



7821 Will Rogers Blvd.  
Fort Worth, Texas 76140

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817.568.1499 (fax)  
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Survey Company: MS Energy Services  
MWD Surveyor Name: Tim Little  
Survey Type: MWD  
Operating Company: Matador Production Co.  
Well Name & Number: Kathy Coleman 14-23S-27E RB 206H  
API Number: 30-015-44057  
Surveyed Depths: 140' – 14,081' MD; PTB: 14,154'  
Dates Performed: 03/14/2017 – 04/11/2017  
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: Tim Little  
Title: MWD Field Specialist  
Date: 2017-05-02  
Email: tlittle@msenergyservices.com



## 5/2/17 17:14

REFERENCED TO GRID NORTH

|                     |        |
|---------------------|--------|
| Proposed Direction: | 269.77 |
|---------------------|--------|

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

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| TVD | N/S |
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|        |        |
|--------|--------|
| 912232 | -16812 |
|--------|--------|

|          |          |
|----------|----------|
| DATE: 02 | TIME: 12 |
| Surface  |          |

| Feet | Vert Sec |
|------|----------|
| 10   | 10       |
| 20   | 20       |
| 30   | 30       |
| 40   | 40       |
| 50   | 50       |
| 60   | 60       |
| 70   | 70       |
| 80   | 80       |
| 90   | 90       |
| 100  | 100      |
| 110  | 110      |
| 120  | 120      |
| 130  | 130      |
| 140  | 140      |
| 150  | 150      |
| 160  | 160      |
| 170  | 170      |
| 180  | 180      |
| 190  | 190      |
| 200  | 200      |
| 210  | 210      |
| 220  | 220      |
| 230  | 230      |
| 240  | 240      |
| 250  | 250      |
| 260  | 260      |
| 270  | 270      |
| 280  | 280      |
| 290  | 290      |
| 300  | 300      |
| 310  | 310      |
| 320  | 320      |
| 330  | 330      |
| 340  | 340      |
| 350  | 350      |
| 360  | 360      |
| 370  | 370      |
| 380  | 380      |
| 390  | 390      |
| 400  | 400      |
| 410  | 410      |
| 420  | 420      |
| 430  | 430      |
| 440  | 440      |
| 450  | 450      |
| 460  | 460      |
| 470  | 470      |
| 480  | 480      |
| 490  | 490      |
| 500  | 500      |
| 510  | 510      |
| 520  | 520      |
| 530  | 530      |
| 540  | 540      |
| 550  | 550      |
| 560  | 560      |
| 570  | 570      |
| 580  | 580      |
| 590  | 590      |
| 600  | 600      |
| 610  | 610      |
| 620  | 620      |
| 630  | 630      |
| 640  | 640      |
| 650  | 650      |
| 660  | 660      |
| 670  | 670      |
| 680  | 680      |
| 690  | 690      |
| 700  | 700      |
| 710  | 710      |
| 720  | 720      |
| 730  | 730      |
| 740  | 740      |
| 750  | 750      |
| 760  | 760      |
| 770  | 770      |
| 780  | 780      |
| 790  | 790      |
| 800  | 800      |
| 810  | 810      |
| 820  | 820      |
| 830  | 830      |
| 840  | 840      |
| 850  | 850      |
| 860  | 860      |
| 870  | 870      |
| 880  | 880      |
| 890  | 890      |
| 900  | 900      |
| 910  | 910      |
| 920  | 920      |
| 930  | 930      |
| 940  | 940      |
| 950  | 950      |
| 960  | 960      |
| 970  | 970      |
| 980  | 980      |
| 990  | 990      |
| 1000 | 1000     |

0.00

0.24  
-0.24

|      |       |
|------|-------|
| 0.72 | -0.72 |
|------|-------|

|      |      |
|------|------|
| 6.72 | 4.44 |
| 6.72 | 4.44 |

|      |      |
|------|------|
| 7.25 | 7.26 |
|------|------|

|      |      |
|------|------|
| 1.20 | 1.20 |
| -723 | -725 |

|      |      |
|------|------|
| 1.23 | 1.23 |
| 1.26 | 1.26 |

|      |      |
|------|------|
| 4.20 | 4.20 |
| 2.64 | 2.70 |

|       |        |
|-------|--------|
| 2.10  | -2.04  |
| 12.86 | -12.77 |

|       |        |
|-------|--------|
| 24.63 | -12.11 |
| 24.63 | -12.11 |

|       |        |
|-------|--------|
| 24.02 | -24.02 |
| 37.67 | 37.67  |

|       |        |
|-------|--------|
| 37.07 | -37.34 |
| E2 31 | E2 16  |

|       |        |
|-------|--------|
| 33.31 | -33.10 |
| 67.70 | 67.54  |

|       |        |
|-------|--------|
| 67.70 | -01.34 |
| 79.40 | 79.34  |

|       |        |
|-------|--------|
| 70.49 | -70.31 |
| 01.03 | 00.03  |

|        | 91.03 | -90.83 |
|--------|-------|--------|
| 100.00 |       |        |

|        | 106.24 | -106.02 |
|--------|--------|---------|
| 106.24 |        |         |
| 106.74 |        |         |

|        |         |
|--------|---------|
|        | -126.71 |
| 126.98 |         |
| 154.22 |         |

|        |         |
|--------|---------|
| 152.27 | -151.96 |
| 177.35 | 177.50  |

|           |           |
|-----------|-----------|
| $-177.85$ | $-177.52$ |
|-----------|-----------|

|         | 2022.20 | -201.85 |
|---------|---------|---------|
| 2022.20 |         |         |
| -201.85 |         |         |

