

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-102

NOV 26 2019

Revised August 1, 2011

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit one copy to appropriate

District Office

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AMENDED REPORT

As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45460	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 322920	⁵ Property Name SPUD MUFFIN 31-30 FED COM	⁶ Well Number 621H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 2959.7

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	31	23 S	29 E		270	SOUTH	1245	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	30	23 S	29 E		24	NORTH	346	WEST	EDDY

¹² Dedicated Acres 632.38	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Erin Workman</i> 11/14/19 Signature Date Erin Workman Printed Name Erin.workman@dvn.com E-mail Address ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. DECEMBER 19, 2018 Date of Survey <i>FILIMON F. JARAMILLO</i> Signature and Seal of Professional Surveyor Certificate Number FILIMON F. JARAMILLO, PLS 13719 13719
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Intent ☐ As Drilled ☒ XX

API #

Operator Name:
DEVON ENERGY PRODUCTION
COMPANY, L.P.

Property Name:
SPUD MUFFIN 31-30 FED COM

Well Number
621H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	31	23S	29E	4	1	SOUTH	208	WEST	EDDY
Latitude					Longitude				NAD
32.2543170					104.0316764				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	31	23S	29E	4	464	SOUTH	285	WEST	EDDY
Latitude					Longitude				NAD
32.2555896					104.0314222				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	30	23S	29E	1	213	NORTH	338	WEST	EDDY
Latitude					Longitude				NAD
32.2829914					104.0311545				83

Is this well the defining well for the Horizontal Spacing Unit? ☒ NO

Is this well an infill well? ☒ YES

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

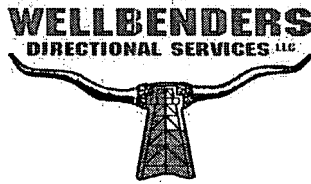
API #
30-015-45266

Operator Name:
DEVON ENERGY PRODUCTION COMPANY, LP

Property Name:
SPUD MUFFIN 31-30 COM

Well Number
622H

KZ 06/29/2018



I **Larry Wright**, certify that I am employed by **Wellbenders Directional Services**. That I did on the day(s) of **01/20/19** thru **01/29/19** conduct or supervise the taking of a **MWD Survey** from a depth of **168'** to a depth of **9191'**; that the data is true, correct, complete and within the limitations of the tool as set forth by **Wellbenders Directional Services**; that I am authorized and qualified to make this report; that this survey was conducted at the request of **Devon Energy** for the **Spud Muffin 31-30 FED COM #621H** API No. **30-015-45460** in **Eddy County, New Mexico**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **Wellbenders Directional Services**.

Larry Wright

Larry

Wright

Digitally signed
by Larry Wright
Date:

2019.10.28

14:15:52 -05'00'

RECEIVED

MAR 24 2020

EMNRD-OCDARTESIA

1125 Beach Airport Rd, Conroe, Texas

77301

PH 281 750 8805 FAX 281 750 8810

Devon

SURVEY REPORT

Spud Muffin 31-30 621H

Cactus 103

I, Deanna Jacobs, certify the surveys supplied on
Spud Muffin 31-30 621H are correct and accurate to the best of my
knowledge and are supported by actual field data.

Deanna Jacobs

Date: 3/23/2020

Scientific Drilling Int

Devon Energy
621H - SDI Surveys #1

Eddy County, NM (NAD83 NME)

Spud Muffin 31-30

Your Ref:

