### REC'D NMOCD 11/18/2020

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

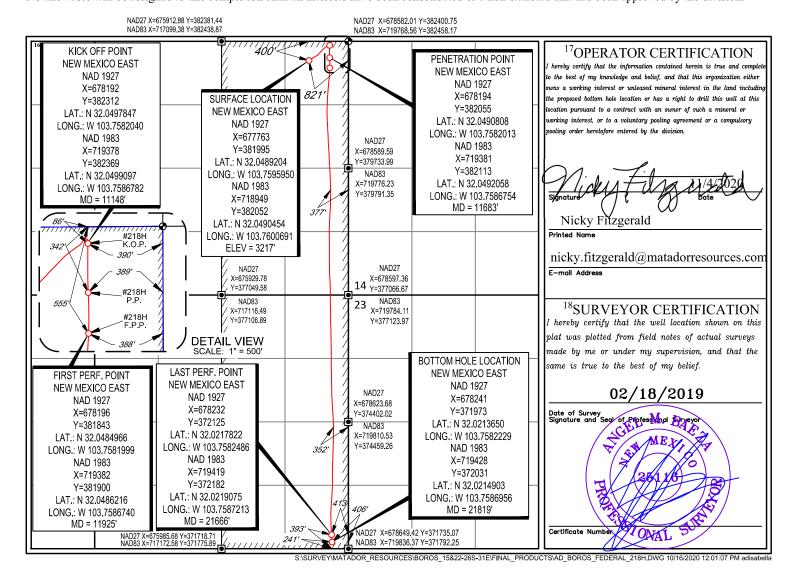
### WELL LOCATION AND ACREAGE DEDICATION PLAT

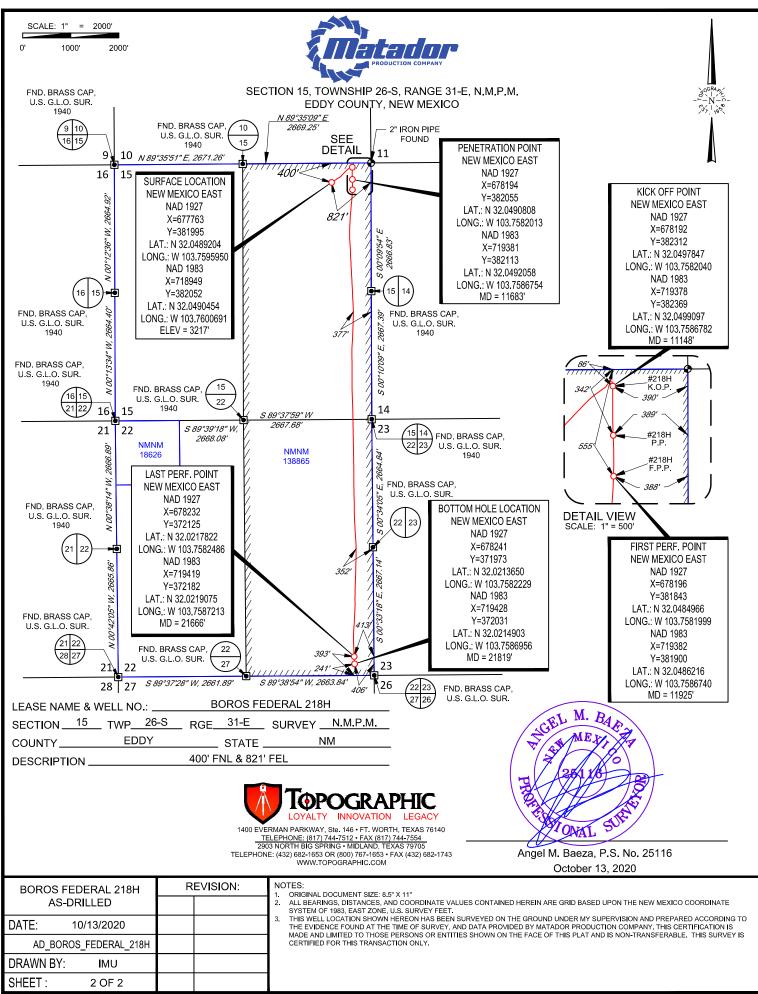
<sup>1</sup> API Numbe	er <sup>2</sup> Pool Co	de	<sup>3</sup> Pool Name							
30-015-46493	98220	PURPLE SA	PURPLE SAGE; WOLFCAMP (GAS)							
<sup>4</sup> Property Code		<sup>5</sup> Property Name	<sup>6</sup> Well Number							
326329		BOROS FEDERAL	218H							
<sup>7</sup> OGRID №.		<sup>8</sup> Operator Name	<sup>9</sup> Elevation							
228937	MATAL	OOR PRODUCTION COMPANY	3217'							

<sup>10</sup>Surface Location

UL or lot no.	Section 15			North/South line	821'	EAST	EDDY		
			<sup>11</sup> ]	Bottom Ho	le Location If I	Different From Su	rface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	22   26-S   31		- 241'		SOUTH	SOUTH 406'		EDDY
<sup>12</sup> Dedicated Acres 640	<sup>13</sup> Joint or	Infill 14Ce	onsolidation Co	de <sup>15</sup> Ord	er No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.







### MWD SURVEY CERTIFICATION Gordon Technologies, LLC

State Of _	New Mexico				
County Of _	Eddy				
1,	Bill Johnson C	ertify that; I	am employed by	Gordon Tec	hnologies, LLC.;
that I did on t	he day(s) of <u>December 28</u>	, 2109 thro	ughJa	nuary 25, 202	20 conduct
or supervise t	the taking of a MWD survey t	rom a depth	of	0fe	eet to a depth of
11,907	feet; that the data is	true, correct	, complete and	within the limi	tations of the
tool set forth	by Gordon Technologies, LL	C.; that I am	authorized and	qualified to m	nake this report;
that this surve	ey was conducted at the requ	uest of	Matador	Production Co.	for the
E	Boros Federal 218H	Well, A.P.I.	No	30-015-46493	in in
Wolf	camp Purple SageF	ield and tha	t I have reviewe	ed this report a	and find that
it conforms to	the principles and procedur	es set forth l	y Gordon Tech	nologies, LLC	<b>)</b> ,
			0 /	2 /	
			B-f-	Tohnse	2
		-		Signature	
			N	WD Coordina	ator
				Title	



Company: Matador Production Company

Well: Boros Federal 218H

County: Eddy County

State: NM

Field: Wolfcamp Purple Sage

API: **30-015-46493** Rig: **Patterson 256** 

Service Co: **GTMWD**Job #: **191293** 

Survey Calc: Minimum Curvature

Well Surface Location Latitude: 32.0489208

Longitude: -103.7595939 Reference: NAD 1927 Y (Northing): 381995

X (Easting): 677763
Field Engr: O.SILVA

**C.BAXTER** 

Report Date: **Apr 08 2020** Time: **11:04** 

Mag Reference: **Grid North**Mag Correction: **6.30**Vert Sect. Azi: **179.64** 

Perm Datum: **Mean Sea Level**Depth Ref: **Rotary Table** 

RKB Height: **28.5** GL Elev: **3217** 

Survey Calc: Minimum Curvature													
						Rectangul	ar Offsets	Course			Clos	ure	
Survey	MD	Inc	Azimuth	TVD	VS	NS	EW	Length	DLS	Temp	Distance	Azimuth	Source
Tie In	0	0	0	0	0	0	0	0	0	0	0	0	
1	148.00	0.40	63.03	148.00	-0.23	0.23	0.46	148.00	0.27	66.20	0.52	63.03	Run 1
2	242.00	0.52	66.57	242.00	-0.55	0.55	1.14	94.00	0.13	68.00	1.27	64.22	Run 1
3	335.00	0.64	67.68	334.99	-0.91	0.92	2.01	93.00	0.13	68.00	2.21	65.48	Run 1
4	427.00	0.78	79.48	426.98	-1.21	1.23	3.10	92.00	0.22	69.80	3.34	68.42	Run 1
5	519.00	0.66	80.60	518.98	-1.40	1.43	4.24	92.00	0.13	71.60	4.48	71.39	Run 1
6	609.00	0.52	80.95	608.97	-1.54	1.58	5.16	90.00	0.16	73.40	5.39	72.99	Run 1
7	702.00	0.79	90.13	701.97	-1.60	1.64	6.21	93.00	0.31	73.40	6.43	75.20	Run 1
8	883.00	0.57	92.29	882.95	-1.55	1.60	8.36	181.00	0.12	75.20	8.51	79.15	Run 1
9	974.00	0.52	82.72	973.95	-1.58	1.64	9.22	91.00	0.11	77.00	9.37	79.93	Run 1
10	1066.00	0.14	45.52	1065.95	-1.71	1.77	9.72	92.00	0.45	75.20	9.88	79.68	Run 1
11	1161.00	0.13	347.52	1160.95	-1.89	1.96	9.78	95.00	0.14	0.00	9.97	78.69	Run 1
12	1256.00	0.25	331.94	1255.95	-2.18	2.24	9.66	95.00	0.14	78.80	9.91	76.92	Run 1
13	1351.00	0.30	22.00	1350.95	-2.60	2,66	9.65	95.00	0.25	80.60	10.01	74.61	Run 1
14	1435.00	0.36	3.18	1434.94	-3.06	3.12	9.75	84.00	0.15	84.20	10.24	72.23	Run 1
15	1511.00	0.45	351.25	1510.94	-3.60	3.66	9.72	76.00	0.16	78.80	10.38	69.37	Run 2
16	1606.00	0.81	353.62	1605.94	4.63	4.69	9.59	95.00	0.38	84.20	10.67	63.91	Run 2
17	1702.00	1.20	354.22	1701.92	-6.31	6.37	9.41	96.00	0.41	89.60	11.36	55.91	Run 2
18	1797.00	1.67	49.58	1796.90	-8.19	8.26	10.36	95.00	1.47	98.60	13.25	51.46	Run 2
19	1892.00	1.74	52.92	1891.85	9.94	10.02	12.57	95.00	0.13	100.40	16.07	51.43	Run 2
20	1987.00	1.80	49.56	1986.81	-11.77	11.86	14.85	95.00	0.13	102.20	19.01	51.39	Run 2
21	2080.00	1.87	50.00	2079.76	-13.68	13.78	17.13	93.00	0.08	102.20	21.98	51.17	Run 2
22	2174.00	2.85	53.83	2173.68	-16.02	16.15	20.19	94.00	1.06	102.20	25.85	51.34	Run 2
23	2269.00	4.78	55.69	2268.46	-19.61	19.77	25.37	95.00	2.04	102.20	32,16	52.06	Run 2
24	2364.00	5.17	58.39	2363.11	-24.04	24.25	32,28	95.00	0.48	100.40	40.37	53.09	Run 2
25	2459.00	5.26	59.37	2457.71	-28.46	28.71	39.67	95.00	0.13	104.00	48.97	54.11	Run 2
26	2553.00	5.15	63.49	2551.33	-32.49	32.79	47.16	94.00	0.41	105.80	57.43	55.19	Run 2
27	2648.00	5.09	61.57	2645.95	-36.35	36.70	54.68	95.00	0.19	104.00	65.85	56.13	Run 2
28	2743.00	4.69	61.09	2740.60	-40.19	40.58	61.78	95.00	0.42	107.60	73.92	56.70	Run 2
29	2837.00	4.42	64.78	2834.30	-43.55	43.98	68.42	94.00	0.42	111.20	81.34	57.27	Run 2
30	2932.00	4.79	56.99	2929.00	-47.23	47.70	75.06	95.00	0.76	122.00	88.94	57.56	Run 2
31	3027.00	5.66	51.98	3023.60	-52.23	52.75	82.08	95.00	1.03	125.60	97.57	57.27	Run 2
32	3122.00	5.57	54.31	3118.15	-57.76	58.33	89.51	95.00	0.26	131.00	106.84	56.91	Run 2
33	3216.00	5.30	53,58	3211.72	-62.96	63,56	96.71	94.00	0.30	132,80	115.73	56,68	Run 2
34	3311.00	6.04	51.98	3306.26	-68.59	69.25	104.18	95.00	0.80	132.80	125.10	56.39	Run 2
35	3406.00	6.36	52,73	3400.70	-74.81	75.51	112.31	95.00	0.35	136.40	135.33	56.08	Run 2
36	3500.00	6.17	59.31	3494.14	-80.48	81.24	120.79	94.00	0.79	138.20	145.57	56.08	Run 2
37	3595.00	5.86	65.64	3588.62	-85.03	85.85	129.60	95.00	0.77	143.60	155.46	56.48	Run 2
38	3690.00	5.96	58.42	3683.12	-89.56	90.43	138.22	95.00	0.79	138.20	165.18	56.80	Run 2
39	3785.00	6.14	63.88	3777.59	-94.33	95.25	146.98	95.00	0.63	140.00	175.15	57.05	Run 2
40	3880.00	5.54	73.79	3872.10	-97.79	98.77	155.95	95.00	1.23	143.60	184.60	57.65	Run 2
41	3975.00	5.55	63.80	3966.66	-101.04	102.08	164.47	95.00	1.01	145.40	193.58	58.17	Run 2
42	4070.00	6.44	48.71	4061.14	-106.54	107.62	172.60	95.00	1.90	143.60	203.41	58.05	Run 2
43	4127.00	6.57	43.26	4117.78	-110.99	112.11	177.24	57.00	1.11	143.60	209.72	57.69	Run 2
44	4261.00	6.29	43.83	4250.93	-121.80	122.99	187.57	134.00	0.21	96.80	224.30	56.75	Run 3
45	4356.00	6.19	43.37	4345.37	-129.24	130.46	194.70	95.00	0.12	100.40	234.36	56.17	Run 3
46	4450.00	6.05	42.81	4438.83	-136.51	137.78	201.54	94.00	0.16	102.20	244.14	55.64	Run 3
47	4546.00	6.31	43.48	4534.28	-144.01	145.32	208.61	96.00	0.28	104.00	254.24	55.14	Run 3
48	4640.00	6.16	43.40	4627.72	-151.37	152.73	215.63	94.00	0.16	107.60	264.24	54.69	Run 3

