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NM OIL CONSERVATION

ARTESIA DISTRICT

SEP 07 2017

RECEIVED

Survey Company: MS Energy Services
MWD Surveyor Name: Chris Morasch
Survey Type: MWD
Operating Company: Matador Production Company
Well Name & Number: Jim Tom Lontos 30-23S-28E RB 206H
API Number: 30-015-44139
Surveyed Depths: 143' – 14,447' MD; PTB: 14,504'
Dates Performed: 06/03/2017 – 06/28/2017
Location: Eddy County, NM

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: Christopher Morasch
Title: MWD Field Specialist
Date: 07-25-2017
Email: cmorasch@msenergyservices.com

SURVEY CALCULATION PROGRAM

7/25/17 13:21

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 07 2017

REFERENCED TO GRID NORTH

RECEIVED

Company:		Matador Production Company									
Well Name:		Jim Tom Lontos 30-23S-28E RB 206H									
Location:		Eddy County, NM									
Rig:		Patterson #810									
Job Number:		DDMO-170516									
API #:		30-015-44139									
Vertical Section Azimuth:		0.13									
Survey Calculation Method:		Minimum Curvature									
PTB:	MD	INC									
	14,504	91.9									
#	Depth	Inc	Azm	TVD	N/S	TVD	N/S	Surface	Closure	DLS/	BUR/
	Feet	Degrees	Degrees	Feet	Feet	Feet	Vert Sec	Distance	Azm	100	100'
TIE IN											
1	143	0.30	132.70	143.00	-0.25	0.00	-0.25	0.37	132.70	0.21	0.21
2	329	0.30	93.80	329.00	-0.62	1.12	-0.61	1.28	118.85	0.11	0.00
3	502	0.30	74.10	501.99	-0.52	2.01	-0.52	2.07	104.59	0.06	0.00
4	610	1.10	17.80	609.99	0.54	2.60	0.55	2.65	78.20	0.89	0.74
5	792	1.40	27.30	791.94	4.18	4.15	4.19	5.89	44.78	0.20	0.16
6	979	2.20	161.40	978.90	2.81	6.34	2.82	6.94	66.11	1.78	0.43
7	1,169	1.90	152.10	1168.78	-3.43	8.98	-3.41	9.61	110.91	0.24	-0.16
8	1,359	2.80	154.00	1358.62	-10.39	12.49	-10.36	16.24	129.75	0.48	0.47
9	1,550	3.90	163.70	1549.29	-20.81	16.36	-20.78	26.47	141.84	0.65	0.58
10	1,740	5.10	158.40	1738.70	-34.87	21.28	-34.82	40.85	148.61	0.67	0.63
11	1,930	5.30	148.30	1927.92	-50.19	29.00	-50.12	57.96	149.98	0.49	0.11
12	2,120	5.20	141.40	2117.13	-64.38	38.98	-64.29	75.26	148.81	0.34	-0.05
13	2,311	5.80	138.70	2307.25	-78.40	50.75	-78.28	93.39	147.08	0.34	0.31
14	2,499	4.60	141.40	2494.47	-91.42	61.72	-91.28	110.31	145.98	0.65	-0.64
15	2,694	4.40	141.20	2688.87	-103.37	71.29	-103.20	125.57	145.41	0.10	-0.10
16	2,883	6.50	142.50	2877.00	-117.50	82.35	-117.32	143.49	144.98	1.11	1.11
17	3,073	8.20	146.00	3065.44	-137.27	96.47	-137.05	167.78	144.90	0.92	0.89
18	3,264	9.00	144.90	3254.29	-160.79	112.68	-160.53	196.34	144.98	0.43	0.42
19	3,454	8.50	145.60	3442.08	-184.53	129.16	-184.24	225.24	145.01	0.27	-0.26
20	3,645	9.40	152.50	3630.75	-210.02	144.33	-209.69	254.83	145.50	0.73	0.47
21	3,835	10.20	149.60	3817.98	-238.29	160.01	-237.93	287.03	146.12	0.49	0.42
22	4,025	10.00	149.80	4005.04	-267.06	176.82	-266.65	320.29	146.49	0.11	-0.11
23	4,214	9.60	150.00	4191.28	-294.89	192.96	-294.45	352.41	146.80	0.21	-0.21
24	4,405	8.50	149.50	4379.90	-320.84	208.09	-320.37	382.41	147.03	0.58	-0.58
25	4,595	9.30	147.40	4567.61	-345.88	223.48	-345.37	411.80	147.13	0.45	0.42
26	4,786	7.10	147.80	4756.64	-368.87	238.09	-368.33	439.04	147.16	1.15	-1.15
27	4,976	5.80	147.10	4945.44	-386.87	249.56	-386.30	460.38	147.17	0.69	-0.68
28	5,166	6.30	142.70	5134.38	-403.22	261.10	-402.63	480.37	147.08	0.36	0.26
29	5,357	5.10	140.90	5324.43	-418.15	272.80	-417.53	499.27	146.88	0.64	-0.63
30	5,547	4.10	138.00	5513.82	-429.75	282.67	-429.10	514.38	146.66	0.54	-0.53
31	5,738	3.30	136.50	5704.42	-438.81	291.03	-438.15	526.54	146.45	0.42	-0.42
32	5,927	1.00	162.30	5893.28	-444.33	295.27	-443.66	533.49	146.39	1.29	-1.22
33	6,117	0.80	100.10	6083.26	-446.14	297.08	-445.46	536.00	146.34	0.50	-0.11