3/27/2019

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Grid X	Grid Y	SSTVD
168	1.1	104.67	167.99	-0.41	1.56	-0.41	0	635627.1	456646.64	-2816.71
204	1.2	102.48	203.98	-0.58	2.26	-0.58	0.3	635627.8	456646.47	-2780.72
266	1.2	96.94	265.97	-0.8	3.54	-0.8	0.19	635629.1	456646.25	-2718.73
347	1	98.96	346.95	-1.01	5.08	-1.01	0.25	635630.6	456646.04	-2637.75
508	0.6	97.99	507.94	-1.34	7.3	-1.34	0.25	635632.9	456645.71	-2476.76
599	0.7	92.72	598.93	-1.44	8.33	-1.44	0.13	635633.9	456645.61	-2385.77
691	0.4	70.13	690.93	-1.35	9.19	-1.35	0.4	635634.7	456645.7	-2293.77
783	0.4	57.21	782.93	-1.07	9.77	-1.07	0.1	635635.3	456645.98	-2201.77
874	0.5	39.46	873.92	-0.59	10.29	-0.59	0.19	635635.8	456646.46	-2110.78
967	0.7	8.7	966.92	0.28	10.63	0.28	0.4	635636.2	456647.33	-2017.78
1057	0.8	304.36	1056.91	1.18	10.19	1.18	0.89	635635.7	456648.23	-1927.79
1149	1.8	279.22	1148.89	1.77	8.24	1.77	1.23	635633.8	456648.82	-1835.81
1240	3	278.7	1239.81	2.36	4.47	2.36	1.32	635630	456649.41	-1744.89
1333	3.5	272.63	1332.66	2.86	-0.77	2.86	0.65	635624.8	456649.91	-1652.04
1424	3.9	268.94	1423.47	2.93	-6.64	2.93	0.51	635618.9	456649.98	-1561.23
1515	4.3	271.58	1514.23	2.97	-13.14	2.97	0.49	635612.4	456650.02	-1470.47
1605	4.8	270.43	1603.95	3.09	-20.28	3.09	0.56	635605.3	456650.14	-1380.75
1697	5.8	269.2	1695.56	3.05	-28.78	3.05	1.09	635596.8	456650.1	-1289.14
1790	6.2	270.87	1788.05	3.06	-38.5	3.06	0.47	635587.1	456650.11	-1196.65
1885	6.5	268.15	1882.46	2.97	-49	2.97	0.45	635576.6	456650.02	-1102.24
1979	7	264.81	1975.81	2.28	-60.02	2.28	0.68	635565.5	456649.33	-1008.89
2073	7.4	260.59	2069.07	0.77	-71.7	0.77	0.71	635553.9	456647.82	-915.63
2167	8	256.99	2162.22	-1.69	-84.05	-1.69	0.82	635541.5	456645.36	-822.48
2261	8.8	255.32	2255.21	-4.99	-97.38	-4.99	0.89	635528.2	456642.06	-729.49
2355	9.7	252.68	2347.99	-9.17	-111.89	-9.17	1.06	635513.7	456637.88	-636.71
2449	10.3	250.66	2440.56	-14.31	-127.38	-14.31	0.74	635498.2	456632.74	-544.14
2543	11.4	248.55	2532.88	-20.49	-143.96	-20.49	1.24	635481.6	456626.56	-451.82
