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Survey Company: MS Energy Services
MWD Surveyor Name: John Magouyrk
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Paul 25-24S-28E RB 225H
API Number: 30-015-43723
Surveyed Depths: 137' – 15,492' MD; PTB: 15,568'
Dates Performed: 04/21/2017 – 05/17/2017
Location: Eddy County, NM
Job Number: DDMO-170370

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 30 2017

RECEIVED

I certify that the data is true, correct and complete and within the limitations of the tool set forth by MS Energy Services; that I am authorized and qualified to make this report and that I have reviewed this report and find it conforms to the principles and procedures as set forth by MS Energy Services.

Digitally signed by:

Title: MWD Coordinator

Date: 06-29-2017

Email: jmagouyrk@msenergyservices.com



SURVEY CALCULATION PROGRAM

6/29/17 12:04

Company:	Matador Production Company		
Well Name:	Paul 25-24S-28E RB 225H		
Location:	Eddy County, NM		
Rig:	Patterson #297		
Job Number:	DDMO-170370		
API #:	30-015-43723		

Magnetic Declination:

7.25

REFERENCED TO GRID NORTH

Vertical Section Azimuth:	90.11
Survey Calculation Method:	Minimum Curvature

Proposed Direction:

90.11

#	Depth Feet	Inc		Azimuth Degrees	TVD Feet	N/S	E/W Feet	Surface		Distance	Closure		DLS/ 100'	BUR/ 100'
		MD	MD					TVD	Surface		E/W	VS		
PTB:	15.568			89.7	89.7	87	10808.5		-592.03		4868.96			4870.09

TIE IN	0	0.00	0.00	0.00	0.00	0.00	0.00		-0.07	0.00			0.22	0.22
1	137	0.30	191.20	137.00	137.00	-0.35	-0.07		0.83	0.36			0.50	0.22
2	323	0.70	60.60	323.00	323.00	-0.27	0.83		3.65	0.87			0.31	0.27
3	505	1.20	76.60	504.97	504.97	0.72	3.65		6.76	3.72			0.22	-0.22
4	689	0.80	74.70	688.94	688.94	1.50	6.76		9.28	6.93			0.10	0.05
5	872	0.90	63.70	871.92	871.92	2.48	9.28		9.20	9.88			0.89	0.00
6	1,059	0.90	288.60	1058.91	1058.91	3.59	9.21		7.48	8.53			0.44	0.43
7	1,152	1.30	284.00	1151.89	1151.89	4.08	7.49		3.60	6.74			0.20	0.00
8	1,339	1.30	300.90	1338.85	1338.85	5.68	3.61		-0.30	6.37			0.50	0.00
9	1,526	1.30	258.70	1525.80	1525.80	6.36	-0.29		-2.09	5.21			1.56	0.64
10	1,620	1.90	208.50	1619.77	1619.77	4.78	-5.88		-9.25	7.33			1.25	1.23
11	1,807	4.20	199.80	1806.49	1806.49	-4.39	-9.28		-11.57	20.18			0.46	0.11
12	1,994	4.40	188.70	1992.97	1992.97	-17.92	-9.28		-13.17	35.36			0.43	0.43
13	2,181	5.20	188.60	2179.31	2179.31	-33.39	-11.63		-14.67	52.21			0.31	0.05
14	2,369	5.30	182.40	2366.53	2366.53	-50.49	-13.27		-16.58	68.64			0.36	-0.21
15	2,556	4.90	188.40	2552.79	2552.79	-67.02	-14.80		-19.00	79.61			0.24	-0.08
16	2,686	4.80	191.90	2682.32	2682.32	-77.84	-16.73		-20.14	92.34			0.21	-0.19
17	2,843	4.50	190.20	2838.80	2838.80	-90.33	-19.18		-21.90	99.46			0.27	-0.22
18	2,936	4.30	188.30	2931.53	2931.53	-97.37	-20.33		-24.87	107.97			2.01	1.91
19	3,030	6.10	194.70	3025.14	3025.14	-105.68	-22.10		-33.32	119.49			2.02	2.02
20	3,124	8.00	195.30	3118.43	3118.43	-116.83	-25.10		-38.42	149.48			1.35	1.34
21	3,311	10.50	197.30	3302.98	3302.98	-145.65	-33.60		-43.26	166.56			0.06	0.00
22	3,405	10.50	197.60	3395.41	3395.41	-161.99	-38.74		-49.17	182.83			0.87	-0.86
23	3,498	9.70	197.10	3486.96	3486.96	-177.56	-43.60		-56.70	199.24			1.71	0.96
24	3,592	10.60	204.70	3579.50	3579.50	-192.98	-49.54		-63.70	216.12			0.21	-0.21
25	3,686	10.40	204.70	3671.92	3671.92	-208.55	-56.70		-70.09	232.80			0.13	-0.11
26	3,780	10.30	204.30	3764.39	3764.39	-223.91	-63.70		-76.86	249.26			0.00	0.00
27	3,873	10.30	204.30	3855.89	3855.89	-239.07	-70.55		-83.29	265.68			0.32	-0.32
28	3,967	10.00	204.20	3948.42	3948.42	-254.17	-77.35		-94.88	281.31			0.54	-0.54
29	4,060	9.50	204.20	4040.08	4040.08	-268.54	-83.81		-105.19	314.01			0.83	0.59
30	4,248	10.60	197.80	4225.20	4225.20	-299.15	-95.45		-110.25	347.77			0.21	-0.21
31	4,435	10.20	198.00	4409.12	4409.12	-331.28	-105.83		-116.03	364.32			0.11	0.11
32	4,528	10.30	197.80	4500.64	4500.64	-347.02	-110.91			382.17			1.46	1.38
33	4,622	11.60	200.10	4592.93	4592.93	-363.90	-116.73							