V09.04.02

Company: Matador Production Company

Well Name: Jim Tom Lontos 30-23S-28E RB 206H

Location: Eddy County, NM

Rigi: Patterson #810

Job Number: DDMO-170516

API #: 30-015-44139

Vertical Section Azimuth:

Survey Calculation Method:

PTB:

MD 14,504

Depth

#

Minimum Curvature

INC 91.9

AZM 357.3

TVD 6273.25

Feet

Degrees

Azim

Degrees

Inc

Degrees

TVD 6463.19

Feet

N/S

AZM -447.84

Feet

TVD 292.10

Feet

N/S

AZM -448.61

Feet

TVD 288.04

Feet

N/S

AZM -449.26

Feet

TVD 285.93

Feet

N/S

AZM -450.49

Feet

TVD 285.09

Feet

N/S

AZM -451.12

Feet

TVD 283.51

Feet

N/S

AZM -452.48

Feet

TVD 282.81

Feet

N/S

AZM -453.16

Feet

Magnetic Declination: 7.17

REFERENCED TO GRID NORTH

Proposed Direction: 0.13

TVD 9450.54

Feet

N/S

AZM -446.06

Feet

TVD 296.43

Feet

N/S

AZM -447.17

Feet

TVD 288.04

Feet

N/S

AZM -448.61

Feet

TVD 285.93

Feet

N/S

AZM -449.26

Feet

TVD 285.09

Feet

N/S

AZM -450.49

Feet

TVD 283.51

Feet

N/S

AZM -451.12

Feet

TVD 282.81

Feet

N/S

AZM -452.48

Feet

TVD 281.15

Feet

N/S

AZM -453.16

Feet

TVD 321.13

Feet

N/S

AZM -454.89

34 6,307 1.20 259.50 6273.25 -446.73 296.43 -446.06 536.14 146.43 1.04 0.21

35 6,497 1.50 252.70 6463.19 -447.84 292.10 -447.17 534.68 146.89 0.18 0.16

36 6,687 1.10 247.80 6653.14 -449.26 288.04 -448.61 533.67 147.33 0.22 -0.21

37 6,878 0.40 217.50 6844.13 -450.49 285.93 -449.84 533.57 147.60 0.41 -0.37

38 7,068 1.30 191.70 7034.10 -451.12 285.09 -452.48 535.35 147.82 0.50 0.47

▶



SUBVEY CAL CILLATION PROGRAM

V08 04 02	
Company:	Matador Production Company
Well Name:	Jim Tom Lontos 30-23S-28E RB 206H
Location:	Eddy County, NM
Rig:	Paterson #810
Job Number:	DDMO-170516
API #:	30-015-44139

Magnetic Declination:	7.17
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REFERENCED TO GRID NORTH

Vertical Section Azimuth:

0.13

Proposed Direction:

0.13

Survey Calculation Method:	Minimum Curvature
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	MD	INC	AZM	TYD	N/S	E/W	VS
PTB:	14,504	91.9	357.3	9450.54	4860.25	289.51	4860.89