2637	11.9	250.75	2624.95	-27.08	-161.75	-27.08	0.71	635463.8	456619.97	-359.75
2731	12.2	253.65	2716.87	-33.07	-180.43	-33.07	0.72	635445.1	456613.98	-267.83
2825	11.7	255.05	2808.84	-38.33	-199.17	-38.33	0.61	635426.4	456608.73	-175.86
2919	12.4	254	2900.77	-43.57	-218.08	-43.57	0.78	635407.5	456603.49	-83.93
3013	13.7	254.17	2992.34	-49.39	-238.5	-49.39	1.38	635387.1	456597.67	7.64
3107	13.9	254.79	3083.62	-55.38	-260.1	-55.38	0.26	635365.5	456591.67	98.92
3201	14	255.05	3174.85	-61.28	-281.98	-61.28	0.13	635343.6	456585.78	190.15
3294	13.6	255.05	3265.17	-67	-303.41	-67	0.43	635322.2	456580.05	280.47
3388	13.5	254.17	3356.55	-72.85	-324.65	-72.85	0.24	635300.9	456574.21	371.85
3482	13.3	254.17	3447.99	-78.79	-345.6	-78.79	0.21	635280	456568.27	463.29
3576	13	254.17	3539.53	-84.62	-366.18	-84.62	0.32	635259.4	456562.43	554.83
3670	12.2	253.47	3631.26	-90.33	-385.87	-90.33	0.87	635239.7	456556.73	646.56
3764	12.8	253.21	3723.03	-96.17	-405.36	-96.17	0.64	635220.2	456550.89	738.33
3859	12.7	253.47	3815.69	-102.18	-425.45	-102.18	0.12	635200.1	456544.88	830.99
3952	13.6	253.91	3906.25	-108.12	-445.76	-108.12	0.97	635179.8	456538.94	921.55
4046	13.6	253.3	3997.61	-114.35	-466.96	-114.35	0.15	635158.6	456532.7	1012.91
4140	13.1	253.03	4089.07	-120.64	-487.73	-120.64	0.54	635137.9	456526.42	1104.37
4234	12.4	253.38	4180.76	-126.64	-507.59	-126.64	0.75	635118	456520.42	1196.06
4328	13	253.3	4272.46	-132.56	-527.39	-132.56	0.64	635098.2	456514.5	1287.76
4422	12.5	253.38	4364.14	-138.51	-547.27	-138.51	0.53	635078.3	456508.55	1379.44
4516	13.3	254.88	4455.76	-144.24	-567.45	-144.24	0.92	635058.1	456502.82	1471.06
4610	13.3	255.32	4547.24	-149.8	-588.35	-149.8	0.11	635037.3	456497.26	1562.54
4704	13.2	255.32	4638.74	-155.26	-609.19	-155.26	0.11	635016.4	456491.8	1654.04
4798	13.1	255.4	4730.28	-160.66	-629.88	-160.66	0.11	634995.7	456486.4	1745.58
4892	12.9	255.58	4821.87	-165.96	-650.35	-165.96	0.22	634975.3	456481.1	1837.17
4987	13.1	256.2	4914.43	-171.17	-671.08	-171.17	0.26	634954.5	456475.89	1929.73