49	4736.00	6.05	42.74	4723.17	-158.79	160.19	222.60	96.00	0.14	109.40	274.25	54.26	Run 3
50	4830.00	6.29	43.92	4816.63	-166.09	167.54	229.54	94.00	0.29	111.20	284.18	53.87	Run 3
51	4925.00	6.43	44.22	4911.05	-173.61	175.10	236.86	95.00	0.15	113.00	294.55	53.53	Run 3
52	5020.00	6.19	43.36	5005.47	-181.10	182.63	244.08	95.00	0.27	111.20	304.85	53.19	Run 3
53	5114.00	5.93	44.64	5098.94	-188.19	189.77	250.97	94.00	0.31	113.00	314.65	52.91	
													Run 3
54	5210.00	6.01	44.36	5194.42	-195.27	196.90	257.97	96.00	0.09	114.80	324.53	52.65	Run 3
55	5305.00	5.98	43.72	5288.90	-202.36	204.03	264.87	95.00	0.08	116.60	334.34	52.39	Run 3
56	5399.00	6.30	42.00	5382.37	-209.69	211.40	271.70	94.00	0.39	114.80	344.26	52.12	Run 3
57	5495.00	6.54	43.24	5477.76	-217.54	219.30	278.97	96.00	0.29	114.80	354.85	51.83	Run 3
58	5589.00	6.54	45.24	5571.15	-225.16	226.97	286.44	94.00	0.24	114.80	365.46	51.61	Run 3
59	5685.00	6.37	45.87	5666.54	-232.67	234.52	294.15	96.00	0.19	114.80	376.20	51.43	Run 3
60	5780.00	6.31	45.61	5760.96	-239.95	241.85	301.66	95.00	0.07	116.60	386.64	51.28	Run 3
61	5874.00	6.19	46.79	5854.40	-246.98	248.93	309.04	94.00	0.19	118.40	396.83	51.15	Run 3
62	5970.00	6.40	49.42	5949.82	-253.96	255.95	316.88	96.00	0.37	118.40	407.34	51.07	Run 3
63	6065.00	6.22	48.81	6044.25	-260.74	262.79	324.77	95.00	0.20	120.20	417.77	51.02	Run 3
64	6160.00	4.04	51.81	6138.86	-266.16	268.25	331.28	95.00	2.31	116.60	426.26	51.00	Run 3
65	6255.00	4.15	53.62	6233.62	-270.23	272.35	336.68	95.00	0.18	118.40	433.04	51.03	Run 3
66	6350.00	4.19	55.08	6328.37	-274.22	276.38	342.29	95.00	0.12	118.40	439.94	51.08	Run 3
67	6445.00	3.91	54.51	6423.13	-278.06	280.25	347.77	95.00	0.30	118.40	446.64	51.14	Run 3
68	6540.00	3.86	54.65	6517.91	-281.75	283.98	353.02	95.00	0.05	118.40	453.06	51.19	Run 3
69	6635.00	3.91	53.69	6612.70	285.49	287.74	358.24	95.00	0.09	118.40	459.49	51.23	Run 3
70	6729.00	3.95	53.56	6706.47	-289.28	291.57	363.42	94.00	0.04	120.20	465.93	51.26	Run 3
71	6825.00	3.97	54.31	6802.24	-293.15	295.47	368.78	96.00	0.06	118.40	472.55	51.30	Run 3
72	6920.00	3.56	54.82	6897.04	-296.73	299.09	373.86	95.00	0.43	118.40	478.78	51.34	Run 3
73	7015.00	3.37	54.67	6991.87	-300.02	302.40	378 <b>.</b> 55	95.00	0.20	118.40	484.51	51.38	Run 3
74	7107.00	3.46	56.21	7083.70	-303.10	305.51	383.07	92.00	0.14	116.60	489.97	51.43	Run 3
75	7201.00	3.46	58.95	7177.53	-306.11	308.55	387.85	94.00	0.18	116.60	495.61	51.50	Run 3
76	7297.00	4.02	35.41	7273.33	-310.31	312.79	392.29	96.00	1.69	113.00	501.72	51.43	Run 3
77	7392.00	4.55	34.75	7368.07	-316.10	318.60	396.36	95.00	0.56	114.80	508.53	51.21	Run 3
78	7486.00	4.41	34.56	7461.78	-322.11	324.64	400.54	94.00	0.15	116.60	515.58	50.98	Run 3
79	7581.00	4.12	36.94	7556.52	327.82	330.37	404.66	95.00	0.36	118.40	522.39	50.77	Run 3
					333.07	335.64		95.00					
80	7676.00	3.87	37.45	7651.29			408.66		0.27	120.20	528.83	50.60	Run 3
81	7770.00	3.65	39.16	7745.08	-337.88	340.48	412.48	94.00	0.26	122.00	534.85	50.46	Run 3
82	7865.00	3.34	42.48	7839.91	-342.25	344.87	416.26	95.00	0.39	122.00	540.56	50.36	Run 3
83	7959.00	0.69	72.73	7933.84	-344.42	347.06	418.65	94.00	2.94	120.20	543.80	50.34	Run 3
84	8054.00	0.38	85.50	8028.84	-344.61	347.25	419.51	95.00	0.35	122.00	544.58	50.38	Run 3
85	8148.00	0.14	71.33	8122.84	-344.67	347.31	419.93	94.00	0.26	125.60	544.95	50.41	Run 3
86	8242.00	0.24	295.65	8216.84	-344.79	347.43	419.86	94.00	0.38	127.40	544.97	50.39	Run 3
87	8337.00	0.86	260.38	8311.83	-344.76	347.40	418.98	95.00	0.71	129.20	544.27	50.34	Run 3
88	8432.00	1.29	263.33	8406.81	344.53	347.16	417.21	95.00	0.46	131.00	542.76	50.24	Run 3
89	8526.00	0.55	257.21	8500.80	344.32	346.93	415.72	94.00	0.79	132.80	541.47	50.15	Run 3
90	8621.00	0.69	242.21	8595.80	-343.95	346.57	414.77	95.00	0.22	134.60	540.50	50.12	Run 3
91	8716.00	1.01	259.97	8690.79	-343.55	346.15	413.44	95.00	0.43	136.40	539.22	50.06	Run 3
92	8811.00	0.35	31.11	8785.78	-343.66	346.26	412.77	95.00	1.33	136.40	538.77	50.01	Run 3
93	8906.00	0.81	7.68	8880.78	-344.57	347.17	413.01	95.00	0.54	136.40	539.54	49.95	Run 3
94	9001.00	0.94	342.07	8975.77	-345.98	348.58	412.86	95.00	0.43	138.20	540.33	49.83	Run 3
95	9096.00	1.09	126.09	9070.76	-346.18	348.79	413.35	95.00	2.03	138.20	540.84	49.84	Run 3
96	9191.00	1.62	129.77	9165.73	-344.78	347.40	415.11	95.00	0.57	141.80	541.29	50.07	Run 3
97	9285.00	1.31	139.31	9259.70	343.10	345.73	416.83	94.00	0.42	145.40	541.55	50.33	Run 3
98	9381.00	1.25	170.34	9355.68	341.23	343.87	417.72	96.00	0.72	147.20	541.05	50.54	Run 3
99	9475.00	1.20	153.32	9449.66	339.34	341.98	418.33	94.00	0.72	149.00	540.33	50.74	Run 3
								95.00				50.74	
100	9570.00	0.95	140.79	9544.64	-337.84	340.48	419.28		0.36	147.20	540.11		Run 3
101	9665.00	1.02	118.49	9639.63	-336.81	339.46	420.52	95.00	0.41	149.00	540.44	51.09	Run 3
102	9760.00	0.98	87.99	9734.61	-336.43	339.09	422.08	95.00	0.56	150.80	541.41	51.22	Run 3
103	9855.00	0.84	97.11	9829.60	-336.36	339.03	423.58	95.00	0.21	152.60	542.55	51.33	Run 3
104	9948.00	0.93	107.37	9922.59	-336.04	338.72	424.98	93.00	0.20	154.40	543.45	51.44	Run 3
105	10043.00	1.23	111.15	10017.57	-335.44	338.12	426.66	95.00	0.32	156.20	544.40	51.60	Run 3
106	10138.00	0.99	126.52	10112.56	-334.57	337.27	428.27	95.00	0.40	158.00	545.13	51.78	Run 3
107	10233.00	1.21	148.30	10207.54	-333.22	335.93	429.46	95.00	0.49	159.80	545.23	51.97	Run 3
108	10328.00	2.20	177.45	10302.50	330.54	333.25	430.07	95.00	1.35	159.80	544.07	52.23	Run 3
100	10423.00	2.43	191.45	10302.30	326.75	329.45	429.75	95.00	0.64	161.60	541.50	52.53	Run 3
110	10518.00	0.76	190.88	10492.38	-324.16	326.86	429.23	95.00	1.76	156.20	539.52	52.71	Run 3
111	10613.00	0.74	172.35	10587.37	-322.93	325.63	429.19	95.00	0.26	158.00	538.74	52.81	Run 3
112	10707.00	1.04	186.86	10681.36	-321.48	324.19	429.17	94.00	0.40	158.00	537.85	52.93	Run 3
113	10802.00	1.22	190.58	10776.34	-319.64	322.34	428.88	95.00	0.20	159.80	536.51	53.07	Run 3
114	10896.00	0.28	147.99	10870.33	-318.46	321.16	428.82	94.00	1.10	159.80	535.75	53.17	Run 3
115	10991.00	0.44	93.42	10965.33	318.24	320.94	429.31	95.00	0.38	159.80	536.01	53.22	Run 3
116	11097.00	0.86	189.17	11071.33	-317.42	320.13	429.59	106.00		149.00	535.75	53.31	Run 4
		00			<b></b>		3.00						

117 118 119 120 121 122 123 124 PTB	11192.00 11287.00 11382.00 11477.00 11572.00 11667.00 11761.00 11856.00 11907.00	19.87 30.34 37.18 38.84 50.13 58.27 66.74	178.95 180.85 179.42 177.63 178.22 180.30	11166.07 11258.31 11344.22 11423.15 11498.00 11565.67 11620.61 11664.43 11682.77	-311.10 -289.25 -249.00 -196.25 -137.76 -71.32 4.83 89.01 136.58	313.81 291.95 251.71 198.95 140.46 74.03 -2.10 -86.28 -133.86	429.02 428.72 429.31 429.33 429.20 431.02 433.75 434.78 434.66	95.00 95.00 95.00 95.00 95.00	13.79 11.02 7.28 1.98 11.96 8.67 9.12	149.00 152.60 152.60 156.20 156.20 159.80 161.60 163.40 0.00	531.54 518.68 497.66 473.18 451.60 437.33 433.76 443.26 454.80	53.82 55.75 59.62 65.14 71.88 80.25 90.28 101.22 107.12	Run 4
Ξ	Ξ			Ξ	Ξ	Ξ	Ξ					Ξ	

#### Oilfield Services, Central U.S. Land

**Schlumberger Drilling and Measurements** 

**Drilling Group** 

Geo Market Area: South West Texas Basin

7220 W I-H 20

Midland, Texas 79706

Phone : (432) 742-5400 (Main) Fax : (432) 742-5606 (Shared)

April 21, 2020

Matador Production Company 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240

Re:

S15, T26S, R31E Eddy, NM N 32.0490454 W -103.7600691 CLIENT: Matador Production Company

WELL: Boros Federal 218H FIELD: Wolfcamp Purple Sage

RIG: Cactus 163 COUNTY: Eddy

API NO: 30-015-46493 JOB NO: 20MLD0900

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).

Other information required by your office is as follows.

