



Directional Survey Report

Company: **Caza Petroleum**
 Well: **Desert Rose 17-8 Federal 10H**
 County: **Lea**
 State: **New Mexico**
 Field: **Delaware Basin**
 API: **30-025-47330**
 Rig: **Ensign 224**
 Service Co: **Quantum**
 Job #: **AEP-PB-220756**
 Survey Calc: **Minimum Curvature**

Well Surface Location
 Latitude: **32.566622**
 Longitude: **-103.475023**
 Reference: **NAD 1983**
 Y (Northing): **570933.89**
 X (Easting): **805758.35**
 Field Engr: **David Soto**
Kelvin Noble
Fidel Garcia

Report Date: **Jan 03 2023**
 Time: **07:01**
 Mag Reference: **Grid North**
 Mag Correction: **5.82**
 Vert Sect. Azi: **2.09**
 Perm Datum: **Mean Sea Level**
 Depth Ref: **Rotary Table**
 RKB Height: **25**
 GL Elev: **3699**

Survey	Rectangular Offsets					Course			Closure		Source		
	MD	Inc	Azimuth	TVD	VS	NS	EW	Length	DLS	Temp		Distance	Azimuth
Tie In	0	0	0	0	0	0	0	0	0	0	0	0	
1	222.00	0.40	192.76	222.00	-0.75	-0.75	-0.17	222.00	0.18	0.00	0.77	192.76	MWD Run 1
2	305.00	0.53	199.09	305.00	-1.40	-1.39	-0.36	83.00	0.17	0.00	1.43	194.45	MWD Run 1
3	398.00	0.35	197.42	397.99	-2.08	-2.06	-0.58	93.00	0.19	0.00	2.15	195.77	MWD Run 1
4	490.00	0.35	196.28	489.99	-2.63	-2.61	-0.75	92.00	0.01	0.00	2.71	195.99	MWD Run 1
5	581.00	0.18	253.50	580.99	-2.95	-2.91	-0.96	91.00	0.33	0.00	3.07	198.22	MWD Run 1
6	672.00	0.40	231.26	671.99	-3.20	-3.15	-1.34	91.00	0.27	0.00	3.42	203.02	MWD Run 1
7	763.00	0.35	249.89	762.99	-3.51	-3.44	-1.85	91.00	0.14	0.00	3.91	208.19	MWD Run 1
8	852.00	0.04	153.21	851.99	-3.64	-3.57	-2.09	89.00	0.40	0.00	4.13	210.33	MWD Run 1
9	941.00	0.04	197.25	940.99	-3.70	-3.63	-2.08	89.00	0.04	0.00	4.18	209.83	MWD Run 1
10	1031.00	0.09	278.11	1030.99	-3.73	-3.65	-2.16	90.00	0.10	0.00	4.24	210.59	MWD Run 1
11	1120.00	0.18	149.87	1119.99	-3.84	-3.76	-2.16	89.00	0.27	0.00	4.34	209.85	MWD Run 1
12	1210.00	0.18	178.70	1209.99	-4.09	-4.02	-2.09	90.00	0.10	0.00	4.53	207.43	MWD Run 1
13	1300.00	0.13	222.91	1299.99	-4.31	-4.23	-2.15	90.00	0.14	0.00	4.75	206.97	MWD Run 1
14	1389.00	0.40	177.03	1388.98	-4.69	-4.61	-2.21	89.00	0.36	0.00	5.11	205.56	MWD Run 1
15	1479.00	0.18	152.16	1478.98	-5.12	-5.05	-2.13	90.00	0.27	0.00	5.48	202.85	MWD Run 1
16	1570.00	0.26	191.53	1569.98	-5.45	-5.38	-2.10	91.00	0.19	0.00	5.77	201.37	MWD Run 1
17	1659.00	0.00	154.36	1658.98	-5.65	-5.58	-2.14	89.00	0.30	0.00	5.97	201.03	MWD Run 1
18	1749.00	0.00	55.74	1748.98	-5.65	-5.58	-2.14	90.00	0.00	0.00	5.97	201.03	MWD Run 1
19	1839.00	0.13	126.58	1838.98	-5.71	-5.64	-2.06	90.00	0.15	0.00	6.00	200.08	MWD Run 1
20	1928.00	0.09	151.54	1927.98	-5.83	-5.76	-1.95	89.00	0.07	0.00	6.08	198.67	MWD Run 1