SURVEY CALCULATION PROGRAM

6/29/17 12:04

Company:	Matador Production Company		
Well Name:	Paul 25-24S-28E RB 225H		
Location:	Eddy County, NM		
Rig:	Patterson #297		
Job Number:	DDMO-170370		
API #:	30-015-43723		

REFERENCED TO GRID NORTH

Magnetic Declination: 7.25

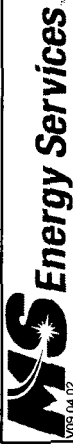
Proposed Direction: 90.11

Vertical Section Azimuth: 90.11

Survey Calculation Method:

Minimum Curvature

#	Depth Feet	Inc		Azim	TVD		Feet	N/S	AZM	TVD E/W	Surface		Distance	E/W Closure	Azim	DLS/ 100'	BUR/ 100'
		MD	15,568		INC	89.7											
34	4,809		10.90			198.80	4776.33										
35	4,996		10.80			201.90	4959.99										
36	5,184		8.60			200.10	5145.29										
37	5,277		9.60			200.00	5237.12										
38	5,371		9.20			199.70	5329.86										
39	5,558		8.90			199.70	5514.53										
40	5,745		7.60			200.60	5699.59										
41	5,932		5.30			194.30	5885.40										
42	6,120		2.40			172.80	6072.96										
43	6,307		0.30			223.90	6259.90										
44	6,494		0.60			222.50	6446.90										
45	6,681		1.50			246.40	6633.86										
46	6,869		1.50			179.80	6821.81										
47	7,056		1.00			179.70	7008.77										
48	7,243		0.90			184.40	7195.71										
49	7,337		0.50			173.70	7289.68										
50	7,524		1.40			177.10	7476.65										
51	7,618		0.20			36.90	7570.65										
52	7,711		2.00			347.30	7663.63										
53	7,898		1.00			339.50	7850.56										
54	8,085		0.70			110.20	8037.55										
55	8,272		0.50			158.60	8224.54										
56	8,459		0.30			57.50	8411.54										
57	8,553		0.30			348.90	8505.54										
58	8,740		1.00			168.20	8692.53										
59	8,927		0.60			304.60	8879.52										
60	9,021		0.70			305.70	8973.51										
61	9,208		0.70			264.70	9160.50										
62	9,395		0.70			206.00	9347.49										
63	9,582		0.30			150.50	9534.48										
64	9,770		0.50			163.90	9722.48										
65	9,957		0.60			234.20	9909.47										
66	10,079		0.90			276.20	10031.46										
67	10,162		2.70			85.50	10114.44										