Name & Title of Surveyor	<u>Drainhole Number</u>	Surveyed Depths	<u>Dates Performed</u>	Type of Survey
Andres Hernandez FE	Boros Federal 218H Original Hole	11945.00 Ft to 15624.00 Ft	April 8, 2020 to April 13, 2020	E-Mag

Oiltield Services, Central U.S. Land

#### Schlumberger Drilling and Measurements

Drilling Group

Geo Market Area: South West Texas Basin

7220 W I-H 20 Midland, Texas 79706

Phone : (432) 742-5400 (Main) Fax : (432) 742-5606 (Shared)

Well Reference:

S15, T26S, R31E Eddy, NM N 32.0490454 W -103.7600691 Schlumberger

I, Andres Hernandez certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of April 08, 2020 through April 13, 2020, conduct or supervise the taking of the E-Mag surveys from a depth of 11945.00 feet to a depth of 15624.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador Production Company for the Boros Federal 218H Well (Original Hole) API No. 30-015-46493 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

Ву	4 ( 11 1
Andres Hernandez	AndresHernandez
FE	/ In Outest leviament

Subscribed and Sworn to before me this	day of	(month) 2620 (yr)
My Commission expires:		
6/14/23		
Jew Par lange is		(signature)
Notary Public Ce OL Celon		( <u>C</u>
(County State)		



#### Schlumberger

Report Date: Client: Field:

Structure / Slot: Well: Borehole: UWI / API#:

Survey Name: Survey Date: Tort / AHD / DDI / ERD Ratio:

#### Matador Boros Federal 218H MWD Surveys 0ft to 15738ft MD Survey **Geodetic Report** (Def Survey)



Location Lat / Long: Location Grid N/E Y/X: CRS Grid Convergence Angle: Grid Scale Factor:

Version / Patch: 2.10.810.1

April 15, 2020 - 10:02 AM
Matador
NM Eddy County (NAD 27)
Matador Boros Federal 218H / New Slot
Boros Federal 218H Boros Federal 218H
Boros Federal 218H
Boros Federal 218H
Boros Federal 218H
Boros Federal 218H
MWD Surveys 0ft to 15738ft MD
March 31, 2020
181,769 \* / 4874,638 ft /6,072 / 0,412
NADZ7 New Mexico State Plane, Eastern Zone, US Feet
N 32 \* 2\* 55,11503\*, W 103\* 45\* 34,53787\*
N 381995,000 ftUS, E 677763,000 ftUS
0,3045 \*
0,9994528
2,10,810,1 Gravity Total N Total M
Magneti
Declinar
Magneti
North R
Grid Co
Total Co
North:
Local Co

Minimum Curvature / Lubinski 179.640 ° (Grid North) 0.000 ft, 0.000 ft RKB 3245,500 ft above MSL 3217,000 ft above MSL

Based)

Well Head

••	
Survey / DLS Computation:	Minimum Curvature / Lubir
Vertical Section Azimuth:	179.640 ° (Grid North)
Vertical Section Origin:	0.000 ft, 0.000 ft
TVD Reference Datum:	RKB
TVD Reference Elevation:	3245,500 ft above MSL
Seabed / Ground Elevation:	3217,000 ft above MSL
Magnetic Declination:	6.571 °
Total Gravity Field Strength:	998.4260mgn (9.80665 Ba
Gravity Model:	GARM
Total Magnetic Field Strength:	47652.122 nT
Magnetic Dip Angle:	59.626 °
Declination Date:	March 31, 2020
Magnetic Declination Model:	HDGM 2020
North Reference:	Grid North
Grid Convergence Used:	0.3045 °
Total Corr Mag North->Grid	6 2661 °

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth
Surface Location	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	381995.00	677763.00	32.048921	-103.759594	0.00	0.00
	148.00	0.40	63.03	148.00	-0.23	0.23	0.46	0.27	381995.23	677763.46	32.048921	-103.759592	0.52	63.03
	242.00	0.52	66.57	242.00	-0.55	0.55	1.14	0.13	381995.55	677764.14	32.048922	-103.759590	1.27	64.22
	335,00 427,00	0.64 0.78	67.68 79.48	334,99 426,98	-0.91 -1.21	0.92 1.23	2,01 3,10	0.13 0.22	381995.92 381996.23	677765,01 677766,10	32,048923 32,048924	-103.759587 -103.759584	2,21 3,34	65.48 68.42
	519.00	0.66	80.60	518,98	1.40	1.43	4.24	0.13	381996.43	677767,24	32,048925	103,759580	4.48	71.39
	609.00	0.52	80.95	608.97	1.54	1.58	5.16	0.16	381996.58	677768.16	32,048925	103.759577	5.39	72.99
	702.00	0.79	90.13	701.97	-1.60	1.64	6.21	0.31	381996.64	677769.21	32.048925	-103.759574	6.43	75.20
	883,00	0.57	92.29	882.95	-1.55	1.60	8.36	0.12	381996.60	677771.36	32,048925	-103,759567	8,51	79.15
	974.00	0.52	82.72	973.95	-1.58	1.64	9.22	0.11	381996.64	677772.22	32,048925	-103,759564	9,37	79.93
	1066,00 1161,00	0.14 0.13	45,52 347,52	1065,95 1160,95	-1.71 -1.89	1.77 1.96	9.72 9.78	0.45 0.14	381996,77 381996,96	677772.72 677772.78	32.048926 32.048926	-103.759562 -103.759562	9.88 9.97	79.68 78.69
	1256.00	0.25	331.94	1255.95	2.18	2.24	9.66	0.14	381997.24	677772.66	32.048927	103.759563	9.91	76.92
	1351.00	0.30	22.00	1350.95	2.60	2.66	9.65	0.25	381997.66	677772.65	32,048928	103,759563	10.01	74.61
	1435.00	0.36	3.18	1434.94	-3.06	3.12	9.75	0.15	381998.12	677772.75	32,048929	-103.759562	10.24	72.23
	1511.00	0.45	351.25	1510.94	-3.60	3.66	9.72	0.16	381998.66	677772.72	32.048931	-103.759562	10.38	69.37
	1606.00	0.81	353.62	1605.94	-4.63	4.69	9.59	0.38	381999.69	677772.58	32.048934	-103.759563	10.67	63.91
	1702.00	1.20	354.22	1701.92	-6.31	6.37	9.41	0.41	382001.37	677772.41	32.048938	-103.759563	11.36	55.91
	1797.00 1892.00	1.67 1.74	49.58 52.92	1796.90 1891.85	8.19 9.94	8.26 10.02	10.36 12.57	1.47 0.13	382003.26 382005.02	677773.36 677775.57	32.048943 32.048948	-103.759560 -103.759553	13.25 16.07	51.46 51.43
	1987.00	1.80	49.56	1986.81	-11.77	11.86	14.85	0.13	382005.02	677777.85	32,048953	103.759546	19.01	51.43
	2080.00	1.87	50.00	2079.76	-13.68	13.78	17.13	0.08	382008.78	677780.13	32.048958	103.759538	21.98	51.17
	2174.00	2.85	53,83	2173.68	-16.02	16.15	20.19	1.06	382011.15	677783.19	32.048965	103.759528	25.85	51.34
	2269.00	4.78	55.69	2268.46	-19.61	19.77	25.37	2.04	382014.77	677788.36	32.048975	-103.759512	32.16	52.06
	2364.00	5.17	58.39	2363.11	-24.04	24.25	32.28	0.48	382019.25	677795.28	32.048987	-103.759489	40.37	53.09
	2459.00	5.26	59.37	2457.71	-28.46	28.71	39.67	0.13	382023.71	677802.67	32.048999	-103.759465	48.97	54.11
	2553.00	5.15 5.09	63.49 61.57	2551.33 2645.95	-32.49 36.35	32.79 36.70	47.16 54.68	0.41 0.19	382027.79 382031.70	677810.15 677817.67	32.049010 32.049021	-103.759441 -103.759417	57.43 65.85	55.19 56.13
	2648.00 2743.00	4.69	61.09	2740.60	-36.35 -40.19	40.58	61.78	0.19	382035.58	677824.78	32.049021	-103.759394	73.92	56.70
	2837.00	4.42	64.78	2834.30	43.55	43.98	68.42	0.42	382038.98	677831.42	32.049041	103.759372	81.34	57.27
	2932.00	4.79	56.99	2929.00	47.23	47.70	75.06	0.76	382042.70	677838.06	32.049051	-103.759351	88.94	57.56
	3027.00	5.66	51.98	3023.60	-52.23	52.75	82.08	1.03	382047.75	677845.07	32.049065	-103.759328	97.57	57.27
	3122.00	5.57	54.31	3118.15	-57.76	58.33	89.51	0.26	382053.32	677852.51	32.049080	-103.759304	106.84	56.91
	3216.00	5.30	53.58	3211.72	-62.96	63.56	96.71	0.30	382058.56	677859.71	32.049094	-103.759281	115.73	56.68
	3311.00	6.04	51.98	3306.26	-68.59	69.25	104.18	0.80	382064.24 382070.51	677867.17	32.049110	-103.759256	125.10	56.39
	3406.00 3500.00	6.36 6.17	52.73 59.31	3400.70 3494.14	-74.81 -80.48	75.51 81.24	112.31 120.79	0.35 0.79	382076.24	677875.30 677883.79	32.049127 32.049142	-103.759230 -103.759203	135.33 145.57	56.08 56.08
	3595.00	5.86	65.64	3588.62	85.03	85.85	129.60	0.77	382080.85	677892.59	32.049155	103.759174	155.46	56.48
	3690.00	5.96	58.42	3683.12	89.56	90.43	138.22	0.79	382085.43	677901.21	32.049167	-103.759146	165.18	56.80
	3785.00	6.14	63.88	3777.59	-94.33	95.25	146.98	0.63	382090.25	677909.98	32.049181	-103.759118	175.15	57.05
	3880.00	5.54	73.79	3872.10	-97.79	98.77	155.95	1.23	382093.76	677918.94	32.049190	-103.759089	184.60	57.65
	3975.00	5.55	63.80	3966.66	-101.04	102.08	164.47	1.01	382097.07	677927.47	32.049199	-103.759061	193.58	58.17
	4070.00	6.44	48.71	4061.14	-106.54	107.62	172.60	1.90	382102.62	677935.59 677940.23	32.049214	-103.759035	203.41	58.05
	4127.00 4261.00	6.57 6.29	43.26 43.83	4117.78 4250.93	-110.99 -121.80	112.11 122.99	177.24 187.57	1.11 0.21	382107.10 382117.98	677950.56	32.049226 32.049256	-103.759020 -103.758986	209.72 224.30	57.69 56.75
	4356.00	6.19	43.37	4345.37	129.24	130.46	194.70	0.12	382125.46	677957.68	32.049277	103.758963	234.36	56.17
	4450.00	6.05	42.81	4438.83	-136.51	137.78	201.54	0.16	382132.77	677964.53	32.049297	-103.758941	244.14	55.64
	4546.00	6.31	43.48	4534.28	-144.01	145.32	208.61	0.28	382140.31	677971.60	32.049317	-103.758918	254.24	55.14
	4640.00	6.16	43.40	4627.72	-151.37	152.73	215.63	0.16	382147.72	677978.62	32.049338	-103.758895	264.24	54.69
	4736.00	6.05	42.74	4723.17	-158.79	160.19	222.60	0.14	382155.18	677985.59	32.049358	-103.758873	274.25	54.26
	4830.00 4925.00	6.29 6.43	43.92	4816.63 4911.05	-166.09	167.54 175.10	229.54 236.86	0.29 0.15	382162.53 382170.09	677992.52 677999.84	32.049378	-103.758850	284.18 294.55	53.87 53.53
	5020.00	6.19	44.22 43.36	5005.47	-173.61 -181.10	182.63	244.08	0.15	382177.62	678007.07	32.049399 32.049419	-103.758826 -103.758803	304.85	53.19
	5114.00	5.93	44.64	5098.94	188.19	189.77	250.97	0.31	382184.76	678013.96	32.049439	-103.758781	314.65	52.91
	5210.00	6.01	44.36	5194.42	-195.27	196.90	257.97	0.09	382191.89	678020.96	32.049458	-103.758758	324.53	52.65
	5305.00	5.98	43.72	5288.90	-202.36	204.03	264.87	0.08	382199.02	678027.85	32.049478	-103.758736	334.34	52.39
	5399.00	6.30	42.00	5382.37	-209.69	211.40	271.70	0.39	382206.39	678034.69	32.049498	-103.758713	344.26	52.12
	5495.00	6.54	43.24	5477.76	-217.54	219.30	278.97	0.29	382214.28	678041.96	32.049520	-103.758690	354.85	51.83
	5589.00	6.54	45.24	5571.15	-225.16	226.97	286.44	0.24	382221.95	678049.43	32.049541	-103.758666 103.758641	365.46	51.61
	5685.00 5780.00	6.37 6.31	45.87 45.61	5666.54 5760.96	-232.67 -239.95	234.52 241.85	294.15 301.66	0.19 0.07	382229.51 382236.83	678057.13 678064.64	32.049561 32.049581	-103.758641 -103.758616	376.20 386.64	51.43 51.28
	5874.00	6.19	46.79	5854.40	-239.95 -246.98	248.93	309.04	0.19	382243.91	678072.03	32.049501	-103.758592	396.83	51.15
	5970.00	6.40	49.42	5949.82	-253.96	255,95	316.88	0.37	382250.94	678079.86	32,049620	103.758567	407.34	51.07
	6065.00	6.22	48.81	6044.25	260.74	262.79	324.77	0.20	382257.77	678087.76	32,049638	103.758541	417.77	51.02
	6160.00	4.04	51.81	6138.86	-266.16	268.25	331.28	2.31	382263,23	678094.26	32,049653	-103,758520	426.26	51.00
	6255,00	4.15	53,62	6233,62	-270.23	272,35	336,68	0.18	382267.34	678099.66	32,049665	-103,758503	433,04	51,03
	6350.00	4.19	55,08	6328.37	-274.22	276,38	342,29	0.12	382271,36	678105.27	32,049676	-103.758484	439,94	51.08
	6445.00 6540.00	3.91 3.86	54,51 54,65	6423,13 6517,91	-278.06 -281.75	280,25 283,98	347.77 353.02	0.30 0.05	382275,23 382278,96	678110,75 678116,00	32,049686 32,049696	-103.758467 -103.758450	446,64 453,06	51.14 51.19
	6635.00	3,91	53.69	6612.70	285.49	287.74	358.24	0.09	382282.73	678121.22	32,049090	103.758433	459.49	51.13
	6729.00	3,95	53.56	6706.47	289.28	291.57	363.42	0.04	382286.55	678126.40	32.049717	103.758416	465.93	51.23
	6825.00	3.97	54.31	6802.24	-293.15	295.47	368.78	0.06	382290.45	678131.76	32,049728	103.758399	472.55	51,30
	6920.00	3.56	54.82	6897.04	-296.73	299.09	373.86	0.43	382294.07	678136.84	32.049737	-103.758382	478.78	51,34
	7015.00	3.37	54.67	6991.87	-300.02	302.40	378.55	0.20	382297.38	678141.53	32.049747	-103.758367	484.51	51.38
HL Crossing	7016.00	3.37	54.69	6992.86	-300.05	302.43	378.60	0.14	382297.42	678141.58	32.049747	-103.758367	484.57	51.38
	7107.00	3.46	56.21	7083.70	-303.10	305.51	383.07	0.14	382300.49	678146.04	32.049755	-103.758352	489,97	51,43
	7201.00	3.46	58.95 35.41	7177.53	-306.11 -310.31	308.55	387.85	0.18	382303.53	678150.83	32,049763	-103.758337 -103.758332	495.61 501.72	51.50 51.43
	7297.00 7392.00	4.02 4.55	35.41 34.75	7273.33 7368.07	-310.31 -316.10	312.79 318.60	392.29 396.36	1.69 0.56	382307.77 382313.58	678155.26 678159.34	32.049775 32.049791	-103.758322 -103.758309	501.72 508.53	51.43 51.21
	7486.00	4.55	34.75	7461.78	-316.10	324.64	400.54	0.15	382319.62	678163.52	32.049791	-103.758296	515.58	50.98
	7581.00	4.12	36.94	7556.52	327.82	330.37	404.66	0.15	382325.35	678167.64	32.049823	103.758282	522.39	50.77
	7676.00	3.87	37.45	7651.29	-333.07	335.64	408.66	0.27	382330.62	678171.64	32.049837	-103.758269	528.83	50.60
	7770.00	3.65	39.16	7745.08	337.88	340.48	412.48	0.26	382335.46	678175.46	32.049851	103.758257	534.85	50.46
	7865.00	3.34	42.48	7839.91	-342.25	344.87	416.26	0.39	382339.85	678179.23	32.049863	-103.758245	540.56	50.36
	7959.00	0.69	72.73	7933.84	-344.42	347.06	418.65	2.94	382342.04	678181.62	32.049869	-103,758237	543.80	50.34