21	2018.00	0.18	134.40	2017.98	-5.98	-5.92	-1.81	90.00	0.11	0.00	6.19	197.05	MWD Run 1
22	2108.00	0.84	105.40	2107.98	-6.22	-6.19	-1.08	90.00	0.76	0.00	6.28	189.94	MWD Run 1
23	2168.00	1.10	96.96	2167.97	-6.37	-6.37	-0.09	60.00	0.50	0.00	6.37	180.82	MWD Run 1
24	2289.00	1.05	75.96	2288.95	-6.16	-6.24	2.14	121.00	0.33	0.00	6.60	161.07	MWD Run 2
25	2378.00	2.73	116.12	2377.90	-6.79	-6.98	4.84	89.00	2.29	0.00	8.49	145.27	MWD Run 2
26	2468.00	5.19	118.14	2467.68	-9.45	-9.84	10.35	90.00	2.74	0.00	14.28	133.56	MWD Run 2
27	2558.00	8.35	118.67	2557.04	-14.17	-14.89	19.67	90.00	3.52	0.00	24.67	127.13	MWD Run 2
28	2648.00	9.14	120.34	2645.99	-20.48	-21.64	31.58	90.00	0.92	0.00	38.28	124.43	MWD Run 2
29	2738.00	8.31	119.90	2734.95	-26.89	-28.50	43.38	90.00	0.93	0.00	51.90	123.30	MWD Run 2
30	2828.00	9.58	124.38	2823.86	-33.93	-35.97	55.20	90.00	1.61	0.00	65.89	123.09	MWD Run 2
31	2919.00	10.29	127.11	2913.49	-42.64	-45.15	67.93	91.00	0.93	0.00	81.57	123.61	MWD Run 2
32	3010.00	9.85	124.56	3003.09	-51.48	-54.46	80.82	91.00	0.69	0.00	97.46	123.98	MWD Run 2
33	3099.00	9.45	122.28	3090.83	-59.24	-62.68	93.26	89.00	0.62	0.00	112.37	123.90	MWD Run 2
34	3189.00	10.68	126.49	3179.45	-67.67	-71.59	106.22	90.00	1.59	0.00	128.09	123.98	MWD Run 2
35	3278.00	11.16	129.13	3266.83	-77.52	-81.93	119.53	89.00	0.78	0.00	144.92	124.43	MWD Run 2
36	3368.00	10.55	126.49	3355.22	-87.42	-92.33	132.91	90.00	0.88	0.00	161.84	124.79	MWD Run 2
37	3457.00	9.80	122.54	3442.82	-95.86	-101.25	145.85	89.00	1.15	0.00	177.55	124.77	MWD Run 2
38	3547.00	9.63	121.57	3531.53	-103.45	-109.31	158.72	90.00	0.27	0.00	192.72	124.56	MWD Run 2
39	3636.00	8.57	118.67	3619.41	-110.08	-116.39	170.88	89.00	1.29	0.00	206.75	124.26	MWD Run 2
40	3727.00	8.22	120.43	3709.44	-116.20	-122.94	182.44	91.00	0.48	0.00	219.99	123.97	MWD Run 2
41	3817.00	8.00	120.87	3798.54	-122.27	-129.41	193.36	90.00	0.25	0.00	232.67	123.79	MWD Run 2
42	3906.00	7.03	114.98	3886.77	-127.37	-134.89	203.62	89.00	1.39	0.00	244.24	123.52	MWD Run 2
43	3996.00	6.68	113.05	3976.13	-131.39	-139.26	213.43	90.00	0.47	0.00	254.85	123.12	MWD Run 2
44	4087.00	7.87	117.62	4066.39	-135.97	-144.22	223.82	91.00	1.45	0.00	266.26	122.80	MWD Run 2
45	4176.00	9.05	124.21	4154.43	-142.32	-150.99	235.01	89.00	1.72	0.00	279.33	122.72	MWD Run 2
46	4266.00	9.23	124.56	4243.28	-149.96	-159.06	246.81	90.00	0.20	0.00	293.63	122.80	MWD Run 2
47	4355.00	9.80	124.12	4331.06	-157.81	-167.36	258.96	89.00	0.65	0.00	308.34	122.87	MWD Run 2
48	4445.00	9.41	123.95	4419.80	-165.75	-175.77	271.41	90.00	0.44	0.00	323.35	122.93	MWD Run 2

49	4535.00	8.97	124.38	4508.64	-173.38	-183.83	283.30	90.00	0.49	0.00	337.72	122.98	MWD Run 2