5081	12.9	255.84	5006.02	-176.28	-691.6	-176.28	0.23	634934	456470.79	2021.32
5175	12	255.14	5097.81	-181.35	-711.22	-181.35	0.97	634914.4	456465.71	2113.11
5268	11.8	255.58	5188.81	-186.2	-729.77	-186.2	0.24	634895.8	456460.87	2204.11
5362	10.8	256.11	5280.99	-190.71	-747.63	-190.71	1.07	634878	456456.36	2296.29
5456	11.1	257.34	5373.28	-194.8	-765.01	-194.8	0.4	634860.6	456452.26	2388.58
5550	10.4	257.69	5465.63	-198.6	-782.13	-198.6	0.75	634843.5	456448.47	2480.93
5644	10.9	256.9	5558.01	-202.42	-799.07	-202.42	0.55	634826.5	456444.65	2573.31
5738	10.6	257.25	5650.36	-206.34	-816.16	-206.34	0.33	634809.5	456440.72	2665.66
5832	10.9	257.34	5742.71	-210.2	-833.26	-210.2	0.32	634792.4	456436.87	2758.01
5926	10.7	256.2	5835.04	-214.23	-850.41	-214.23	0.31	634775.2	456432.84	2850.34
6020	10.2	255.76	5927.48	-218.36	-866.95	-218.36	0.54	634758.7	456428.71	2942.78
6114	9.4	255.32	6020.11	-222.35	-882.45	-222.35	0.85	634743.2	456424.72	3035.41
6208	8.9	254.97	6112.92	-226.18	-896.89	-226.18	0.54	634728.7	456420.89	3128.22
6302	8.3	253.47	6205.86	-230	-910.42	-230	0.68	634715.2	456417.07	3221.16
6396	7.5	254	6298.97	-233.62	-922.82	-233.62	0.85	634702.8	456413.45	3314.27
6490	6.4	254.88	6392.27	-236.68	-933.78	-236.68	1.18	634691.9	456410.39	3407.57
6584	5.2	260.06	6485.79	-238.78	-943.03	-238.78	1.39	634682.6	456408.29	3501.09
6678	4	272.81	6579.49	-239.35	-950.5	-239.35	1.67	634675.1	456407.72	3594.79
6772	3.8	268.5	6673.27	-239.27	-956.89	-239.27	0.38	634668.7	456407.8	3688.57
6866	3.3	279.22	6767.09	-238.92	-962.68	-238.92	0.88	634663	456408.15	3782.39
6960	2.8	281.51	6860.96	-238.03	-967.6	-238.03	0.55	634658	456409.04	3876.26
7054	2.4	289.95	6954.86	-236.9	-971.7	-236.9	0.59	634653.9	456410.17	3970.16
7148	2.3	275.8	7048.78	-236.04	-975.42	-236.04	0.62	634650.2	456411.03	4064.08
7242	2.1	265.42	7142.71	-235.98	-979.02	-235.98	0.47	634646.6	456411.09	4158.01
7336	1.2	294.69	7236.68	-235.71	-981.63	-235.71	1.28	634644	456411.36	4251.98
7430	0.6	315.17	7330.66	-234.95	-982.87	-234.95	0.71	634642.8	456412.12	4345.96
7524	0.7	300.4	7424.66	-234.31	-983.71	-234.31	0.21	634641.9	456412.76	4439.96
7618	1.1	276.23	7518.65	-233.92	-985.1	-233.92	0.58	634640.5	456413.15	4533.95
7712	1	294.6	7612.63	-233.48	-986.75	-233.48	0.37	634638.9	456413.59	4627.93
7806	1.1	275.53	7706.62	-233.05	-988.39	-233.05	0.38	634637.2	456414.01	4721.92
7900	1.4	289.42	7800.59	-232.59	-990.37	-232.59	0.45	634635.3	456414.48	4815.89
7994	2.3	275.18	7894.54	-232.03	-993.33	-232.03	1.07	634632.3	456415.04	4909.84
8088	2.8	259.1	7988.45	-232.3	-997.46	-232.3	0.92	634628.2	456414.77	5003.75
8181	3.6	247.14	8081.31	-233.86	-1002.39	-233.86	1.12	634623.2	456413.21	5096.61
8275	5.2	235.72	8175.03	-237.41	-1008.63	-237.41	1.93	634617	456409.66	5190.33