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	Closure (ft)	Closure Azimuth
	8054.00	0.38	85.50	8028.84	-344.61	347.25	419.51	0.35	382342.23	678182.49	32.049869	-103.758234	544.58	50.38
	8148.00	0.14	71.33	8122.84	-344.67	347.31	419.93	0.26	382342.29	678182.90	32.049869	-103.758233	544.95	50.41
	8242.00	0.24	295.65	8216.84	-344.79	347.43	419.86	0.38	382342.41	678182.84	32.049870	-103.758233	544.97	50.39
	8337.00 8432.00	0.86 1.29	260.38 263.33	8311.83 8406.81	-344.76 -344.53	347.40 347.16	418.98 417.21	0.71 0.46	382342.38 382342.14	678181.95 678180.19	32.049870 32.049869	-103.758236 -103.758241	544.27 542.76	50.34 50.24
	8526.00	0.55	257,21	8500.80	344.32	346.93	415.72	0.79	382341,91	678178.70	32,049868	103.758246	541.47	50.15
	8621.00	0.69	242.21	8595.80	-343.95	346.57	414.77	0.22	382341.55	678177.75	32.049867	103.758249	540.50	50.12
	8716.00	1.01	259.97	8690.79	-343.55	346.15	413.44	0.43	382341.13	678176.42	32.049866	-103.758254	539,22	50.06
	8811.00	0.35	31,11	8785.78	-343.66	346.26	412.77	1.33	382341.24	678175.74	32.049867	-103.758256	538,77	50.01
	8906.00	0.81	7.68	8880.78	-344.57	347.17	413.01	0.54	382342.15	678175.98	32.049869	-103.758255	539.54	49.95
	9001.00 9096.00	0.94 1.09	342.07 126.09	8975.77 9070.76	-345.98 -346.18	348.58 348.79	412.86 413.35	0.43 2.03	382343.56 382343.77	678175.83 678176.32	32.049873 32.049874	-103.758255 -103.758254	540.33	49.83 49.84
	9191.00	1.62	129.77	9165.73	344.78	347.40	415.11	0.57	382342.38	678178.08	32.049874	103.758248	540.84 541.29	50.07
	9285.00	1.31	139.31	9259.70	343.10	345.73	416.83	0.42	382340.71	678179.81	32.049865	103.758243	541.55	50.33
	9381.00	1.25	170.34	9355.68	-341.23	343.87	417.72	0.72	382338.85	678180.70	32.049860	-103.758240	541.05	50.54
	9475.00	1.20	153.32	9449.66	-339.34	341.98	418.33	0.39	382336.96	678181.31	32.049855	-103.758238	540.33	50.74
	9570.00	0.95	140.79	9544.64	-337.84	340.48	419.28	0.36	382335.46	678182.26	32.049851	-103.758235	540.11	50.92
	9665.00 9760.00	1.02 0.98	118.49 87.99	9639.63 9734.61	-336.81 -336.43	339.46 339.09	420.52 422.08	0.41 0.56	382334.44 382334.07	678183.50 678185.05	32.049848 32.049847	-103.758231 -103.758226	540.44 541.41	51.09 51.22
	9855.00	0.84	97.11	9829.60	336.36	339.03	423.58	0.21	382334.01	678186.55	32.049847	103.758221	542.55	51.33
	9948.00	0.93	107.37	9922.59	-336.04	338.72	424.98	0.20	382333.70	678187.95	32.049846	103.758217	543.45	51.44
	10043.00	1.23	111.15	10017.57	-335.44	338.12	426.66	0.32	382333.10	678189.64	32.049844	-103.758211	544.40	51.60
	10138.00	0.99	126.52	10112.56	-334.57	337.27	428.27	0.40	382332.25	678191.25	32.049842	-103.758206	545.13	51.78
	10233.00	1.21	148.30	10207.54	-333.22	335.93	429.46	0.49	382330.91	678192.43	32.049838	-103.758202	545.23	51.97
	10328.00 10423.00	2.20 2.43	177.45 191.45	10302.50 10397.42	-330.54 -326.75	333.25 329.45	430.07 429.75	1.35 0.64	382328.23 382324.44	678193.04 678192.72	32.049831 32.049820	-103.758200 -103.758201	544.07 541.50	52.23 52.53
	10518.00	0.76	190.88	10492.38	-324.16	326.86	429.73	1.76	382321.84	678192.72	32.049820	103.758203	539.52	52.53
	10613.00	0.74	172.35	10587.37	322.93	325.63	429.19	0.26	382320.62	678192.17	32.049810	103.758203	538.74	52.81
	10707.00	1.04	186.86	10681.36	-321.48	324.19	429.17	0.40	382319.17	678192.15	32.049806	-103.758203	537.85	52.93
	10802.00	1.22	190.58	10776.34	-319.64	322.34	428.88	0.20	382317.32	678191.86	32.049801	-103.758204	536.51	53.07
	10896.00	0.28	147.99	10870.33	-318.46	321.16	428.82	1.10	382316.14	678191.80	32.049797	-103.758204	535.75	53.17
	10991.00 11097.00	0.44 0.86	93.42 189.17	10965.33 11071.33	-318.24 -317.42	320.94 320.13	429.31 429.59	0.38 0.95	382315.92 382315.11	678192.28 678192.56	32.049797 32.049795	-103.758203 -103.758202	536.01 535.75	53.22 53.31
	11192.00	6.81	184.64	11166.07	311.10	313.81	429.02	6.27	382308.79	678191.99	32.049777	103.758204	531.54	53.82
HL Crossing	11247.00	14.36	180.50	11220.10	-301.02	303.72	428.69	13.79	382298.70	678191.67	32.049749	-103.758205	525.38	54.68
	11287.00	19.87	179.45	11258.31	-289.25	291.95	428.72	13.79	382286.94	678191.69	32.049717	-103.758205	518.68	55.75
	11382.00	30.34	178.95	11344.22	-249.00	251.71	429.31	11.02	382246.69	678192.29	32.049606	-103.758204	497.66	59.62
	11477.00	37.18	180.85	11423.15	-196.25	198.95	429.33	7.28	382193.94	678192.30	32.049461	-103.758205	473.18	65.14
	11572.00 11667.00	38.84 50.13	179.42 177.63	11498.00 11565.67	-137.76 -71.32	140.46 74.03	429.20 431.02	1.98 11.96	382135.45 382069.02	678192.18 678193.99	32.049301 32.049118	-103.758206 -103.758202	451.60 437.33	71.88 80.25
	11761.00	58.27	178.22	11620.61	4.83	-2.10	433.75	8.67	381992.90	678196.73	32.048909	-103.758194	433.76	90.28
Last 3rd Party Survey	11856.00	66.74	180.30	11664.43	89.01	-86.28	434.78	9.12	381908.72	678197.76	32.048677	-103.758192	443.26	101.22
	11945.00	73.75	182.64	11694.50	172.67	-169.96	432.60	8.26	381825.05	678195.57	32.048447	-103.758201	464.79	111.45
	11977.00	74.08	182.92	11703.37	203.37	-200.67	431.11	1.33	381794.35	678194.08	32.048363	-103.758206	475.52	114.96
	12009.00	74.46	183.24	11712.04	234.12	-231.42	429.45	1.53	381763.59	678192.43	32.048278	-103.758212	487.84	118.32
	12072.00 12104.00	76.13 76.66	184.09 184.37	11728.03 11735.56	294.90 325.90	-292.23 -323.25	425.56 423.26	2.95 1.86	381702.78 381671.77	678188.53 678186.24	32.048111 32.048026	-103.758226 -103.758233	516.23 532.58	124.48 127.37
	12167.00	77.76	184.99	11749.51	387.10	-384.48	418.25	1.99	381610.54	678181.22	32.046020	-103.758251	568.12	132.59
	12199.00	77.74	185.12	11756.30	418.23	-415.63	415.49	0.40	381579.39	678178.47	32.047772	-103.758260	587.69	135.01
	12248.00	78.45	185.37	11766.41	465.95	-463.37	411.11	1.53	381531.65	678174.09	32.047641	-103.758275	619.46	138.42
	12294.00	78.62	185.18	11775.55	510.81	-508.27	406.96	0.55	381486.76	678169.94	32.047518	-103.758289	651.12	141.32
	12389.00	80.27	185.24	11792.95	603.76	-601.27	398.48	1.74	381393.76	678161.46	32.047262	-103.758318	721.33	146.47
	12484.00 12579.00	86.07 87.46	184.53 182.47	11804.24 11809.61	697.65 792.28	-695.21 -789.88	390.46 384.67	6.15 2.61	381299.83 381205.17	678153.44 678147.65	32.047004 32.046744	-103.758346 -103.758366	797.36 878.56	150.68 154.03
	12674.00	89.04	181.79	11812.51	887.14	-884.76	381.14	1.81	381110.29	678144.12	32.046483	-103.758379	963.37	156.69
	12769.00	89.62	182.84	11813.62	982.03	-979.68	377.30	1.26	381015.38	678140.28	32.046222	-103.758393	1049.82	158.94
	12864.00	90.45	180.14	11813.56	1076.97	-1074.64	374.83	2.97	380920.43	678137.81	32.045961	-103.758403	1138.13	160.77
	12959.00	89.20	176.68	11813.85	1171.93	-1169.58	377.47	3.87	380825.48	678140.45	32.045700	-103.758396	1228.99	162.11
	13055.00	89.81	176.64	11814.68	1267.80	-1265.42	383.06	0.64	380729.66	678146.04	32.045437	-103.758379	1322.12	163.16
	13150.00 13245.00	89.55 90.02	176.94 177.72	11815.21 11815.57	1362.68 1457.60	-1360.26 -1455.16	388.38 392.81	0.42 0.96	380634.81 380539.92	678151.36 678155.78	32.045176 32.044915	-103.758364 -103.758351	1414.62 1507.24	164.06 164.89
	13340.00	89.60	176.96	11815.88	1552.52	-1550.06	397.22	0.91	380445.03	678160.19	32.044654	103.758339	1600.14	165.63
	13436.00	90.14	177.39	11816.10	1648.43	-1645.94	401.95	0.72	380349.15	678164.92	32.044391	-103.758325	1694.31	166.28
	13531.00	89.85	177.13	11816.11	1743.35	-1740.83	406.49	0.41	380254.27	678169.47	32.044130	-103.758312	1787.66	166.86
	13626.00	89.38	176.31	11816.75	1838.22	-1835.67	411.92	0.99	380159.43	678174.90	32.043869	-103.758296	1881.32	167.35
	13721.00	89.41	177.22	11817.75	1933.10	-1930.51	417.28	0.96	380064.60	678180.26	32.043608	-103.758280	1975.10	167.80
	13816,00 13912,00	89.88 89.28	176.85 177.39	11818.34 11819.04	2028.00 2123.90	-2025.38 -2121.26	422,20 427,02	0.63 0.84	379969.73 379873.86	678185,17 678190,00	32.043347 32.043084	-103.758266 -103.758252	2068.92 2163.81	168,23 168,62
	14007.00	89.41	176.83	11820.13	2218.80	2216.13	431.81	0.61	379778.99	678194.79	32,043004	103.758238	2257.81	168.97
	14102.00	89.42	177.33	11821.10	2313.70	2311.00	436.65	0.53	379684.13	678199.63	32.042562	103.758224	2351.89	169.30
	14197.00	89.18	177.48	11822.26	2408.62	-2405.90	440.95	0.30	379589,24	678203.93	32.042301	-103.758212	2445.97	169.61
	14292.00	89.20	177.88	11823.60	2503.56	-2500.81	444.80	0.42	379494.33	678207.77	32.042040	-103.758201	2540.06	169.91
	14388.00	89.25	177.22	11824.90	2599.48	-2596.71	448.90	0.69	379398.43	678211.87	32.041776	103.758190	2635.23	170.19
	14483.00 14578.00	89.46	179.41	11825.97	2694.45	-2691.66 -2786.65	451.69 451.45	2.32 1.55	379303.49 379208.50	678214.67	32.041515 32.041254	-103.758182 103.758185	2729.30	170.47
	14578.00 14673.00	89.53 89.74	180.88 181.09	11826.81 11827.41	2789.44 2884.41	-2786.65 -2881.64	451.45 449.82	1.55 0.31	379208.50 379113.53	678214.43 678212.79	32.041254 32.040993	-103.758185 -103.758192	2822,99 2916,53	170.80 171.13
	14768.00	90.52	181.60	11827.20	2979.36	2976.61	447.59	0.98	379018.56	678210.56	32.040333	103.758201	3010.07	171.45
	14863.00	91.30	182.62	11825.69	3074.26	3071.53	444.09	1.35	378923.64	678207.07	32,040471	103.758213	3103.47	171.77
	14958.00	91.20	182.84	11823.61	3169.10	-3166.40	439.57	0.25	378828.78	678202.54	32.040211	-103.758230	3196.77	172.10
	15054.00	91.53	182.94	11821.33	3264.92	-3262.25	434.73	0.36	378732.93	678197.71	32.039947	-103.758247	3291.09	172.41
	15149.00	91.66	184.06	11818.68	3359.67	3357.04	428.93	1.19	378638.15	678191.91	32.039687	103.758267	3384.33	172.72
	15244.00 15339.00	90.92 90.79	181.77 180.53	11816.54 11815.13	3454.48 3549.43	-3451.88 -3546.85	424.10 422.20	2.53 1.31	378543.31 378448.35	678187.08 678185.17	32.039426 32.039165	-103.758284 -103.758292	3477.84 3571.89	173.00 173.21
	15434.00	89.47	177.92	11814.91	3644.42	3641.83	423.48	3.08	378353.37	678186.46	32.039165	-103.758292	3666.37	173.21
	15529.00	90.17	179.63	11815.21	3739.41	3736.81	425.51	1.94	378258.41	678188.49	32.038643	103.758285	3760.95	173.50
Final Survey	15624.00	89.00	179.60	11815.90	3834.40	-3831.80	426.15	1.23	378163.42	678189.13	32.038382	-103.758284	3855.42	173.65
Projection to Bit	15738.00	89.40	181.02	11817.49	3948.38	-3945.78	425.53	1.29	378049.44	678188.51	32.038069	-103.758288	3968.66	173.84