50	4625.00	8.57	122.19	4597.59	-180.49	-191.37	294.76	90.00	0.58	0.00	351.43	122.99	MWD Run 2
51	4714.00	8.26	121.75	4685.63	-186.98	-198.27	305.81	89.00	0.35	0.00	364.46	122.96	MWD Run 2
52	4804.00	7.56	121.57	4774.77	-193.10	-204.77	316.36	90.00	0.78	0.00	376.85	122.91	MWD Run 2
53	4895.00	5.10	130.54	4865.21	-198.56	-210.53	324.53	91.00	2.91	0.00	386.84	122.97	MWD Run 2
54	4984.00	3.25	129.92	4953.97	-202.57	-214.72	329.48	89.00	2.07	0.00	393.27	123.09	MWD Run 2
55	5073.00	1.98	149.26	5042.88	-205.41	-217.67	332.20	89.00	1.72	0.00	397.16	123.23	MWD Run 2
56	5162.00	0.97	159.10	5131.85	-207.39	-219.69	333.25	89.00	1.17	0.00	399.15	123.39	MWD Run 2
57	5251.00	1.14	164.20	5220.84	-208.92	-221.24	333.76	89.00	0.22	0.00	400.43	123.54	MWD Run 2
58	5342.00	1.05	164.81	5311.82	-210.59	-222.92	334.23	91.00	0.10	0.00	401.75	123.70	MWD Run 2
59	5433.00	1.19	167.45	5402.80	-212.30	-224.65	334.65	91.00	0.16	0.00	403.06	123.87	MWD Run 2
60	5522.00	1.23	160.42	5491.78	-214.08	-226.45	335.17	89.00	0.17	0.00	404.50	124.04	MWD Run 2
61	5634.00	1.08	179.10	5603.76	-216.25	-228.64	335.59	112.00	0.36	91.40	406.08	124.27	MWD Run 3
62	5725.00	1.50	327.09	5694.75	-216.13	-228.50	334.96	91.00	2.73	100.40	405.47	124.30	MWD Run 3
63	5815.00	1.50	328.31	5784.72	-214.19	-226.51	333.70	90.00	0.04	107.60	403.31	124.17	MWD Run 3
64	5905.00	1.36	338.94	5874.69	-212.23	-224.51	332.70	90.00	0.33	109.40	401.36	124.01	MWD Run 3
65	5994.00	1.08	347.82	5963.67	-210.44	-222.70	332.14	89.00	0.38	111.20	399.89	123.84	MWD Run 3
66	6084.00	0.92	346.30	6053.66	-208.93	-221.17	331.79	90.00	0.18	113.00	398.75	123.69	MWD Run 3
67	6174.00	0.82	347.64	6143.65	-207.61	-219.84	331.48	90.00	0.11	114.80	397.76	123.55	MWD Run 3
68	6264.00	0.86	351.44	6233.64	-206.32	-218.54	331.24	90.00	0.08	116.60	396.84	123.42	MWD Run 3
69	6355.00	0.86	357.43	6324.63	-204.97	-217.19	331.11	91.00	0.10	116.60	395.98	123.26	MWD Run 3
70	6445.00	0.79	9.67	6414.62	-203.68	-215.90	331.18	90.00	0.21	118.40	395.34	123.10	MWD Run 3
71	6535.00	0.71	2.57	6504.61	-202.51	-214.73	331.31	90.00	0.14	118.40	394.81	122.95	MWD Run 3
72	6625.00	0.67	359.63	6594.60	-201.42	-213.65	331.33	90.00	0.06	116.60	394.24	122.81	MWD Run 3
73	6716.00	0.66	352.18	6685.60	-200.37	-212.60	331.26	91.00	0.10	118.40	393.61	122.69	MWD Run 3
74	6805.00	0.69	334.42	6774.59	-199.40	-211.61	330.96	89.00	0.24	120.20	392.82	122.59	MWD Run 3
75	6896.00	0.76	332.03	6865.58	-198.39	-210.58	330.44	91.00	0.08	122.00	391.83	122.51	MWD Run 3
76	6985.00	1.00	305.03	6954.57	-197.45	-209.61	329.53	89.00	0.53	122.00	390.54	122.46	MWD Run 3
77	7076.00	1.22	305.74	7045.56	-196.49	-208.59	328.09	91.00	0.24	123.80	388.78	122.45	MWD Run 3
