.00	0.95	150.24	3607.14	179.21	MWD Run 9
160	14152.00	89.64	179.09	10505.29	3702.04	-3701.77	51.09	95.00	2.62	150.24	3702.12	179.21	MWD Run 9
161	14246.00	90.08	179.23	10505.52	3796.03	-3795.76	52.46	94.00	0.49	152.00	3796.12	179.21	MWD Run 9
162	14341.00	91.15	179.05	10504.50	3891.02	-3890.74	53.89	95.00	1.14	152.00	3891.11	179.21	MWD Run 9
163	14435.00	88.57	179.45	10504.73	3985.01	-3984.72	55.12	94.00	2.78	152.00	3985.11	179.21	MWD Run 9
164	14530.00	89.10	179.50	10506.66	4079.99	-4079.70	55.99	95.00	0.56	153.76	4080.08	179.21	MWD Run 9
165	14624.00	88.01	179.43	10509.03	4173.96	-4173.66	56.87	94.00	1.16	152.00	4174.05	179.22	MWD Run 9
166	14719.00	89.97	180.68	10510.71	4268.94	-4268.64	56.78	95.00	2.45	153.76	4269.02	179.24	MWD Run 9
167	14813.00	87.59	180.97	10512.71	4362.89	-4362.61	55.42	94.00	2.55	153.76	4362.96	179.27	MWD Run 9
168	14907.00	88.23	181.28	10516.14	4456.79	-4456.52	53.58	94.00	0.76	155.53	4456.85	179.31	MWD Run 9
169	15002.00	89.30	181.31	10518.18	4551.72	-4551.48	51.43	95.00	1.13	155.53	4551.77	179.35	MWD Run 9
170	15097.00	90.11	181.38	10518.67	4646.68	-4646.45	49.20	95.00	0.86	153.76	4646.71	179.39	MWD Run 9
171	15192.00	91.21	181.53	10517.58	4741.62	-4741.41	46.79	95.00	1.17	155.53	4741.64	179.43	MWD Run 9
172	15242.00	92.02	181.68	10516.17	4791.57	-4791.37	45.39	50.00	1.65	157.29	4791.58	179.46	MWD Run 9
173	15305.00	92.02	181.68	10513.95	4854.49	-4854.30	43.55	63.00	0.00	0.00	4854.50	179.49	PTB

Checked and Approved by:

B. Johnson

Date: 12/7/2019