SURVEY CALCULATION PROGRAM

6/29/17 12:04

Company: Matador Production Company
Well Name: Paul 25-24S-28E RB 225H
Location: Eddy County, NM
Rig: Patterson #297
Job Number: DDMO-170370
API #: 30-015-43723

Magnetic Declination: 7.25



REFERENCED TO GRID NORTH

Vertical Section Azimuth: 90.11

Proposed Direction: 90.11

Survey Calculation Method: Minimum Curvature

#	Depth Feet	Inc		Azimuth Degrees	TVD Feet	N/S	AZM	TVD Feet	E/W	Surface		Distance	Closure		DLS/ 100'	BUR/ 100'
		MD	15.568							10808.5	-592.03		4868.96	VS		

68	10,209	9.40	86.20	10161.15	-599.15		87	-195.19	198.04	630.14	198.04	14.26	14.26			
69	10,256	15.90	84.80	10206.98	-598.31			-184.94	197.18	626.24	197.18	13.84	13.84			
70	10,303	20.50	80.60	10251.62	-596.38			-170.40	195.95	620.24	195.95	10.17	10.17			
71	10,350	23.30	82.80	10295.23	-593.87			-153.05	194.45	613.27	194.45	6.21	6.21			
72	10,396	26.20	85.60	10337.00	-591.95			-133.90	192.75	606.90	192.75	6.80	6.80			
73	10,443	28.90	90.40	10378.67	-591.23			-112.19	190.74	601.78	190.74	7.43	7.43			
74	10,490	33.10	93.00	10418.95	-591.98			-88.00	188.46	598.49	188.46	9.38	9.38			
75	10,537	38.40	93.80	10457.08	-593.62			-60.60	185.83	596.71	185.83	11.32	11.32			
76	10,584	43.20	94.30	10492.65	-595.80			-29.98	182.88	596.55	182.88	10.24	10.24			
77	10,631	47.40	94.50	10525.70	-598.36			3.32	179.68	598.37	179.68	8.94	8.94			
78	10,677	52.20	92.50	10555.39	-600.49			38.38	176.34	601.71	176.34	10.95	10.95			
79	10,724	55.10	88.20	10583.25	-599.20			76.21	172.77	605.51	172.77	9.61	9.61			
80	10,771	59.50	87.50	10608.63	-599.20			115.73	169.07	610.27	169.07	9.45	9.45			
81	10,818	63.70	87.90	10630.98	-597.54			157.03	165.28	617.83	165.28	8.97	8.97			
82	10,865	69.20	90.10	10649.76	-596.81			200.09	161.47	629.46	161.47	12.46	12.46			
83	10,912	73.30	91.60	10664.86	-597.48			244.58	157.74	645.60	157.74	9.23	9.23			
84	10,950	77.00	97.80	10674.61	-600.50			281.16	154.91	663.06	154.91	18.53	18.53			
85	11,010	77.60	98.90	10687.80	-609.00			339.07	150.89	697.03	150.89	2.05	2.05			
86	11,041	76.60	100.40	10694.72	-614.07			368.85	149.01	716.33	149.01	5.71	5.71			
87	11,074	74.00	103.00	10703.10	-620.53			400.11	147.19	738.34	147.19	10.96	10.96			
88	11,106	72.00	106.20	10712.45	-628.24			429.72	145.63	761.15	145.63	11.42	11.42			
89	11,137	72.50	106.20	10721.90	-636.48			458.07	144.26	784.18	144.26	1.61	1.61			
90	11,169	74.90	104.70	10730.89	-644.66			487.67	142.89	808.33	142.89	8.75	8.75			
91	11,200	76.70	103.10	10738.49	-651.87			516.84	141.59	831.90	141.59	7.66	7.66			
92	11,232	79.00	101.40	10745.23	-658.51			547.41	140.26	856.32	140.26	8.87	8.87			
93	11,263	81.00	99.60	10750.61	-664.07			577.42	138.99	880.00	138.99	8.62	8.62			
94	11,295	85.40	94.60	10754.40	-667.99			608.94	137.65	903.89	137.65	20.73	20.73			
95	11,391	94.60	84.00	10754.40	-666.82			704.69	133.42	970.17	133.42	14.61	14.61			
96	11,485	93.90	83.60	10747.43	-656.70			797.88	129.46	1033.38	129.46	0.86	0.86			
97	11,579	93.50	82.60	10741.37	-645.43			891.01	125.92	1100.21	125.92	1.14	1.14			
98	11,673	93.40	82.20	10735.71	-633.02			984.01	122.75	1170.04	122.75	0.44	0.44			
99	11,767	92.20	83.40	10731.12	-621.25			1077.16	119.97	1243.47	119.97	1.80	1.80			
100	11,862	89.70	83.70	10729.54	-610.58			1171.53	117.53	1321.10	117.53	2.65	2.65			
101	11,956	87.90	84.70	10731.51	-601.08			1266.18	115.41	1400.57	115.41	2.19	2.19			