78	7165.00	0.73	301.06	7134.54	-195.69	-207.74	326.83	89.00	0.56	123.80	387.27	122.44	MWD Run 3
79	7255.00	0.72	291.06	7224.54	-195.22	-207.25	325.82	90.00	0.14	125.60	386.14	122.46	MWD Run 3
80	7345.00	0.86	289.73	7314.53	-194.84	-206.81	324.65	90.00	0.16	127.40	384.93	122.50	MWD Run 3
81	7436.00	1.16	279.99	7405.51	-194.50	-206.42	323.10	91.00	0.38	127.40	383.41	122.57	MWD Run 3
82	7526.00	1.32	277.87	7495.49	-194.27	-206.12	321.18	90.00	0.18	129.20	381.63	122.69	MWD Run 3
83	7615.00	1.29	284.23	7584.47	-193.96	-205.74	319.19	89.00	0.17	129.20	379.75	122.80	MWD Run 3
84	7706.00	0.72	274.42	7675.46	-193.72	-205.44	317.63	91.00	0.65	129.20	378.28	122.89	MWD Run 3
85	7796.00	0.37	238.15	7765.45	-193.86	-205.55	316.82	90.00	0.53	129.20	377.66	122.98	MWD Run 3
86	7887.00	0.36	214.46	7856.45	-194.27	-205.94	316.41	91.00	0.17	129.20	377.53	123.06	MWD Run 3
87	7977.00	0.33	240.91	7946.45	-194.64	-206.30	316.02	90.00	0.18	129.20	377.40	123.14	MWD Run 3
88	8068.00	0.46	225.68	8037.45	-195.04	-206.68	315.53	91.00	0.18	131.00	377.20	123.23	MWD Run 3
89	8158.00	0.46	234.04	8127.44	-195.52	-207.15	314.98	90.00	0.07	131.00	376.99	123.33	MWD Run 3
90	8248.00	0.53	224.08	8217.44	-196.06	-207.66	314.40	90.00	0.12	131.00	376.79	123.44	MWD Run 3
91	8337.00	0.77	225.48	8306.43	-196.80	-208.37	313.68	89.00	0.27	132.80	376.59	123.60	MWD Run 3
92	8427.00	0.93	220.06	8396.42	-197.81	-209.36	312.78	90.00	0.20	131.00	376.38	123.80	MWD Run 3
93	8517.00	0.86	223.31	8486.41	-198.89	-210.41	311.85	90.00	0.10	132.80	376.19	124.01	MWD Run 3
94	8608.00	0.63	240.46	8577.40	-199.67	-211.15	310.95	91.00	0.35	132.80	375.86	124.18	MWD Run 3
95	8698.00	0.63	287.16	8667.40	-199.80	-211.25	310.04	90.00	0.55	132.80	375.17	124.27	MWD Run 3
96	8788.00	0.63	319.55	8757.39	-199.31	-210.73	309.25	90.00	0.39	134.60	374.22	124.27	MWD Run 3
97	8879.00	0.76	338.06	8848.39	-198.39	-209.79	308.70	91.00	0.28	134.60	373.24	124.20	MWD Run 3
98	8969.00	0.86	358.60	8938.38	-197.17	-208.56	308.46	90.00	0.34	136.40	372.35	124.06	MWD Run 3
99	9058.00	1.05	21.84	9027.37	-195.74	-207.13	308.75	89.00	0.48	136.40	371.79	123.86	MWD Run 3
100	9149.00	1.33	55.65	9118.35	-194.32	-205.76	309.93	91.00	0.82	136.40	372.01	123.58	MWD Run 3
101	9238.00	1.35	51.55	9207.32	-193.03	-204.53	311.60	89.00	0.11	136.40	372.73	123.28	MWD Run 3
102	9328.00	1.23	54.62	9297.30	-191.75	-203.31	313.22	90.00	0.15	136.40	373.42	122.99	MWD Run 3
103	9417.00	1.02	30.76	9386.28	-190.48	-202.08	314.40	89.00	0.57	138.20	373.74	122.73	MWD Run 3
104	9506.00	1.00	6.52	9475.27	-189.01	-200.62	314.90	89.00	0.48	136.40	373.38	122.50	MWD Run 3
105	9597.00	0.97	1.15	9566.26	-187.44	-199.06	315.00	91.00	0.11	136.40	372.63	122.29	MWD Run 3