Survey Type:

Def Survey

Survey Error Model: Survey Program: ISCWSA Rev 0 \*\*\* 3-D 95.000% Confidence 2.7955 sigma

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size Casin (in)	ng Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	28,500	1/98.425	8.500	7,000 NAL	_MWD-NON_SLB-Depth Only	Boros Federal 218H / Matador / Boros Federal 218H MWD Surveys Oft to 15738ft MD Boros Federal 218H / Matador
	1	28.500	28.500	Act Stns	8.500	7.000 NAL	_MWD-NON_SLB-Depth Only	/ Boros Federal 218H MWD Surveys Oft to 15738ft MD
	1	28.500	11856.000	Act Stns	8.500	7.000	NAL_MWD-NON_SLB	Boros Federal 218H / Matador Boros Federal 218H MWD Surveys
	1	11856.000	15738.000	Act Stns	6.750	0.000	NAL_MWD_1.0_DEG	Boros Federal 218H / Matador Boros Federal 218H MWD Surveys







Boros Federal No. 218H Eddy County, NM

May 06, 2020

Job No. LNM5564319

### **Certified Report**

### Survey Certification Letter

May 06, 2020



Operator Name: Matador Resources
Well Name: Boros Federal No. 218H

County/Parish: Eddy County,

State: NM

Rig Name: Patterson 256
Job Number: LNM5564319

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

Surveyor	Surveyed Depths	Projection to Bit	Dates Performed	Type of Survey
•		•		
ProDirectional	15,713' MD – 21,758' MD	21,819' MD	04/14/20 — 04/23/20	MWD

Sincerely,

Mike Coats

Regulatory Specialist Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266 prodirectional.com



# **Matador Resources**

Eddy County, NM Boros Federal No. 218H OH

Survey: ProDirectional

# **Survey Report**

06 May, 2020







Well @ 3245.50usft Well @ 3245.50usft Minimum Curvature Well No. 218H WellPlanner1 Grid Local Co-ordinate Reference: Survey Calculation Method: North Reference: TVD Reference: MD Reference: Database: MWD-148'-21758', PTB: 21819' Eddy County, NM (NAD83) Matador Resources Boros Federal No. 218H Н Company: Wellbore: Project: Design: Well: Site:

Mean Sea Level System Datum: Eddy County, NM (NAD83) US State Plane 1983 North American Datum 1983 Map System: Geo Datum: Project

New Mexico Eastern Zone

Map Zone:

32.049038 -103.765276 0.30 Grid Convergence: Longitude: Latitude: 382,041.00 usft 717,336.00 usft 13-3/16 " Slot Radius: Northing: Easting: 0.00 usft Boros Federal Мар Position Uncertainty: Site Position: Site

32.049045 -103.760070 3,217.00 usft **Ground Level:** Longitude: Latitude: 382,052.00 usft 718,949.00 usft nsft Wellhead Elevation: Northing: Easting: 0.00 usft 0.00 usft 0 00 usft No. 218H +E/-W Ş/N+ Position Uncertainty Well Position Well

47,648.10 Field Strength 59.63 Dip Angle € 6.57 Declination **©** 4/13/2020 Sample Date HDGM Model Name Б Magnetics Wellbore

Direction 0.00 179.64 ေ Tie On Depth: +E/-W (nsft) 00.0 +N/-S (nsft) 00.0 ACTUAL Depth From (TVD) MWD-148'-21758', PTB: 21819' Phase: (nsft) 0.00 1.0 Vertical Section: Audit Notes: Version: Design



## ProDirectional





Well No. 218H
Well @ 3245.50usft
Well @ 3245.50usft
Grid
Minimum Curvature
WellPlanner1 Local Co-ordinate Reference: North Reference: Survey Calculation Method: Database: TVD Reference: MD Reference: MWD-148'-21758', PTB: 21819' Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH Company:
Project:
Site:
Well:
Wellbore:
Design:

Survey Program	<b>Date</b> 5/6/2020		
From (usft)	To (usft) Survey (Wellbore)	Tool Name	Description
148.00	11,856.00 Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM
11,945.00	15,624.00 Survey #2 (OH)	MWD+HDGM	OWSG MWD + HRGM
15,713.00	21,819.00 Survey #3 (OH)	MWD+HDGM	OWSG MWD + HRGM

Survey										
MD (nsft)	Inc (°)	Azi (azimuth) (°)	TVD (nsft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
0.00	00.00	00:00	00.00	0.00	00:00	O.	0.00 0.00	00:0	382,052.00	718,949.00
148.00	0.40	63.03	148.00	-0.23	0.23	°.	0.46 0.52	63.03	382,052.23	718,949.46
242.00	0.52	66.57	242.00	-0.55	0.55	<u>L</u> .	1.14 1.27	64.22	382,052.55	718,950.14
335.00	0.64	67.68	334.99	-0.91	0.92	2.	2.01 2.21	65.48	382,052.92	718,951.01
427.00	0.78	79.48	426.98	-1.21	1.23	.3	3.10 3.34	68.42	382,053.23	718,952.10
519.00	99.0	80.60	518.98	-1.40	1.43	4	4.24 4.48	71.39	382,053.43	718,953.24
00.609	0.52	80.95	608.97	-1.54	1.58	5.	5.16 5.39	72.99	382,053.58	718,954.16
702.00	0.79	90.13	701.97	-1.60	1.64	9	6.21 6.43	75.20	382,053.64	718,955.21
883.00	0.57	92.29	882.95	-1.55	1.60	œ̈́	8.36 8.51	79.15	382,053.60	718,957.36
974.00	0.52	82.72	973.95	-1.58	1.64	6	9.22 9.37	79.93	382,053.64	718,958.22
1,066.00	0.14	45.52	1,065.95	-1.71	1.77	6	9.72 9.88	79.68	382,053.77	718,958.72
1,161.00	0.13	347.52	1,160.95	-1.89	1.96	6	9.78	78.69	382,053.96	718,958.78
1,256.00	0.25	331.94	1,255.95	-2.18	2.24	- <del>6</del>	9.66 9.91	76.92	382,054.24	718,958.66
1,351.00	0.30	22.00	1,350.95	-2.60	2.66	-G	9.65 10.01	74.61	382,054.66	718,958.65
1,435.00	0.36	3.18	1,434.94	-3.06	3.12	6	9.75 10.24	72.23	382,055.12	718,958.75
1,511.00	0.45	351.25	1,510.94	-3.60	3.66	6	9.72 10.38	69.37	382,055.66	718,958.72
1,606.00	0.81	353.62	1,605.94	4.63	4.69	ő	9.59 10.67	63.91	382,056.69	718,958.59
1,702.00	1.20	354.22	1,701.92	-6.31	6.37	·6	9.41 11.36	55.91	382,058.37	718,958.41
1,797.00	1.67	49.58	1,796.90	-8.19	8.26	10.36	36 13.25	51.46	382,060.26	718,959.36
1,892.00	1.74	52.92	1,891.85	-9.94	10.02	12.57	57 16.07	51.43	382,062.02	718,961.57