8369	4.8	232.11	8268.67	-242.22	-1015.25	-242.22	0.54	634610.4	456404.85	5283.97
8463	3.4	242.13	8362.43	-245.94	-1020.82	-245.94	1.67	634604.8	456401.13	5377.73
8557	2.2	259.98	8456.32	-247.56	-1025.06	-247.56	1.56	634600.6	456399.51	5471.62
8652	2	262	8551.25	-248.11	-1028.5	-248.11	0.22	634597.1	456398.96	5566.55
8746	1.5	233.08	8645.21	-249.07	-1031.1	-249.07	1.06	634594.5	456398	5660.51
8840	2.1	199.59	8739.17	-251.43	-1032.66	-251.43	1.26	634593	456395.64	5754.47
8933	2	201.26	8832.11	-254.55	-1033.82	-254.55	0.13	634591.8	456392.52	5847.41
9027	1.5	205.92	8926.06	-257.19	-1034.96	-257.19	0.55	634590.7	456389.88	5941.36
9121	1.6	201.62	9020.03	-259.51	-1035.98	-259.51	0.16	634589.7	456387.56	6035.33
9191	1.6	197.4	9090	-261.35	-1036.63	-261.35	0.17	634589	456385.72	6105.3
9243	1.4	205.3	9141.98	-262.62	-1037.12	-262.62	0.55	634588.5	456384.45	6157.28
9326	2.1	325.7	9224.96	-262.28	-1038.41	-262.28	3.68	634587.2	456384.79	6240.26
9420	11.5	2.7	9318.22	-251.47	-1038.94	-251.47	10.53	634586.7	456395.6	6333.52
9514	22.8	21.9	9407.96	-225.11	-1031.68	-225.11	13.29	634594	456421.96	6423.26
9561	30.1	25.1	9450.01	-205.96	-1023.27	-205.96	15.82	634602.4	456441.11	6465.31
9608	35	20.4	9489.63	-182.64	-1013.56	-182.64	11.73	634612.1	456464.43	6504.93
9655	40.2	13	9526.87	-155.19	-1005.44	-155.19	14.64	634620.2	456491.87	6542.17
9702	45.3	6.4	9561.39	-123.77	-1000.16	-123.77	14.43	634625.5	456523.29	6576.69
9749	50.7	5.6	9592.83	-89.05	-996.52	-89.05	11.56	634629.1	456558.01	6608.13
9796	55	6.2	9621.2	-51.8	-992.67	-51.8	9.21	634633	456595.26	6636.5
9843	58.8	7.5	9646.87	-12.71	-987.96	-12.71	8.41	634637.7	456634.34	6662.17
9890	63.2	8.5	9669.65	27.98	-982.24	27.98	9.54	634643.4	456675.03	6684.95
9937	66.6	8.5	9689.58	70.07	-975.95	70.07	7.23	634649.7	456717.11	6704.88
9985	67.6	8	9708.26	113.83	-969.6	113.83	2.29	634656	456760.87	6723.56
10032	67.2	6	9726.32	156.89	-964.31	156.89	4.02	634661.3	456803.93	6741.62
10079	71.9	5.4	9742.74	200.7	-959.95	200.7	10.07	634665.7	456847.73	6758.04
10126	76.8	5.6	9755.42	245.74	-955.61	245.74	10.43	634670	456892.77	6770.72
10173	80.3	5.6	9764.74	291.57	-951.11	291.57	7.45	634674.5	456938.6	6780.04
10220	81.3	6.4	9772.26	337.71	-946.26	337.71	2.71	634679.4	456984.74	6787.56
10266	82.2	5.1	9778.86	383.01	-941.7	383.01	3.41	634683.9	457030.03	6794.16
10360	88.3	2.4	9786.64	476.43	-935.59	476.43	7.09	634690	457123.44	6801.94
10454	91.1	3	9787.13	570.32	-931.16	570.32	3.05	634694.5	457217.32	6802.43
10548	90.6	2.3	9785.74	664.2	-926.82	664.2	0.92	634698.8	457311.2	6801.04
10642	89.2	2	9785.9	758.14	-923.29	758.14	1.52	634702.3	457405.12	6801.2
10736	89.6	2.9	9786.89	852.04	-919.27	852.04	1.05	634706.4	457499.02	6802.19