106	9687.00	0.56	330.03	9656.25	-186.31	-197.92	314.80	90.00	0.63	138.20	371.85	122.16	MWD Run 3
107	9777.00	0.69	303.97	9746.25	-185.65	-197.24	314.13	90.00	0.34	138.20	370.92	122.12	MWD Run 3
108	9869.00	0.97	299.25	9838.24	-185.00	-196.55	312.99	92.00	0.31	138.20	369.59	122.13	MWD Run 3
109	9959.00	1.11	288.80	9928.22	-184.40	-195.89	311.50	90.00	0.26	140.00	367.98	122.16	MWD Run 3
110	10049.00	1.19	291.26	10018.20	-183.85	-195.27	309.80	90.00	0.10	140.00	366.21	122.22	MWD Run 3
111	10139.00	1.15	312.53	10108.18	-182.95	-194.33	308.27	90.00	0.48	138.20	364.41	122.23	MWD Run 3
112	10163.00	1.41	319.28	10132.18	-182.58	-193.94	307.90	24.00	1.25	123.80	363.89	122.21	MWD Run 4
113	10207.00	4.58	357.97	10176.12	-180.43	-191.77	307.48	44.00	8.16	127.40	362.38	121.95	MWD Run 4
114	10252.00	11.22	9.52	10220.67	-174.29	-185.65	308.14	45.00	15.10	131.00	359.75	121.07	MWD Run 4
115	10297.00	19.11	4.24	10264.07	-162.57	-173.97	309.41	45.00	17.78	136.40	354.97	119.35	MWD Run 4
116	10342.00	24.97	359.41	10305.76	-145.70	-157.11	309.86	45.00	13.62	138.20	347.42	116.89	MWD Run 4

117	10387.00	29.48	358.07	10345.77	-125.16	-136.53	309.39	45.00	10.11	138.20	338.18	113.81	MWD Run 4
118	10431.00	33.24	358.46	10383.33	-102.32	-113.65	308.70	44.00	8.56	138.20	328.96	110.21	MWD Run 4
119	10477.00	35.53	359.48	10421.29	-76.38	-87.68	308.24	46.00	5.13	140.00	320.47	105.88	MWD Run 4
120	10522.00	37.68	1.45	10457.42	-49.56	-60.85	308.47	45.00	5.44	141.80	314.42	101.16	MWD Run 4
121	10567.00	42.75	3.18	10491.77	-20.52	-31.83	309.67	45.00	11.54	141.80	311.30	95.87	MWD Run 4
122	10612.00	48.81	3.76	10523.14	11.71	0.34	311.63	45.00	13.50	143.60	311.63	89.94	MWD Run 4
123	10658.00	53.00	3.63	10552.14	47.39	35.96	313.93	46.00	9.11	145.40	315.98	83.47	MWD Run 4
124	10703.00	57.19	3.95	10577.88	84.27	72.78	316.37	45.00	9.33	143.60	324.63	77.05	MWD Run 4
125	10748.00	60.14	3.04	10601.28	122.69	111.14	318.71	45.00	6.78	145.40	337.53	70.78	MWD Run 4
126	10792.00	63.62	2.28	10622.02	161.48	149.89	320.50	44.00	8.05	147.20	353.82	64.94	MWD Run 4
127	10838.00	67.26	1.09	10641.14	203.31	191.71	321.73	46.00	8.26	149.00	374.51	59.21	MWD Run 4
128	10883.00	71.50	0.48	10656.98	245.41	233.81	322.30	45.00	9.51	149.00	398.18	54.04	MWD Run 4
129	10928.00	76.43	0.24	10669.41	288.62	277.05	322.57	45.00	10.97	150.80	425.21	49.34	MWD Run 4
130	10972.00	81.89	0.34	10677.68	331.80	320.24	322.79	44.00	12.41	152.60	454.70	45.23	MWD Run 4
131	11018.00	87.04	1.28	10682.11	377.56	366.01	323.44	46.00	11.38	154.40	488.44	41.47	MWD Run 4
132	11063.00	87.97	1.64	10684.07	422.51	410.95	324.58	45.00	2.22	152.60	523.67	38.30	MWD Run 4