Company: Project: Site: Well: Wellsore: Design:	Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH MWD-148'-21758', PTB: 21819'	rces IM (NAD83) 58', PTB: 218	19.				Local Co-ordinate TVD Reference: MD Reference: North Reference: Survey Calculatif	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature		
Survey											
MD (tjsn)	nc ©	Azi	Azi (azimuth) (°)	TVD (nsft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
1,987.00		1.80	49.56	1,986.81	-11.77	11.86	14.85		51.39	382,063.86	718,963.85
2,080.00	00	1.87	20.00	2,079.76	-13.68	13.78	17.13	21.98	51.17	382,065.78	718,966.13
2,174.00	00	2.85	53.83	2,173.68	-16.02	16.15	20.19	25.85	51.34	382,068.15	718,969.19
2,269.00	00	4.78	55.69	2,268.46	-19.61	19.77	25.37	32.16	52.06	382,071.77	718,974.37
2,364.00	00	5.17	58.39	2,363.11	-24.04	24.25	32.28	40.37	53.09	382,076.25	718,981.28
2,459.00	00	5.26	59.37	2,457.71	-28.46	28.71	39.67	48.97	54.11	382,080.71	718,988.67
2,553.00	00	5.15	63.49	2,551.33	-32.49	32.79	47.16	57.43	55.19	382,084.79	718,996.16
2,648.00	00	5.09	61.57	2,645.95	-36.35	36.70	54.68	65.85	56.13	382,088.70	719,003.68
2,743.00	00	4 69	61.09	2,740.60	-40.19	40.58	61.78	73.92	56.70	382,092.58	719,010.78
2,837.00	00	4.42	64.78	2,834.30	43.55	43.98	68.42	81.34	57.27	382,095.98	719,017.42
2,932.00	00	4.79	56.99	2,929.00	47.23	47.70	75.06	88.94	57.56	382,099.70	719,024.06
3,027.00	00	5.66	51.98	3,023.60	-52.23	52.75	82.08	97.57	57.27	382,104.75	719,031.08
3,122.00	00	5.57	54.31	3,118.15	-57.76	58.33	89.51	106.84	56.91	382,110.33	719,038.51
3,216.00	00	5.30	53.58	3,211.72	-62.96	63.56	96.71	115.73	56.68	382,115.56	719,045.71
3,311.00	00	6.04	51.98	3,306.26	-68.59	69.25	104.18	125.10	56.39	382,121.25	719,053.18
3,406.00	00	98.9	52.73	3,400.70	-74.81	75.51	112.31	135.33	56.08	382,127.51	719,061.31
3,500.00	00	6.17	59.31	3,494.14	-80.48	81.24	120.79	145.57	26.08	382,133.24	719,069.79
3,595.00	00	5.86	65.64	3,588.62	-85.03	85.85	129.60	155.46	56.48	382,137.85	719,078.60
3,690.00	00	5.96	58.42	3,683.12	-89.56	90.43	138.22	165.18	56.80	382,142.43	719,087.22
3,785.00	00	6.14	63.88	3,777.59	-94.33	95.25	146.98	175.15	57.05	382,147.25	719,095.98
3,880.00	00	5.54	73.79	3,872.10	97.79	98.77	155.95	184.60	57.65	382,150.77	719,104.95
3,975.00	00	5.55	63.80	3,966.66	-101.04	102.08	164.47	193.58	58.17	382,154.08	719,113.47
4,070.00	00	6.44	48.71	4,061.14	-106.54	107.62	172.60	203.41	58.05	382,159.62	719,121.60
4,127.00	00	6.57	43.26	4,117.78	-110.99	112.11	177.24	209.72	57.69	382,164.11	719,126.24
4,261.00	00	6.29	43.83	4,250.93	-121.80	122.99	187.57	224.30	56.75	382,174.99	719,136.57
4,356.00	00	6.19	43.37	4,345.37	-129.24	130.46	194.70	234.36	56.17	382,182.46	719,143.70
4,450.00	00	6.05	42.81	4,438.83	-136.51	137.78	201.54	244.14	55.64	382,189.78	719,150.54



### ProDirectional

Survey Report



719,243.15 719,164.63 719,171.60 719,178.54 719,193.08 719,206.97 719,220.70 719,227.97 719,235.44 719,250.66 719,258.04 719,265.88 719,273.77 719,280.28 719,285.68 719,291.29 719,296 77 719,157.61 719,185.86 719,199.97 719,213.87 Easting (usft) 382,212.19 382,293.85 382,300.93 382,307.95 382,314.79 382,320.25 382,197.32 382,204 73 382,227.10 382,234.63 382,248.90 382,256.03 382,263.40 382,271.30 382,278.97 382,286 52 382,324.35 382,328.38 382,332.25 382,219.54 382,241.77 Northing Well @ 3245.50usft Well @ 3245.50usft Minimum Curvature 51.43 51.08 51.14 53.53 53.19 52.65 52.39 52.12 51.28 51.15 51.07 51.02 51.00 51.03 54.26 53.87 52.91 51.83 51.61 Well No. 218H Closure Azimuth WellPlanner1 Grid 274.25 284.18 294.55 304.85 314.65 324 53 344.26 354.85 365.46 376.20 386.64 396.83 407.34 417.77 126.26 433.04 334 34 439.94 446.64 Closure Distance 254 24 264 24 Local Co-ordinate Reference: Survey Calculation Method: (nsft) North Reference: TVD Reference: MD Reference: 294 15 301.66 316.88 215.63 222.60 229 54 236.86 271.70 278.97 286.44 309.04 324.77 331.28 336.68 342.29 347 77 244.08 250.97 257.97 264.87 Database: E/W (usft) 272.35 152.73 160.19 167.54 175.10 182.63 196.90 204.03 211.40 219.30 226.97 234 52 241.85 248.93 255.95 262.79 268.25 276 38 280.25 189 77 N/S (usft) -166 09 -225 16 -260.74 -278.06 -158.79 -181.10 -188.19 -195.27 202 36 209.69 -217.54 -232.67 239.95 -246.98 253.96 -266.16 270 23 274 22 -151 37 -144 01 V Sec (usft) 4,816.63 5,571 15 5,760.96 6,044.25 6,423 13 5,005.47 5,194.42 5,666.54 5,949.82 6,138.86 6,328.37 4,534.28 4,627.72 4,723.17 5,477.76 5,854 40 6,233.62 1,911.05 5,098.94 5,288.90 5,382.37 TVD (usft) 43.48 43.40 42.74 43.36 44.64 44.36 43.72 42.00 43.24 45.24 45.87 45.61 46.79 49.42 48.81 51.81 53.62 55.08 54.51 Azi (azimuth)
(°) MWD-148'-21758', PTB: 21819 Eddy County, NM (NAD83) 6.19 5.93 6.19 6.40 4.19 6.29 6.43 6.01 5.98 6.54 6.54 6.37 6.22 4.04 4.15 6.05 6.30 6.31 3.91 6.31 Matador Resources Boros Federal <u>ಕ</u> ಲ No. 218H Ы 4,736.00 4,830.00 5,114.00 5,210.00 5,589.00 5,685.00 5,780.00 6,160.00 4,640.00 1,925.00 5,020.00 5,305.00 5,399.00 5,495.00 5,874.00 5,970.00 6,065.00 6,255.00 6,350.00 6,445.00 4,546.00 MD (usft) Company: Wellbore: Project: Design: Survey Well: Site:

719,312.42

382,343.57 382,347.47

719,302.02

382,335.98

51.19

453.06 459.49 465.93 472.55

353.02

283.98 287.74 291.57 295.47 299.09 302.40

358.24

382,339.74

51.2351.2651.30

719,322.86 719,327.55

382,354.40

51.38

382,351.09

51.34

478.78

363.42

-296.73 -300.02

6,802.24 6,897.04 6,991.87

54.31

3.97 3.56

3.95

6,729.00 6,825.00 6,920.00

54.82

54.67

3.37

7,015.00

-285.49

6,612.70 6,706.47

53.69

3.91

6,635.00

6,540.00

6,517.91

54.65

3.86

-281.75

484.51

378.55

719,317.78





V. Sec (usft) -303.10 36 -306.11 37 -310.31 37 -310.31 37 -322.11 37 -327.82 37 -333.07 37 -344.42 34 -344.42 34	Survey Calculatic Barbase:  Survey Calculatic Class Survey Class Survey Class Survey S	on Method:  (usft)  489.97  495.61  501.72  508.53  515.58  522.39  522.39  522.39  524.85  540.56	Closure Azimuth (°) 51.43 51.43 51.21 50.98 50.77 50.36	Northing (usft) 382,357.51 382,360.55 382,370.60 382,376.64 382,387.64 382,387.64	Easting (usft) 719,332.07 719,332.85 719,341.29 719,345.36 719,349.54 719,353.66 719,353.66 719,353.66
N/S (usft) 303.10 306.11 310.31 310.31 322.11 327.82 333.07 344.42	E/W (usft)	Closure Distance (usft) 489.97 495.61 501.72 508.53 515.58 522.39 522.39 522.39 524.85 540.56 543.80	Closure Azimuth (°) 51.43 51.50 51.21 51.21 50.98 50.77 50.60 50.46 50.36	Northing (usft) 382,357.51 382,360.55 382,364.79 382,376.64 382,376.64 382,382.37	Easting (usft) 719,332.07 719,332.85 719,341.29 719,345.36 719,349.54 719,353.66 719,353.66 719,353.66 719,351.48
N/S (usft) 303.10 306.11 310.31 316.10 322.11 327.82 333.07 344.61	(usft)	Closure Distance (usft) 489.97 495.61 501.72 508.53 515.58 522.39 522.39 524.85 540.56 543.80	Closure Azimuth (°) 51.43 51.50 51.43 51.21 50.98 50.77 50.60 50.46	Northing (usft) 382,357.51 382,360.55 382,370.60 382,376.64 382,376.64 382,382.37	(usft) 719,332.07 719,341.29 719,345.36 719,349.54 719,353.66 719,353.66 719,351.48
-303.10 -306.11 -316.31 -322.11 -327.82 -337.82 -344.42 -344.61				382,357.51 382,360.55 382,370.60 382,376.64 382,382.37 382,387.64 382,387.64	719,332.07 719,336.85 719,341.29 719,345.36 719,353.66 719,353.66 719,351.48
			51.50 51.43 51.21 50.98 50.77 50.60 50.46	382,360.55 382,364.79 382,370.60 382,376.64 382,382.37 382,387.64 382,392.48	719,336.85 719,341.29 719,345.36 719,349.54 719,353.66 719,357.66 719,351.48
			51.43 51.21 50.98 50.60 50.60 50.46	382,370.60 382,370.60 382,376.64 382,382.37 382,387.64 382,392.48	719,341.29 719,345.36 719,353.66 719,357.66 719,361.48 719,361.48
			51.21 50.98 50.77 50.60 50.46 50.36	382,370.60 382,376.64 382,382.37 382,387.64 382,392.48	719,345.36 719,349.54 719,353.66 719,357.66 719,361.48
			50.98 50.77 50.60 50.46 50.36	382,376.64 382,382.37 382,387.64 382,392.48	719,349.54 719,353.66 719,357.66 719,361.48 719,365.26
			50.77 50.60 50.46 50.36	382,382.37 382,387.64 382,392.48	719,353.66 719,357.66 719,361.48 719,365.26
			50.60 50.46 50.36	382,387.64 382,392.48	719,357.66 719,361.48 719,365.26
			50.46	382,392.48	719,361.48
			50.36		719,365.26
				382,396.87	
			50.34	382,399.06	719,367.65
		.51 544.58	50.38	382,399.25	719,368.51
-344.67 34	347.31 419.93	.93 544.95	50.41	382,399.31	719,368.93
-344.79	347.43 419.86	.86 544.97	50.39	382,399.43	719,368.86
-344.76 34	347.40 418.98	.98 544.27	50.34	382,399.40	719,367.98
-344.53 34	347.16 417.21	.21 542.76	50.24	382,399.16	719,366.21
-344.32 34	346.93 415.72	.72 541.47	50.15	382,398.93	719,364.72
-343.95	346.57 414.77	.77 540.50	50.12	382,398.57	719,363.77
-343.55	346.15 413.44	44 539.22	90.06	382,398.15	719,362.44
-343.66 34	346.26 412.77	77 538.77	50.01	382,398.26	719,361.77
-344.57 34	347 17 413 01	.01 539.54	49.95	382,399.17	719,362.01
-345.98 34	348.58 412.86	.86 540.33	49.83	382,400.58	719,361.86
-346.18 34	348.79 413.35	.35 540.84	49.84	382,400.79	719,362.35
-344.78 34	347.40 415.11	11 541 29	50.07	382,399.40	719,364.11
-343.10 34	345.73 416.83	83 541.55	50.33	382,397.73	719,365.83
-341.23 34	343.87 417.72	72 541.05	50.54	382,395.87	719,366.72
-339.34 34	341.98 418.33	.33 540.33	50.74	382,393.98	719,367.33
-337.84 34	340.48 419.28	.28 540.11	50.95	382,392.48	719,368.28
		251 77 77 77 77 77 77 77 77 77 72 73 88 86 86 86 72 72 72 73 73 73 74	543.80 544.58 544.95 544.97 542.76 541.47 539.22 538.77 539.54 540.84 541.05 540.33		50.34 50.38 50.39 50.34 50.24 50.15 50.01 49.85 49.83 49.84 50.07 50.07 50.07