SURVEY CALCULATION PROGRAM

6/29/17 12:04

Company:	Matador Production Company		
Well Name:	Paul 25-24S-28E RB 225H		
Location:	Eddy County, NM		
Rig:	Patterson #297		
Job Number:	DDMO-170370		
API #:	30-015-43723		
Vertical Section Azimuth:	90.11		

REFERENCED TO GRID NORTH

Magnetic Declination: 7.25

Proposed Direction: 90.11

Survey Calculation Method: Minimum Curvature

PTB:	MD		INC		AZM		TVD		N/S		E/W		VS		
	15.568		89.7		87		10808.5		-592.03		4868.96		4870.09		
#	Depth	Inc	Degrees	Azm	TVD	Feet	N/S	Feet	E/W	Surface	Vert Sec	Distance	Closure	DLS/ 100'	BUR/ 100'
102	12,051	89.90	87.50		10733.34		-594.63	1359.77		1360.91		113.62		3.62	2.11
103	12,145	89.20	86.40		10734.07		-589.62	1453.64		1454.77		1568.67		1.39	-0.74
104	12,240	88.30	86.80		10736.15		-583.99	1548.45		1549.56		1654.91		1.04	-0.95
105	12,334	89.10	86.60		10738.28		-578.58	1642.26		1643.37		1741.20		0.88	0.85
106	12,429	86.80	84.70		10741.68		-571.38	1736.92		1738.01		1828.49		3.14	-2.42
107	12,523	89.80	88.00		10744.47		-565.41	1830.66		1831.75		1915.99		4.74	3.19
108	12,618	87.20	87.30		10746.95		-561.51	1925.54		1926.62		2065.75		2.83	-2.74
109	12,649	87.60	90.00		10748.36		-560.78	1956.50		1957.57		2035.28		8.80	1.29
110	12,680	88.30	91.00		10749.47		-561.05	1987.48		1988.55		2065.15		3.94	2.26
111	12,712	87.70	90.60		10750.58		-561.50	2019.46		2020.53		2096.06		2.25	-1.87
112	12,806	88.10	92.30		10754.03		-563.88	2113.36		2114.44		2187.29		1.86	0.43
113	12,900	86.30	90.90		10758.62		-566.50	2207.20		2208.29		2278.74		2.42	-1.91
114	12,994	87.30	93.70		10763.87		-570.27	2300.97		2302.06		2370.58		3.16	1.06
115	13,088	87.00	93.90		10768.54		-576.49	2394.65		2395.75		2463.06		0.38	-0.32
116	13,151	88.60	94.60		10770.96		-581.15	2457.43		2458.54		2525.21		2.77	2.54
117	13,182	90.10	94.90		10771.31		-583.72	2488.32		2489.43		2555.87		4.93	4.84
118	13,276	93.70	96.20		10768.20		-592.80	2581.81		2582.94		2648.99		4.07	3.83
119	13,370	93.70	94.60		10762.13		-601.63	2675.19		2676.34		2742.01		1.70	0.00
120	13,465	94.10	93.60		10755.67		-608.41	2769.73		2770.89		2835.76		1.13	0.42
121	13,559	93.20	91.70		10749.68		-612.74	2863.43		2864.60		2928.26		2.23	-0.96
122	13,653	93.00	90.40		10744.60		-614.46	2957.28		2958.45		3020.44		1.40	-0.21
123	13,747	86.00	86.40		10745.42		-611.84	3051.16		3052.33		3111.90		8.58	-7.45
124	13,842	83.70	85.70		10753.95		-605.33	3145.54		3146.70		3203.26		2.53	-2.42
125	13,937	83.90	87.00		10764.21		-599.32	3239.79		3240.94		3294.76		1.38	0.21