133	11153.00	88.58	1.66	10686.78	512.47	500.87	327.17	90.00	0.68	158.00	598.26	33.15	MWD Run 4
134	11242.00	87.63	0.68	10689.73	601.41	589.80	328.99	89.00	1.53	158.00	675.35	29.15	MWD Run 4
135	11332.00	86.58	359.43	10694.27	691.23	679.68	329.08	90.00	1.81	156.20	755.16	25.83	MWD Run 4
136	11421.00	86.51	359.17	10699.63	779.97	768.52	327.99	89.00	0.30	159.80	835.58	23.11	MWD Run 4
137	11512.00	89.20	358.81	10703.04	870.76	859.43	326.39	91.00	2.98	161.60	919.32	20.80	MWD Run 4
138	11601.00	91.92	359.31	10702.17	959.62	948.40	324.93	89.00	3.11	165.20	1002.52	18.91	MWD Run 4
139	11692.00	92.62	359.37	10698.57	1050.45	1039.33	323.88	91.00	0.77	167.00	1088.62	17.31	MWD Run 4
140	11783.00	92.96	359.04	10694.14	1141.22	1130.21	322.62	91.00	0.52	167.00	1175.35	15.93	MWD Run 4
141	11873.00	93.07	358.87	10689.40	1230.96	1220.07	320.98	90.00	0.22	168.80	1261.59	14.74	MWD Run 4
142	11962.00	91.25	359.82	10686.05	1319.79	1309.00	319.96	89.00	2.31	165.20	1347.53	13.74	MWD Run 4
143	12053.00	88.73	0.31	10686.06	1410.73	1399.99	320.07	91.00	2.82	165.20	1436.11	12.88	MWD Run 4
144	12143.00	88.28	0.13	10688.41	1500.65	1489.96	320.41	90.00	0.54	161.60	1524.02	12.14	MWD Run 4
145	12233.00	88.44	0.15	10690.99	1590.56	1579.92	320.63	90.00	0.18	165.20	1612.13	11.47	MWD Run 4
146	12323.00	88.64	0.12	10693.28	1680.48	1669.89	320.84	90.00	0.22	167.00	1700.43	10.88	MWD Run 4
147	12413.00	86.68	0.29	10696.96	1770.35	1759.81	321.17	90.00	2.19	167.00	1788.88	10.34	MWD Run 4
148	12503.00	86.65	359.94	10702.19	1860.15	1849.66	321.35	90.00	0.39	168.80	1877.36	9.86	MWD Run 4
149	12593.00	86.34	359.94	10707.69	1949.92	1939.49	321.25	90.00	0.34	168.80	1965.92	9.40	MWD Run 4
150	12683.00	87.10	359.88	10712.84	2039.70	2029.34	321.11	90.00	0.85	167.00	2054.59	8.99	MWD Run 4
151	12772.00	89.01	359.74	10715.86	2128.58	2118.29	320.82	89.00	2.15	168.80	2142.44	8.61	MWD Run 4
152	12862.00	91.95	359.46	10715.11	2218.48	2208.27	320.19	90.00	3.28	161.60	2231.36	8.25	MWD Run 4
153	12952.00	92.56	359.74	10711.57	2308.32	2298.20	319.56	90.00	0.75	168.80	2320.31	7.92	MWD Run 4
154	13043.00	90.49	359.79	10709.15	2399.21	2389.16	319.19	91.00	2.28	168.80	2410.39	7.61	MWD Run 4
155	13133.00	90.49	359.94	10708.38	2489.14	2479.16	318.98	90.00	0.17	170.60	2499.59	7.33	MWD Run 4
156	13223.00	90.88	0.19	10707.30	2579.08	2569.15	319.08	90.00	0.51	170.60	2588.89	7.08	MWD Run 4
157	13313.00	91.19	0.58	10705.68	2669.02	2659.13	319.68	90.00	0.55	172.40	2678.28	6.86	MWD Run 4
158	13403.00	91.47	359.56	10703.59	2758.94	2749.11	319.79	90.00	1.17	170.60	2767.64	6.64	MWD Run 4
159	13493.00	93.88	359.50	10699.39	2848.75	2839.00	319.05	90.00	2.68	172.40	2856.87	6.41	MWD Run 4