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100'	BUR/ 100'
68	9,941	88.80	359.30	9430.98	300.03	320.88	300.75	439.29	46.92	3.57	3.51
69	10,035	89.50	359.30	9432.37	394.01	319.73	394.73	507.41	39.06	0.74	0.74
70	10,129	90.40	358.60	9432.45	487.99	318.01	488.71	582.46	33.09	1.21	0.96
71	10,223	89.70	359.70	9432.37	581.98	316.61	582.69	662.53	28.55	1.39	-0.74
72	10,317	89.70	359.60	9432.86	675.97	316.04	676.69	746.20	25.06	0.11	0.00
73	10,411	88.20	358.60	9434.58	769.94	314.56	770.65	831.72	22.22	1.92	-1.60
74	10,505	89.00	359.20	9436.88	863.90	312.76	864.60	918.77	19.90	1.06	0.85
75	10,599	89.40	358.20	9438.19	957.86	310.62	958.56	1006.97	17.97	1.15	0.43
76	10,694	88.80	357.90	9439.69	1052.79	307.39	1053.49	1096.75	16.28	0.71	-0.63
77	10,788	89.60	357.70	9441.00	1146.72	303.78	1147.40	1186.27	14.84	0.88	0.85
78	10,882	90.70	358.60	9440.75	1240.66	300.75	1241.34	1276.60	13.63	1.51	1.17
79	10,976	90.20	358.50	9440.01	1334.63	298.37	1335.30	1367.58	12.60	0.54	-0.53
80	11,070	91.30	358.90	9438.78	1428.60	296.24	1429.26	1458.99	11.72	1.25	1.17
81	11,163	89.10	357.90	9438.46	1521.55	293.64	1522.21	1549.63	10.92	2.60	-2.37
82	11,258	90.90	358.30	9438.46	1616.50	290.49	1617.15	1642.39	10.19	1.94	1.89
83	11,353	90.40	358.60	9437.38	1711.46	287.92	1712.10	1735.51	9.55	0.61	-0.53
84	11,446	87.60	357.40	9439.00	1804.37	284.68	1805.01	1826.69	8.97	3.28	-3.01
85	11,540	91.40	359.90	9439.82	1898.32	282.47	1898.95	1919.22	8.46	4.84	4.04
86	11,633	86.00	357.70	9441.93	1991.23	280.52	1991.87	2010.90	8.02	6.27	-5.81
87	11,727	86.20	358.30	9448.33	2084.96	277.25	2085.58	2103.31	7.57	0.67	0.21
88	11,821	87.10	359.30	9453.82	2178.78	275.28	2179.39	2196.10	7.20	1.43	0.96
89	11,915	89.20	1.10	9456.85	2272.72	275.61	2273.34	2289.37	6.91	2.94	2.23
90	12,009	90.50	2.20	9457.10	2366.67	278.32	2367.30	2382.98	6.71	1.81	1.38
91	12,103	90.60	2.50	9456.20	2460.59	282.17	2461.22	2476.72	6.54	0.34	0.11
92	12,196	89.80	2.20	9455.87	2553.51	285.99	2554.15	2569.48	6.39	0.92	-0.86
93	12,290	90.10	2.60	9455.96	2647.43	289.92	2648.08	2663.26	6.25	0.53	0.32
94	12,384	90.90	3.20	9455.14	2741.30	294.68	2741.96	2757.10	6.14	1.06	0.85
95	12,478	88.50	1.30	9455.63	2835.22	298.37	2835.89	2850.87	6.01	3.26	-2.55
96	12,571	90.80	2.00	9456.20	2928.17	301.05	2928.85	2943.61	5.87	2.59	2.47
97	12,666	88.60	358.90	9456.69	3023.15	301.79	3023.83	3038.18	5.70	4.00	-2.32
98	12,760	89.40	359.70	9458.33	3117.13	300.64	3117.80	3131.59	5.51	1.20	0.85
99	12,855	91.70	1.50	9457.42	3212.11	301.64	3212.78	3226.24	5.36	3.07	2.42
100	12,948	90.60	0.30	9455.56	3305.07	303.10	3305.75	3318.94	5.24	1.75	-1.18
101	13,042	89.10	359.70	9455.80	3399.07	303.10	3399.75	3412.56	5.10	1.72	-1.60

V09.04.02

Company:		Matador Production Company			
Well Name:		Jim Tom Lontos 30-23S-28E RB 206H			
Location:		Eddy County, NM			
Rig:		Patterson #810		Magnetic Declination: 7.17	
Job Number:		DDMO-170516		REFERENCED TO GRID NORTH	
API #:		30-015-44139			
Vertical Section Azimuth:		0.13		Proposed Direction: 0.13	
Survey Calculation Method:		Minimum Curvature			
PTB:	MD	INC		TVD	
	14,504	91.9		351.3	
#	Depth	Inc	Azm	TVD	N/S
	Feet	Degrees	Degrees	Feet	Feet
102	13,137	91.70	1.50	9455.14	3494.05
103	13,231	90.10	359.10	9453.66	3588.03
104	13,325	90.60	359.80	9453.09	3682.02
105	13,420	89.60	359.30	9452.92	3777.02
106	13,514	87.90	0.10	9454.97	3870.99
107	13,608	88.40	0.80	9458.01	3964.94
108	13,703	88.50	0.10	9460.58	4059.90
109	13,797	88.50	0.20	9463.04	4153.86
110	13,892	89.60	359.70	9464.61	4248.85
111	13,986	88.40	358.40	9466.25	4342.82
112	14,080	91.40	359.00	9466.42	4436.78
113	14,175	90.60	359.00	9464.76	4531.75
114	14,269	94.00	359.70	9460.99	4625.66
115	14,363	92.50	357.90	9455.66	4719.48
116	14,447	91.90	357.30	9452.43	4803.34
PTB:	14,504	91.90	357.30	9450.54	4860.25
				TVD	
				E/W	
				Surface	
				Vert Sec	
				Distance	
				Closure	
				Azimuth	
				DLS/	
				BUR/	
				100'	
				100'	
				VS	
				4860.89	
				2.74	
				-1.70	
				0.53	
				-1.05	
				-1.81	
				0.53	
				0.11	
				0.00	
				1.16	
				3.98	
				1.88	
				3.25	
				0.84	
				3.68	
				3.69	
				2.49	
				-1.60	
				-0.71	
				0.00	