10830	90	3.3	9787.22	945.9	-914.19	945.9	0.6	634711.4	457592.88	6802.52
10924	90.6	4	9786.72	1039.71	-908.2	1039.71	0.98	634717.4	457686.68	6802.02
11018	89.4	4.3	9786.72	1133.46	-901.4	1133.46	1.32	634724.2	457780.42	6802.02
11112	89.4	1.2	9787.71	1227.34	-896.89	1227.34	3.3	634728.7	457874.29	6803.01
11206	89.6	357.7	9788.53	1321.32	-897.8	1321.32	3.73	634727.8	457968.26	6803.83
11300	87.3	357	9791.07	1415.17	-902.14	1415.17	2.56	634723.5	458062.11	6806.37
11394	88.5	357	9794.52	1508.98	-907.06	1508.98	1.28	634718.6	458155.91	6809.82
11488	88.5	356.7	9796.98	1602.81	-912.22	1602.81	0.32	634713.4	458249.73	6812.28
11582	87.5	356.3	9800.26	1696.57	-917.95	1696.57	1.15	634707.7	458343.49	6815.56
11676	87.7	356.5	9804.19	1790.3	-923.85	1790.3	0.3	634701.8	458437.21	6819.49
11770	91.3	358.1	9805.01	1884.18	-928.28	1884.18	4.19	634697.4	458531.08	6820.31
11864	92.1	358.5	9802.22	1978.09	-931.06	1978.09	0.95	634694.6	458624.98	6817.52
11958	92	358.2	9798.86	2072	-933.77	2072	0.34	634691.9	458718.88	6814.16
12052	92.1	358.4	9795.5	2165.89	-936.56	2165.89	0.24	634689.1	458812.77	6810.8
12146	92.3	358.3	9791.89	2259.79	-939.26	2259.79	0.24	634686.4	458906.65	6807.19
12240	91.1	359.2	9789.1	2353.72	-941.31	2353.72	1.6	634684.3	459000.58	6804.4
12334	88.9	0.3	9789.1	2447.71	-941.72	2447.71	2.62	634683.9	459094.56	6804.4
12428	88.3	0.3	9791.4	2541.68	-941.23	2541.68	0.64	634684.4	459188.53	6806.7
12522	89.4	0.5	9793.29	2635.66	-940.57	2635.66	1.19	634685.1	459282.5	6808.59
12616	89.2	359.8	9794.43	2729.65	-940.33	2729.65	0.77	634685.3	459376.48	6809.73
12710	87.7	359.6	9796.98	2823.61	-940.82	2823.61	1.61	634684.8	459470.43	6812.28
12804	90.6	359.5	9798.37	2917.59	-941.56	2917.59	3.09	634684.1	459564.4	6813.67
12898	91.6	359.6	9796.57	3011.57	-942.29	3011.57	1.07	634683.3	459658.37	6811.87
12992	91.5	359.3	9794.02	3105.53	-943.2	3105.53	0.34	634682.4	459752.33	6809.32
13086	90.9	1.4	9792.05	3199.5	-942.62	3199.5	2.32	634683	459846.29	6807.35
13179	90.2	1.8	9791.16	3292.46	-940.03	3292.46	0.87	634685.6	459939.24	6806.46
13207	90.07	1.68	9791.1	3320.45	-939.18	3320.45	0.63	634686.5	459967.23	6806.4
13301	90.07	2.22	9790.98	3414.39	-935.98	3414.39	0.57	634689.7	460061.17	6806.28
13395	89.8	3.05	9791.09	3508.29	-931.66	3508.29	0.93	634694	460155.06	6806.39
13488	89.13	2.54	9791.96	3601.18	-927.12	3601.18	0.91	634698.5	460247.93	6807.26
13582	88.56	2.52	9793.85	3695.06	-922.97	3695.06	0.61	634702.7	460341.82	6809.15
13677	89.73	3.24	9795.27	3789.93	-918.2	3789.93	1.45	634707.4	460436.68	6810.57
13770	88.86	2.95	9796.41	3882.79	-913.18	3882.79	0.99	634712.4	460529.52	6811.71
13864	88.32	2.89	9798.73	3976.64	-908.39	3976.64	0.58	634717.2	460623.37	6814.03
13958	88.12	1.7	9801.65	4070.51	-904.63	4070.51	1.28	634721	460717.24	6816.95
14052	89.16	0.87	9803.88	4164.46	-902.52	4164.46	1.42	634723.1	460811.18	6819.18