126	14,031	84.70	88.00		10773.54		-595.24	3333.24		3334.38		3385.97		1.36	0.85
127	14,125	90.10	91.50		10777.81		-594.83	3427.09		3428.23		3478.33		6.84	5.74
128	14,220	87.40	89.70		10779.88		-595.83	3522.05		3523.19		3572.09		3.42	-2.84
129	14,314	86.50	90.70		10784.88		-596.15	3615.92		3617.05		3664.73		1.43	-0.96
130	14,408	87.80	91.70		10789.56		-598.12	3709.77		3710.92		3757.68		1.74	1.38
131	14,502	88.00	91.90		10793.00		-601.07	3803.67		3804.81		3850.86		0.30	0.21
132	14,596	87.40	91.70		10796.77		-604.02	3897.54		3898.70		3944.07		0.67	-0.64
133	14,691	87.40	90.00		10801.08		-605.43	3992.43		3993.59		4038.08		1.79	0.00
134	14,785	89.40	91.90		10803.71		-606.99	4086.37		4087.53		4131.21		2.93	2.13
135	14,880	89.90	91.70		10804.29		-609.97	4181.32		4182.49		4225.58		0.57	0.53



SURVEY CALCULATION PROGRAM

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Company:	Matador Production Company
Well Name:	Paul 25-24S-28E RB 225H
Location:	Eddy County, NM
Rig:	Patterson #297
Job Number:	DDMO-170370
API #:	30-015-43723

REFERENCED TO GRID NORTH

Magnetic Declination: 7.25

Proposed Direction: 90.11

Vertical Section Azimuth:	90.11
Survey Calculation Method:	Minimum Curvature

#	Depth		Inc		Azimuth		TVD		N/S		Feet		E/W		Surface		Distance		Closure		DLS/		BUR/	
	Feet	Inc	Degrees	Degrees	Azm	Degrees	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	100'	100'	100'	100'
PTB:	15,568	MD	15,568	89.7	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
136	14,974	88.80	87.30	10805.36	-609.15	4275.29	4318.47	98.11	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82
137	15,068	89.30	88.00	10806.91	-605.30	4369.20	4410.93	97.89	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
138	15,162	89.70	89.50	10807.73	-603.25	4463.17	4503.75	97.70	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
139	15,256	89.30	88.00	10808.55	-601.20	4557.14	4596.62	97.52	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
140	15,351	90.40	89.50	10808.80	-599.13	4652.11	4690.53	97.34	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
141	15,445	90.40	88.80	10808.15	-597.73	4746.10	4783.59	97.18	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
142	15,492	89.70	87.00	10808.11	-596.01	4793.06	4829.98	97.09	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11
PTB:	15,568	89.70	87.00	10808.50	-592.03	4868.96	4904.82	96.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00