Company: Project: Site: Well: Wellbore: Design:	Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH MWD-148'-21758', PTB: 21819'	AD83) TB: 21819'				Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	te Reference: ;; ion Method:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature WellPlanner1	## <b>0</b>	
Survey										
MD (nsft)	(°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W C (usft)	Closure Distance (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
9,665.00	1.02	2 118.49	639.63	-336.81	339.46	420.52	540.44	51.09	382,391.46	719,369.52
9,760.00	96.0 00.	8 87.99	9,734.61	-336.43	339.09	422.08	541.41	51.22	382,391.09	719,371.08
9,855.00	.00 0.84	4 97 11	9,829.60	-336.36	339.03	423.58	542.55	51.33	382,391.03	719,372.58
9,948.00	.00 0.93	3 107.37	9,922.59	-336.04	338.72	424.98	543.45	51.44	382,390.72	719,373.98
10,043.00	.00 1.23	3 111.15	10,017.57	-335.44	338.12	426.66	544.40	51.60	382,390.12	719,375.66
10,138.00	66.0 00.	9 126.52	10,112.56	-334.57	337.27	428.27	545.13	51.78	382,389.27	719,377.27
10,233.00	.00 1.21	1 148.30	10,207.54	-333.22	335.93	429.46	545.23	51.97	382,387.93	719,378.46
10,328.00	.00 2.20	0 177.45	10,302.50	-330.54	333.25	430.07	544.07	52.23	382,385.25	719,379.07
10,423.00	.00 2.43	3 191.45	10,397.42	-326.75	329.45	429.75	541.50	52.53	382,381.45	719,378.75
10,518.00	00.76	5 190.88	10,492.38	-324.16	326.86	429.23	539.52	52.71	382,378.86	719,378.23
10,613.00	.00 0.74	4 172.35	10,587.37	-322.93	325.63	429.19	538.74	52.81	382,377.63	719,378.19
10,707.00	1.04	186.86	10,681.36	-321.48	324.19	429.17	537.85	52.93	382,376.19	719,378.17
10,802.00	.00 1.22	2 190.58	10,776.34	-319.64	322.34	428.88	536.51	53.07	382,374.34	719,377.88
10,896.00	.00 0.28	8 147.99	10,870.33	-318.46	321.16	428.82	535.75	53.17	382,373.16	719,377.82
10,991.00	.00 0.44	4 93.42	10,965.33	-318.24	320.94	429.31	536.01	53.22	382,372.94	719,378.31
11,097.00	98.0 0.86	6 189.17	11,071.33	-317.42	320.13	429.59	535.75	53.31	382,372.13	719,378.59
11,192.00	.00 6.81	1 184.64	11,166.07	-311.10	313.81	429.02	531.54	53.82	382,365.81	719,378.02
11,250.70	.70 14.87	7 180.37	11,223.68	-300:09	302.79	428.69	524.84	54.77	382,354.79	719,377.69
FTP: 11250.7' MD										
11,287.00	.00 19.87	7 179.45	11,258.31	-289.25	291.95	428.72	518.69	52.75	382,343.95	719,377.72
11,382.00	.00 30.34	4 178.95	11,344.22	-249.01	251.71	429.31	497.66	59.65	382,303.71	719,378.31
11,477.00	.00 37.18	8 180.85	11,423.15	-196.25	198.95	429.33	473.18	65.14	382,250.95	719,378.33
11,572.00	.00 38.84	4 179.42	11,498.00	-137.76	140.46	429.20	451.60	71.88	382,192.46	719,378.20
11,667.00	.00 50.13	3 177.63	11,565.67	-71.32	74.03	431.02	437.33	80.25	382,126.03	719,380.02
11,761.00	.00 58.27	7 178.22	11,620.61	4.83	-2.10	433.76	433.76	90.28	382,049.90	719,382.76
11,856.00	.00 66.74	180.30	11,664.43	89.01	-86.28	434.78	443.26	101.22	381,965.72	719,383.78
Final Gor	Final Gordon Survey: 11856' MD	0								





Company: Project: Site: Well: Wellbore:	Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH MWD-148'-21758', PTB: 21819'	чАD83) этВ: 21819				Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	ate Reference: :: ion Method:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature WellPlanner1		
Survey										
(tysn)	lnc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W C	Closure Distance C (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
11,945.00		75 182.64	11,694.50	172.67	-169.95	432.60	464.79	111.45	381,882.05	719,381.60
First SLB	First SLB Survey: 11945' MD									
11,977.00	.00 74.08	182.92	11,703.37	203.37	-200.67	431.11	475.52	114.96	381,851.33	719,380.11
12,009.00	.00 74.46	183.24	11,712.04	234.12	-231.42	429.45	487.84	118.32	381,820.58	719,378.45
12,072.00	.00 76.13	13 184.09	11,728.03	294.90	-292.23	425.56	516.23	124.48	381,759.77	719,374.56
12,104.00	99.92 76.66	36 184.37	11,735.56	325.90	-323.25	423.26	532.58	127.37	381,728.75	719,372.26
12,167.00	97.77 00.	76 184.99	11,749.51	387.10	-384.48	418.25	568.12	132.59	381,667.52	719,367.25
12,199.00	.00	74 185.12	11,756.30	418.23	-415.63	415.49	587.69	135.01	381,636.37	719,364.49
12,248.00	.00 78.45	185.37	11,766.41	465.95	-463.37	411.11	619.46	138.42	381,588.63	719,360.11
12,294.00	.00 78.62	32 185.18	11,775.55	510.81	-508.27	406.97	651.12	141.32	381,543.73	719,355.97
12,389.00	.00 80,27	27 185,24	11,792,95	603,76	-601.27	398,48	721,33	146,47	381,450.73	719,347,48
12,484.00	00.88	184.53	11,804.24	697.65	-695.21	390.46	797.36	150.68	381,356.79	719,339.46
12,579.00	.00 87.46	182.47	11,809.61	792.28	-789.88	384.67	878.56	154.03	381,262.12	719,333.67
12,674.00	.00 89.04	181.79	11,812.51	887.14	-884.76	381.14	963.37	156.69	381,167.24	719,330.14
12,769.00	.00 89.62	182.84	11,813.62	982.03	-979.68	377.30	1,049.82	158.94	381,072.32	719,326.30
12,864.00	.00 90.45	180.14	11,813.56	1,076.97	-1,074.63	374.83	1,138.13	160.77	380,977.37	719,323.83
12,959.00	.00 89.20	176.68	11,813.85	1,171.93	-1,169.58	377.47	1,228.99	162.11	380,882.42	719,326.47
13,055.00	.00 89.81	176.64	11,814.68	1,267.80	-1,265.41	383.06	1,322.12	163.16	380,786.59	719,332.06
13,150.00	.00 89.55	176.94	11,815.21	1,362.68	-1,360.26	388.38	1,414.62	164.06	380,691.74	719,337.38
13,245.00	.00 90.02	177.72	11,815.57	1,457.60	-1,455.16	392.81	1,507.24	164.89	380,596.84	719,341.81
13,340.00	00.88 00.	30 176.96	11,815.88	1,552.52	-1,550.05	397.22	1,600.14	165.63	380,501.95	719,346.22
13,436.00	.00 90.14	177.39	11,816.10	1,648.43	-1,645.94	401.95	1,694.31	166.28	380,406.06	719,350.95
13,531.00	.00 89.85	35 177.13	11,816.11	1,743.35	-1,740.83	406.49	1,787.66	166.86	380,311.17	719,355.49

719,360.92 719,366.28 719,371.20 719,376.02

380,216.33

167.35 167.80 168.23 168.62

1,881.32 1,975.10 2,068.92 2,163.81

411.92 417.28 422.20 427.02

-1,930.51

11,817.75

11,816.75

176.31 177.22

89.38 89.41 89.88

13,721.00

13,816.00

13,626.00

11,819.04

177.39

11,818.34

176.85

-2,025.38 -2,121.26

-1,835.67

1,838.22 1,933.10 2,028.00 2,123.90

380,121.49

380,026.62 379,930.74





Company: Project: Site: Well:	Matador Resources Eddy County, NM (NAD83) Boros Federal OH OH	Irces MM (NAD83;					Local Co-ordinate TVD Reference: MD Reference: North Reference: Survey Calculation	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature		
							Catabase				
Survey											
MD (nsft)	Inc ©	₹	Azi (azimuth)	TVD (nsft)	V. Sec (usft)	N/S (nsft)	E/W	Closure Distance (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
14,007.00		89.41	176.83	11,820.13	2,218.80	-2,216.13	431.81		168.97	379,835.87	719,380.81
14,102.00		89.42	177.33	11,821.10	2,313.70	-2,311.00	436.65	5 2,351.89	169.30	379,741.00	719,385.65
14,197.00		89.18	177.48	11,822.26	2,408.62	-2,405.90	440.95	5 2,445.97	169.61	379,646.10	719,389.95
14,292.00		89.20	177.88	11,823.60	2,503.56	-2,500.81	444.80	2,540.06	169.91	379,551.19	719,393.80
14,388.00		89.25	177.22	11,824.90	2,599.48	-2,596.71	448.90	2,635.23	170.19	379,455.29	719,397.90
14,483.00		89.46	179.41	11,825.97	2,694.44	-2,691.66	451.69	9 2,729.30	170.47	379,360.34	719,400.69
14,578.00		89.53	180.88	11,826.81	2,789.43	-2,786.65	451.45	5 2,822.99	170.80	379,265.35	719,400.45
14,673.00		89.74	181.09	11,827.41	2,884.41	-2,881.64	449.82	2,916.53	171.13	379,170.36	719,398.82
14,768.00		90.52	181.60	11,827.20	2,979.36	-2,976.61	447.59	3,010.07	171.45	379,075.39	719,396.59
14,863.00		91.30	182.62	11,825.69	3,074.26	-3,071.53	444.09	3,103.47	171.77	378,980.47	719,393.09
14,958.00		91.20	182.84	11,823.61	3,169.10	-3,166.40	439.57	3,196.77	172.10	378,885.60	719,388.57
15,054.00		91.53	182.94	11,821.33	3,264.92	-3,262.25	434.73	3,291.09	172.41	378,789.75	719,383.73
15,149.00		91.66	184.06	11,818.68	3,359.66	-3,357.04	428.93	3,384.33	172.72	378,694.96	719,377.93
15,244.00		90.92	181.77	11,816.54	3,454.48	-3,451.88	424.10	3,477.84	173.00	378,600.12	719,373.10
15,339.00		62'06	180.53	11,815.13	3,549.43	-3,546.85	422.20	3,571.89	173.21	378,505.15	719,371.20
15,434.00		89.47	177.92	11,814.91	3,644.42	-3,641.83	423.48	3,666.37	173.37	378,410.17	719,372.48
15,529.00		90.17	179.63	11,815.21	3,739.40	-3,736.81	425.51	3,760.95	173.50	378,315.19	719,374.51
15,624.00		89.00	179.60	11,815.90	3,834.40	-3,831.80	426.15	5 3,855.42	173.65	378,220.20	719,375.15
Last SLB	Last SLB Survey: 15624' MD	MD									
15,713.00		89.32	180.99	11,817.20	3,923.38	-3,920.79	425.69	3,943.83	173.80	378,131.21	719,374.69
Pro MWD	rst Survey: 15	5713' MD									
15,808.00		87.30	180.00	11,820.00	4,018.32	4,015.73	424.87	7 4,038.15	173.96	378,036.27	719,373.87
15,903.00		87.16	179.40	11,824.60	4,113.21	-4,110.62	425.37	7 4,132.57	174.09	377,941.38	719,374.37
15,998.00		86.59	179.49	11,829.77	4,208.07	-4,205.48	426.29	9 4,227.03	174.21	377,846.52	719,375.29
16,093.00		87.34	178.88	11,834.80	4,302.93	-4,300.33	427.64	4,321.54	174.32	377,751.67	719,376.64
16,188.00		87.74	178.79	11,838.88	4,397.84	4,395.22	429.57	7 4,416.17	174 42	377,656.78	719,378.57
16,283.00		87.96	177.73	11,842.45	4,492.74	-4,490.11	432.45	5 4,510.89	174.50	377,561.89	719,381,45