14146	88.79	359.81	9805.56	4258.44	-901.96	4258.44	1.19	634723.7	460905.15	6820.86
14240	89.93	358.98	9806.61	4352.43	-902.96	4352.43	1.5	634722.7	460999.13	6821.91
14334	91.01	359.6	9805.84	4446.42	-904.12	4446.42	1.32	634721.5	461093.11	6821.14
14427	91.75	359.64	9803.6	4539.39	-904.74	4539.39	0.8	634720.9	461186.07	6818.9
14521	91.08	359.73	9801.28	4633.36	-905.26	4633.36	0.72	634720.4	461280.03	6816.58
14615	86.2	358.85	9803.51	4727.29	-906.42	4727.29	5.28	634719.2	461373.96	6818.81
14708	88.39	359.48	9807.9	4820.18	-907.77	4820.18	2.45	634717.9	461466.84	6823.2
14801	88.49	359.28	9810.43	4913.14	-908.78	4913.14	0.24	634716.9	461559.79	6825.73
14895	90.3	359.52	9811.42	5007.12	-909.76	5007.12	1.94	634715.9	461653.77	6826.72
14989	89.29	359.63	9811.76	5101.12	-910.46	5101.12	1.08	634715.2	461747.75	6827.06
15083	89.03	359.29	9813.13	5195.1	-911.34	5195.1	0.46	634714.3	461841.73	6828.43
15177	90.07	359.61	9813.87	5289.09	-912.25	5289.09	1.16	634713.4	461935.72	6829.17
15271	88.89	358.99	9814.73	5383.08	-913.4	5383.08	1.42	634712.2	462029.7	6830.03
15365	89.7	359.55	9815.88	5477.06	-914.59	5477.06	1.05	634711	462123.67	6831.18
15459	87.38	359.25	9818.28	5571.02	-915.58	5571.02	2.49	634710.1	462217.62	6833.58
15553	89.8	359.39	9820.59	5664.98	-916.69	5664.98	2.58	634708.9	462311.57	6835.89
15647	88.05	359.62	9822.35	5758.96	-917.5	5758.96	1.88	634708.1	462405.54	6837.65
15741	90.6	0.37	9823.46	5852.94	-917.51	5852.94	2.83	634708.1	462499.52	6838.76
15835	89.56	359.41	9823.33	5946.94	-917.69	5946.94	1.51	634707.9	462593.51	6838.63
15929	90.5	0.47	9823.28	6040.94	-917.79	6040.94	1.51	634707.8	462687.5	6838.58
16020	89.26	359.55	9823.47	6131.93	-917.77	6131.93	1.7	634707.9	462778.49	6838.77
16114	92.55	359.24	9821.99	6225.9	-918.77	6225.9	3.52	634706.9	462872.45	6837.29
16198	90.54	359.48	9819.72	6309.86	-919.7	6309.86	2.41	634705.9	462956.4	6835.02
16292	90.24	358.68	9819.08	6403.85	-921.21	6403.85	0.91	634704.4	463050.38	6834.38
16386	91.95	359.69	9817.29	6497.82	-922.55	6497.82	2.11	634703.1	463144.34	6832.59
16480	92.18	0.29	9813.9	6591.76	-922.57	6591.76	0.68	634703.1	463238.27	6829.2
16574	91.61	359.97	9810.79	6685.7	-922.35	6685.7	0.7	634703.3	463332.21	6826.09
16668	92.89	0.26	9807.1	6779.63	-922.17	6779.63	1.4	634703.5	463426.13	6822.4
16762	93.46	1.51	9801.89	6873.47	-920.72	6873.47	1.46	634704.9	463519.97	6817.19
16856	91.92	1.97	9797.48	6967.32	-917.87	6967.32	1.71	634707.8	463613.81	6812.78
16950	92.62	2.98	9793.76	7061.16	-913.81	7061.16	1.31	634711.8	463707.64	6809.06
17045	91.04	2.62	9790.72	7155.99	-909.17	7155.99	1.71	634716.5	463802.46	6806.02
17139	89.13	2.75	9790.59	7249.88	-904.77	7249.88	2.04	634720.9	463896.35	6805.89
17233	89.77	2.83	9791.49	7343.77	-900.19	7343.77	0.69	634725.4	463990.23	6806.79