160	13583.00	94.50	359.76	10692.81	2938.42	2928.76	318.47	90.00	0.75	172.40	2946.02	6.21	MWD Run 4
161	13674.00	94.68	359.92	10685.53	3029.06	3019.46	318.22	91.00	0.26	165.20	3036.19	6.02	MWD Run 4
162	13764.00	93.61	359.69	10679.02	3118.75	3109.23	317.92	90.00	1.22	168.80	3125.44	5.84	MWD Run 4
163	13855.00	94.02	359.55	10672.97	3209.47	3200.02	317.31	91.00	0.48	172.40	3215.72	5.66	MWD Run 4
164	13945.00	93.63	359.75	10666.96	3299.18	3289.82	316.77	90.00	0.49	170.60	3305.04	5.50	MWD Run 4
165	14035.00	90.24	358.90	10663.93	3389.01	3379.75	315.71	90.00	3.88	174.20	3394.46	5.34	MWD Run 4
166	14126.00	90.24	359.31	10663.55	3479.89	3470.74	314.28	91.00	0.45	174.20	3484.94	5.17	MWD Run 4
167	14215.00	91.11	359.38	10662.50	3568.78	3559.72	313.27	89.00	0.98	174.20	3573.48	5.03	MWD Run 4
168	14306.00	91.19	359.60	10660.67	3659.67	3650.70	312.46	91.00	0.26	172.40	3664.05	4.89	MWD Run 4
169	14396.00	91.53	359.72	10658.53	3749.56	3740.67	311.92	90.00	0.40	168.80	3753.66	4.77	MWD Run 4
170	14487.00	91.86	359.80	10655.84	3840.45	3831.63	311.54	91.00	0.37	174.20	3844.28	4.65	MWD Run 4
171	14577.00	91.58	359.27	10653.14	3930.32	3921.59	310.81	90.00	0.67	172.40	3933.89	4.53	MWD Run 4
172	14667.00	93.04	358.87	10649.51	4020.12	4011.50	309.35	90.00	1.68	168.80	4023.41	4.41	MWD Run 4
173	14758.00	93.52	358.59	10644.31	4110.81	4102.33	307.34	91.00	0.61	174.20	4113.83	4.28	MWD Run 4
174	14848.00	93.63	358.50	10638.70	4200.46	4192.13	305.06	90.00	0.16	176.00	4203.21	4.16	MWD Run 4
175	14939.00	94.36	358.60	10632.36	4291.07	4282.88	302.76	91.00	0.81	177.80	4293.56	4.04	MWD Run 4
176	15028.00	93.68	359.46	10626.12	4379.72	4371.64	301.26	89.00	1.23	176.00	4382.01	3.94	MWD Run 4
177	15118.00	92.98	359.81	10620.89	4469.49	4461.49	300.69	90.00	0.87	177.80	4471.61	3.86	MWD Run 4
178	15208.00	93.29	359.77	10615.97	4559.28	4551.35	300.36	90.00	0.35	177.80	4561.25	3.78	MWD Run 4
179	15298.00	91.97	359.88	10611.84	4649.11	4641.26	300.08	90.00	1.47	177.80	4650.95	3.70	MWD Run 4
180	15389.00	89.57	359.35	10610.61	4740.01	4732.24	299.47	91.00	2.70	177.80	4741.70	3.62	MWD Run 4
181	15478.00	89.59	359.54	10611.27	4828.91	4821.23	298.61	89.00	0.21	168.80	4830.47	3.54	MWD Run 4
182	15569.00	89.87	359.36	10611.69	4919.82	4912.23	297.73	91.00	0.37	177.80	4921.24	3.47	MWD Run 4
183	15658.00	90.46	359.46	10611.44	5008.72	5001.22	296.82	89.00	0.67	179.60	5010.02	3.40	MWD Run 4
184	15749.00	91.98	359.56	10609.50	5099.60	5092.19	296.04	91.00	1.67	181.40	5100.79	3.33	MWD Run 4

185	15838.00	90.38	359.79	10607.67	5188.50	5181.17	295.54	89.00	1.82	176.00	5189.59	3.26	MWD Run 4
186	15929.00	89.12	359.48	10608.07	5279.42	5272.17	294.96	91.00	1.43	177.80	5280.41	3.20	MWD Run 4