Company: Project: Site: Well: Wellbore: Design:	Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH MWD-148'-21758', PTB: 21819'	ss (NAD83) , PTB: 21819'				Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database:	te Reference: 3: ion Method:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature WellPlanner1	# # O	
Survey										
MD (tysh)	inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W C (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
16,378.00		88.40 177.30	11,845.46	4,587.63	-4,584.97	436.57	4,605.71	174.56	377,467.03	719,385.57
16,473.00		89.05 177.30	11,847.58	4,682.52	-4,679.85	441.04	4,700.58	174.62	377,372.15	719,390.04
16,569.00		88.48 179.40	11,849.65	4,778.47	4,775.78	443.80	4,796.35	174.69	377,276.22	719,392.80
16,663.00		89.80 179.93	11,851.06	4,872.46	-4,869.76	444.35	4,889.99	174.79	377,182.24	719,393.35
16,758.00		91.30 179.84	11,850.15	4,967.45	-4,964.76	444.54	4,984.62	174.88	377,087.24	719,393.54
16,853.00		90.90	11,848.32	5,062.43	-5,059.73	445.61	5,079.31	174.97	376,992.27	719,394.61
16,949.00		91.25 178.26	11,846.52	5,158.40	-5,155.68	448.00	5,175.11	175.03	376,896.32	719,397.00
17,044.00		90.81 178.35	11,844.81	5,253.36	-5,250.63	450.81	5,269.94	175.09	376,801.37	719,399.81
17,139.00		89.93 179.76	11,844.20	5,348.34	-5,345.61	452.38	5,364.72	175.16	376,706.39	719,401.38
17,234.00		89.80 179.49	11,844.42	5,443.34	-5,440.61	453.00	5,459.43	175.24	376,611.39	719,402.00
17,329.00		88.53 178.70	11,845.81	5,538.33	-5,535.58	454.50	5,554.21	175.31	376,516.42	719,403.50
17,424.00		88.09 178.09	11,848.61	5,633.26	-5,630.50	457.16	5,649.03	175.36	376,421.50	719,406.16
17,519.00		89.36 179.32	11,850.72	5,728.22	-5,725.45	459.30	5,743.84	175.41	376,326.55	719,408.30
17,615.00		89.54 178.70	11,851.64	5,824.21	-5,821.43	460.96	5,839.65	175.47	376,230.57	719,409.96
17,710.00		89.01 179.49	11,852.85	5,919.20	-5,916.41	462.46	5,934.46	175.53	376,135.59	719,411.46
17,805.00		88.44 179.32	11,854.96	6,014.17	-6,011.38	463.45	6,029.22	175.59	376,040.62	719,412.45
17,900.00		89.98 179.58	11,856.27	6,109.16	-6,106.36	464.36	6,124.00	175.65	375,945.64	719,413.36
17,995.00		89.71 180.28	11,856.53	6,204.16	-6,201.36	464.48	6,218.73	175.72	375,850.64	719,413.48
18,090.00		91.56 179.76	11,855.47	6,299.15	-6,296.35	464.44	6,313.46	175.78	375,755.65	719,413.44
18,185.00		91.34 179.40	11,853.07	6,394.12	-6,391.32	465.14	6,408.22	175.84	375,660.68	719,414.14
18,280.00		90.77 178.79	11,851.32	6,489.10	-6,486.29	466.64	6,503.06	175.89	375,565.71	719,415.64
18,367.00		89.49 178.00	11,851.12	6,576.07	-6,573.25	469.08	6,589.97	175.92	375,478.75	719,418.08
18,471.00		90.33 179.49	11,851.29	6,680.06	-6,677.23	471.36	6,693.84	175.96	375,374.77	719,420.36
18,566.00		90 77 179 40	11,850.38	6,775.05	-6,772.22	472.28	6,788.66	176.01	375,279.78	719,421.28
18,661.00		91.12 178.88	11,848.81	6,870.03	-6,867.19	473.70	6,883.51	176.05	375,184.81	719,422.70
18,757.00		91.47 178.00	11,846.64	6,965.99	-6,963.13	476.31	6,979.40	176.09	375,088.87	719,425.31
18,852.00		92.53 177.38	11,843.32	7,060.87	-7,057.99	480.14	7,074.31	176.11	374,994.01	719,429.14





Company: Project: Site: Well: Wellibore:	Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH	s (NAD83) <sub>DTD</sub> . 24640.				Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:	ate Reference: : e: tion Method:	Well No. 218H Well @ 3245.50usft Well @ 3245.50usft Grid Minimum Curvature	## <b>0</b>	
iii.	,0012-041-033	2				Database.				
Survey										
MD (nsft)	n ©	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W C	Closure Distance C (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
18,947.00	.00 92.44	.44 176.50	11,839.20	7,155.68	-7,152.77	485.21	7,169.21	176.12	374,899.23	719,434.21
19,042.00	.00 91.43	.43 176.94	11,836.00	7,250.50	-7,247.56	490.64	7,264.15	176.13	374,804.44	719,439.64
19,137.00	.00 90.55	.55 175.19	11,834.36	7,345.29	-7,342.32	497.16	7,359.13	176.13	374,709.68	719,446.16
19,232.00	.00 90.51	.51 176.24	11,833.48	7,440.07	-7,437.04	504.26	7,454.12	176.12	374,614.96	719,453.26
19,327.00	.00 91.52	.52 178.53	11,831.79	7,534.97	-7,531.92	508.59	7,549.07	176.14	374,520.08	719,457.59
19,423.00	.00 92.00	.00 179.84	11,828.84	7,630.92	-7,627.87	509.95	7,644.89	176.18	374,424.13	719,458.95
19,518.00	.00 91.96	.96 179.58	11,825.56	7,725.86	-7,722.81	510.43	7,739.66	176.22	374,329.19	719,459.43
19,613.00	.00 92.04	.04 181.69	11,822.25	7,820.78	-7,817.74	509.38	7,834.32	176.27	374,234.26	719,458.38
19,708.00	.00 92.18	18 181.07	11,818.75	7,915.68	-7,912.65	507.10	7,928.88	176.33	374,139.35	719,456.10
19,803.00	.00 91.34	.34 182.13	11,815.83	8,010.57	-8,007.56	504.44	8,023.44	176.40	374,044.44	719,453.44
19,899.00	.00 91.43	.43 181.16	11,813.51	8,106.49	-8,103.49	501.69	8,119.01	176.46	373,948.51	719,450.69
19,994.00	90.95	.95 181.60	11,811.54	8,201.42	-8,198.44	499.40	8,213.64	176.51	373,853.56	719,448.40
20,089.00	.00 91.43	.43 181.87	11,809.56	8,296.34	-8,293.38	496.53	8,308.23	176.57	373,758.62	719,445.53
20,184.00	00.89		11,808.55	8,391.24	-8,388.31	493.14	8,402.79	176.64	373,663.69	719,442.14
20,279.00	.00 89.27		11,809.32	8,486.18	-8,483.26	490.33	8,497.42	176.69	373,568.74	719,439.33
20,375.00	.00 90.20	.20 181.16	11,809.76	8,582.14	-8,579.24	488.39	8,593.13	176.74	373,472.76	719,437.39
20,470.00	92.68 00.	.76 179.67	11,809.79	8,677.13	-8,674.24	487.70	8,687.94	176.78	373,377.76	719,436.70
20,565.00	.00 89.85	.85 179.76	11,810.12	8,772.13	-8,769.24	488.18	8,782.81	176.81	373,282.76	719,437.18
20,660.00	.00 90.95	.95 182.22	11,809.45	8,867.09	-8,864.21	486.53	8,877.55	176.86	373,187.79	719,435.53
20,755.00	.00 91.56	.56 182.30	11,807.37	8,961.97	-8,959.11	482.79	8,972.11	176.92	373,092.89	719,431.79
20,850.00	.00 90.29	.29 183.71	11,805.84	9,056.79	-9,053.97	477.81	9,066.57	176.98	372,998.03	719,426.81
20,945.00	.00 90.81	.81 183.71	11,804.93	9,151.55	-9,148.76	471.66	9,160.91	177.05	372,903.24	719,420.66
21,040.00	.00 91.87	.87 184.06	11,802.71	9,246.26	-9,243.52	465.23	9,255.22	177.12	372,808.48	719,414.23
21,136.00	66.06 00.	99 183.10	11,800.31	9,342.00	-9,339.30	459.24	9,350.58	177.18	372,712.70	719,408.24
21,231.00	79.68 00.	.67 180.20	11,799.76	9,436.93	-9,434.24	456.50	9,445.28	177.23	372,617.76	719,405.50
21,326.00	.00 90.15	.15 178.79	11,799.91	9,531.92	-9,529.24	457.34	9,540.21	177.25	372,522.76	719,406.34
21,421.00	.00 90.37	.37 178.70	11,799.48	9,626.91	-9,624.21	459.42	9,635.17	177.27	372,427.79	719,408.42





Well No. 218H
Well @ 3245.50usft
Well @ 3245.50usft
Grid
Minimum Curvature
WellPlanner1 Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Database: MWD-148'-21758', PTB: 21819' Matador Resources Eddy County, NM (NAD83) Boros Federal No. 218H OH Company:
Project:
Site:
Well:
Wellbore:
Design:

Survey										
MD (usft)	()	Azi (azimuth) (°)	TVD (usff)	V. Sec (usft)	N/S (nsft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth	Northing (usft)	Easting (usft)
21,517.00	89.71	177.73	11,799.41	9,722.88	-9,720.17	462.41	9,731.16		372,331.83	719,411.41
21,612.00	88.97	176.77	11,800.51	9,817.79	-9,815.05	466.97	9,826.15	177.28	372,236.95	719,415.97
21,707.00	88.84	176.68	11,802.32	9,912.65	-9,909.88	472.39	9,921.13		372,142.12	719,421.39
21,729.60	89.07	176.68	11,802.74	9,935.21	-9,932.43	473.70	9,943.72	177.27	372,119.57	719,422.70
LTP: 21729.6' MD										
21,758.00	89.36	176.68	11,803.12	9,963.57	-9,960.78	475.35	9,972.12	177.27	372,091.22	719,424.35
Last Survey: 21758' MD	8. MD									
21,819.00	89.36	176.68	11,803.81	10,024.49	-10,021.68	478.88	10,033.11	177.26	372,030.32	719,427.88
PTB: 21819' MD										

Measured bepth (usft)         HVL-S         +EL-W         Comment           Local Coordinates         HVL-S         +EL-W         Comment           (usft)         (usft)         (usft)         (usft)         (usft)         (usft)         (usft)         Comment           11,250.70         11,223.68         302.79         428.69         FTP: 11250.7* MD         428.69         FTP: 11250.7* MD           11,856.00         11,664.43         -86.28         434.78         Final Gordon Survey: 11856* MD           15,624.00         11,815.90         -3,831.80         426.15         Last SLB Survey: 1574* MD           15,713.00         11,817.20         -3,920.79         426.69         Pro MWD First Survey: 1574* MD           21,729.60         11,803.12         -9,960.78         473.50         LTP: 21729.6* MD           21,758.00         11,803.12         -9,960.78         475.35         Last Survey: 21758* MD           21,819.00         11,803.81         -10,021.68         PTB: 21819* MD	Design Annotations				
Vertical         Local Coordinates           Depth (usft)         +N/-S         +E/-W           (usft)         (usft)         (usft)           0         11,223.68         302.79         428.69           0         11,694.50         -169.95         432.60           0         11,815.90         -3,831.80         426.15           0         11,817.20         -3,920.79         425.69           0         11,802.74         -9,932.43         475.69           0         11,803.12         -9,960.78         475.35           0         11,803.81         -10,021.68         478.88					
Depth (usft)         +N-S (usft)         +E-W (usft)           11,223.68         302.79         428.69           11,664.43         -86.28         434.78           11,694.50         -169.95         432.60           11,815.90         -3,831.80         426.15           11,817.20         -3,920.79         426.15           11,802.74         -9,932.43         473.70           11,803.12         -9,960.78         476.35           11,803.81         -10,021.68         476.88	Measured	Vertical	Local Coord	linates	
11,223,68       302.79       428.69         11,664.43       -86.28       434.78         11,694.50       -3,831.80       426.15         11,815.90       -3,831.80       426.15         11,817.20       -3,920.79       425.69         11,802.74       -9,932.43       473.70         11,803.12       -9,960.78       476.35         11,803.81       -10,021.68       478.88	Depth (usft)	Depth (usft)	+N/-S (nsft)	+E/-W (usft)	Comment
11,664.43       -86.28       434.78         11,694.50       -169.95       432.60         11,815.90       -3,831.80       426.15         11,817.20       -3,920.79       425.69         11,802.74       -9,932.43       473.70         11,803.12       -9,960.78       475.35         11,803.81       -10,021.68       478.88	11,250.70	11,223.68	302.79	428.69	FTP: 11250.7' MD
11,694.50       -169.95       432.60         11,815.90       -3,831.80       426.15         11,817.20       -3,920.79       425.69         11,802.74       -9,932.43       473.70         11,803.12       -9,960.78       476.35         11,803.81       -10,021.68       478.88	11,856.00	11,664.43	-86.28	434.78	Final Gordon Survey: 11856' MD
11,815.90       -3,831.80       426.15         11,817.20       -3,920.79       425.69         11,802.74       -9,932.43       473.70         11,803.12       -9,960.78       475.35         11,803.81       -10,021.68       478.88	11,945.00	11,694.50	-169.95	432.60	First SLB Survey: 11945' MD
11,817.20       -3,920.79       425.69         11,802.74       -9,932.43       473.70         11,803.12       -9,960.78       475.35         11,803.81       -10,021.68       478.88	15,624.00	11,815.90	-3,831.80	426.15	Last SLB Survey: 15624' MD
11,802.74     -9,932.43     473.70       11,803.12     -9,960.78     475.35       11,803.81     -10,021.68     478.88	15,713.00	11,817.20	-3,920.79	425.69	Pro MWD First Survey: 15713' MD
11,803.12     -9,960.78     475.35       11,803.81     -10,021.68     478.88	21,729.60	11,802.74	-9,932.43	473.70	LTP: 21729.6' MD
11,803.81 -10,021.68 478.88	21,758.00	11,803.12	-9,960.78		Last Survey: 21758' MD
	21,819.00	11,803.81	-10,021.68	478.88	PTB: 21819' MD