17327	87.92	1.69	9793.38	7437.67	-896.49	7437.67	2.31	634729.1	464084.12	6808.68
17421	87.15	1.17	9797.42	7531.55	-894.14	7531.55	0.99	634731.5	464178	6812.72
17515	86.88	2.12	9802.32	7625.39	-891.45	7625.39	1.05	634734.2	464271.82	6817.62
17609	89.46	1.52	9805.32	7719.28	-888.47	7719.28	2.82	634737.2	464365.71	6820.62
17703	87.75	0.09	9807.61	7813.24	-887.14	7813.24	2.37	634738.5	464459.66	6822.91
17797	89.83	358.95	9809.6	7907.21	-887.93	7907.21	2.52	634737.7	464553.62	6824.9
17891	90.2	358.34	9809.57	8001.18	-890.16	8001.18	0.76	634735.5	464647.59	6824.87
17985	92.11	359.28	9807.68	8095.14	-892.11	8095.14	2.26	634733.5	464741.53	6822.98
18079	92.15	359.46	9804.18	8189.07	-893.14	8189.07	0.2	634732.5	464835.45	6819.48
18173	92.14	358.45	9800.66	8282.98	-894.85	8282.98	1.07	634730.8	464929.36	6815.96
18267	92.22	358.66	9797.09	8376.89	-897.22	8376.89	0.24	634728.4	465023.26	6812.39
18361	90.27	358.13	9795.05	8470.82	-899.85	8470.82	2.15	634725.8	465117.19	6810.35
18455	89.53	358.55	9795.21	8564.78	-902.58	8564.78	0.91	634723.1	465211.14	6810.51
18549	88.96	358.17	9796.45	8658.73	-905.27	8658.73	0.73	634720.4	465305.08	6811.75
18643	89.97	358.28	9797.33	8752.68	-908.18	8752.68	1.08	634717.4	465399.03	6812.63
18737	89.33	356.88	9797.9	8846.59	-912.15	8846.59	1.64	634713.5	465492.93	6813.2
18831	89.73	356.59	9798.67	8940.44	-917.5	8940.44	0.53	634708.1	465586.77	6813.97
18925	89.97	357.14	9798.92	9034.3	-922.64	9034.3	0.64	634703	465680.62	6814.22
19019	89.36	359.98	9799.47	9128.26	-925	9128.26	3.09	634700.6	465774.57	6814.77
19113	88.86	359.94	9800.93	9222.24	-925.07	9222.24	0.53	634700.6	465868.55	6816.23
19207	87.92	359.16	9803.57	9316.2	-925.81	9316.2	1.3	634699.8	465962.5	6818.87
19300	88.79	359.62	9806.24	9409.16	-926.8	9409.16	1.06	634698.8	466055.45	6821.54
19395	92.39	1.44	9805.26	9504.13	-925.92	9504.13	4.25	634699.7	466150.41	6820.56
19489	91.21	0.59	9802.31	9598.07	-924.25	9598.07	1.55	634701.4	466244.34	6817.61
19583	91.91	1.64	9799.75	9692.01	-922.43	9692.01	1.34	634703.2	466338.28	6815.05
19677	92.31	1.59	9796.29	9785.91	-919.78	9785.91	0.43	634705.9	466432.17	6811.59
19771	92.08	2.24	9792.69	9879.79	-916.64	9879.79	0.73	634709	466526.04	6807.99
19866	91.41	2.26	9789.79	9974.67	-912.91	9974.67	0.71	634712.7	466620.91	6805.09
19960	90.87	2.43	9787.92	10068.57	-909.07	10068.57	0.6	634716.6	466714.81	6803.22
20055	89.2	1.85	9787.87	10163.5	-905.52	10163.5	1.86	634720.1	466809.73	6803.17
20148	88.39	1.86	9789.82	10256.43	-902.51	10256.43	0.87	634723.1	466902.65	6805.12
20195	88.52	2.81	9791.09	10303.38	-900.6	10303.38	2.04	634725	466949.59	6806.39
20252	88.52	2.81	9792.56	10360.29	-897.8	10360.29	0	634727.8	467006.5	6807.86

FINAL MWD Survey @ 20,195'
 FINAL PTB @ 20,252'

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
 Vertical depths are relative to KB=25'. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
 Vertical Section is from Slot and calculated along an Azimuth of 0.000° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
 Central meridian is -104.333°.
 Grid Convergence at Surface is 0.163°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 20252.00ft.,
 the Bottom Hole Displacement is 10399.12ft., in the Direction of 0.000° (Grid).