187	16019.00	88.11	359.40	10610.24	5369.29	5362.13	294.08	90.00	1.13	179.60	5370.19	3.14	MWD Run 4
188	16109.00	88.56	359.48	10612.86	5459.16	5452.09	293.20	90.00	0.51	183.20	5459.97	3.08	MWD Run 4
189	16199.00	87.77	359.66	10615.74	5549.02	5542.04	292.52	90.00	0.90	170.60	5549.76	3.02	MWD Run 4
190	16290.00	87.41	359.26	10619.56	5639.85	5632.96	291.67	91.00	0.59	179.60	5640.50	2.96	MWD Run 4
191	16380.00	87.38	358.71	10623.65	5729.62	5722.85	290.07	90.00	0.61	181.40	5730.20	2.90	MWD Run 4
192	16470.00	88.53	359.04	10626.87	5819.42	5812.77	288.31	90.00	1.33	179.60	5819.92	2.84	MWD Run 4
193	16560.00	89.96	358.90	10628.05	5909.28	5902.75	286.69	90.00	1.60	179.60	5909.71	2.78	MWD Run 4
194	16650.00	92.56	359.41	10626.07	5999.13	5992.71	285.36	90.00	2.94	177.80	5999.50	2.73	MWD Run 4
195	16740.00	90.85	359.53	10623.40	6088.99	6082.66	284.53	90.00	1.90	177.80	6089.31	2.68	MWD Run 4
196	16831.00	90.01	359.91	10622.71	6179.91	6173.66	284.09	91.00	1.01	179.60	6180.19	2.63	MWD Run 4
197	16920.00	91.36	0.33	10621.65	6268.85	6262.65	284.27	89.00	1.59	181.40	6269.10	2.60	MWD Run 4
198	17010.00	90.24	0.21	10620.39	6358.79	6352.64	284.70	90.00	1.25	174.20	6359.01	2.57	MWD Run 4
199	17100.00	91.41	359.67	10619.10	6448.72	6442.63	284.60	90.00	1.43	176.00	6448.91	2.53	MWD Run 4
200	17191.00	90.07	359.26	10617.92	6539.61	6533.61	283.75	91.00	1.54	179.60	6539.77	2.49	MWD Run 4
201	17281.00	89.43	359.03	10618.31	6629.49	6623.60	282.41	90.00	0.76	181.40	6629.62	2.44	MWD Run 4
202	17371.00	91.47	0.05	10617.61	6719.40	6713.59	281.69	90.00	2.53	183.20	6719.50	2.40	MWD Run 4
203	17462.00	92.14	0.33	10614.74	6810.30	6804.54	281.99	91.00	0.80	183.20	6810.38	2.37	MWD Run 4
204	17552.00	89.14	359.02	10613.74	6900.20	6894.52	281.48	90.00	3.64	183.20	6900.27	2.34	MWD Run 4
205	17642.00	90.94	358.77	10613.67	6990.06	6984.50	279.74	90.00	2.02	183.20	6990.10	2.29	MWD Run 4
206	17733.00	90.88	358.80	10612.23	7080.90	7075.47	277.81	91.00	0.07	0.00	7080.92	2.25	MWD Run 4
207	17823.00	90.10	358.06	10611.46	7170.71	7165.43	275.35	90.00	1.19	176.00	7170.72	2.20	MWD Run 4
208	17913.00	91.81	358.47	10609.96	7260.49	7255.38	272.62	90.00	1.95	176.00	7260.50	2.15	MWD Run 4
209	18004.00	92.81	358.38	10606.29	7351.23	7346.27	270.12	91.00	1.10	0.00	7351.23	2.11	MWD Run 4
210	18094.00	90.69	358.11	10603.54	7440.98	7436.18	267.37	90.00	2.37	0.00	7440.98	2.06	MWD Run 4
211	18172.00	90.00	357.93	10603.07	7518.78	7514.13	264.67	78.00	0.91	0.00	7518.79	2.02	MWD Run 4
PTD	18226.00	90.00	357.93	10603.07	7572.64	7568.09	262.72	54.00	0.00	0.00	7572.65	1.99	TD

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