224.46 -224.09

|    | 248.59 | -248.19 |
|----|--------|---------|
| 0  | 0      | 0       |
| 1  | 0      | 0       |
| 2  | 0      | 0       |
| 3  | 0      | 0       |
| 4  | 0      | 0       |
| 5  | 0      | 0       |
| 6  | 0      | 0       |
| 7  | 0      | 0       |
| 8  | 0      | 0       |
| 9  | 0      | 0       |
| 10 | 0      | 0       |
| 11 | 0      | 0       |
| 12 | 0      | 0       |
| 13 | 0      | 0       |
| 14 | 0      | 0       |
| 15 | 0      | 0       |
| 16 | 0      | 0       |
| 17 | 0      | 0       |
| 18 | 0      | 0       |
| 19 | 0      | 0       |
| 20 | 0      | 0       |
| 21 | 0      | 0       |
| 22 | 0      | 0       |
| 23 | 0      | 0       |
| 24 | 0      | 0       |
| 25 | 0      | 0       |
| 26 | 0      | 0       |
| 27 | 0      | 0       |
| 28 | 0      | 0       |
| 29 | 0      | 0       |
| 30 | 0      | 0       |
| 31 | 0      | 0       |
| 32 | 0      | 0       |
| 33 | 0      | 0       |
| 34 | 0      | 0       |
| 35 | 0      | 0       |
| 36 | 0      | 0       |
| 37 | 0      | 0       |
| 38 | 0      | 0       |
| 39 | 0      | 0       |
| 40 | 0      | 0       |
| 41 | 0      | 0       |
| 42 | 0      | 0       |
| 43 | 0      | 0       |
| 44 | 0      | 0       |
| 45 | 0      | 0       |
| 46 | 0      | 0       |
| 47 | 0      | 0       |
| 48 | 0      | 0       |
| 49 | 0      | 0       |
| 50 | 0      | 0       |
| 51 | 0      | 0       |
| 52 | 0      | 0       |
| 53 | 0      | 0       |
| 54 | 0      | 0       |
| 55 | 0      | 0       |
| 56 | 0      | 0       |
| 57 | 0      | 0       |
| 58 | 0      | 0       |
| 59 | 0      | 0       |
| 60 | 0      | 0       |
| 61 | 0      | 0       |
| 62 | 0      | 0       |
| 63 | 0      | 0       |
| 64 | 0      | 0       |
| 65 | 0      | 0       |
| 66 | 0      | 0       |
| 67 | 0      | 0       |
| 68 | 0      | 0       |
| 69 | 0      | 0       |
| 70 | 0      | 0       |
| 71 | 0      | 0       |
| 72 | 0      | 0       |
| 73 | 0      | 0       |
| 74 | 0      | 0       |
| 75 | 0      | 0       |
| 76 | 0      | 0       |
| 77 | 0      | 0       |
| 78 | 0      | 0       |
| 79 | 0      | 0       |
| 80 | 0      | 0       |
| 81 | 0      | 0       |
| 82 | 0      | 0       |
| 83 | 0      | 0       |
| 84 | 0      | 0       |
| 85 | 0      | 0       |
| 86 | 0      | 0       |
| 87 | 0      | 0       |
| 88 | 0      | 0       |
| 89 | 0      | 0       |
| 90 | 0      | 0       |
| 91 | 0      | 0       |
| 92 | 0      | 0       |
| 93 | 0      | 0       |
| 94 | 0      | 0       |
| 95 | 0      | 0       |
| 96 | 0      | 0       |
| 97 | 0      | 0       |
| 98 | 0      | 0       |
| 99 | 0      | 0       |

276.28 -275.85

303.18 -302.71

326.91 -326.41

|        |         |
|--------|---------|
| 349.08 | -348.55 |
|--------|---------|

|        |         |
|--------|---------|
| 370.53 | -369.96 |
|--------|---------|

|        |         |
|--------|---------|
| 388.26 | -387.66 |
|--------|---------|

|        |         |
|--------|---------|
| 401.91 | -401.30 |
|--------|---------|

|  |   |        |         |
|--|---|--------|---------|
|  | - | 409.39 | -408.77 |
|--|---|--------|---------|

| Year | 411.93 | -411.31 |
|------|--------|---------|
| 1985 | 411.93 | -411.31 |
| 1986 | 411.93 | -411.31 |
| 1987 | 411.93 | -411.31 |
| 1988 | 411.93 | -411.31 |
| 1989 | 411.93 | -411.31 |
| 1990 | 411.93 | -411.31 |
| 1991 | 411.93 | -411.31 |
| 1992 | 411.93 | -411.31 |
| 1993 | 411.93 | -411.31 |
| 1994 | 411.93 | -411.31 |
| 1995 | 411.93 | -411.31 |
| 1996 | 411.93 | -411.31 |
| 1997 | 411.93 | -411.31 |
| 1998 | 411.93 | -411.31 |
| 1999 | 411.93 | -411.31 |
| 2000 | 411.93 | -411.31 |
| 2001 | 411.93 | -411.31 |
| 2002 | 411.93 | -411.31 |
| 2003 | 411.93 | -411.31 |
| 2004 | 411.93 | -411.31 |
| 2005 | 411.93 | -411.31 |
| 2006 | 411.93 | -411.31 |
| 2007 | 411.93 | -411.31 |
| 2008 | 411.93 | -411.31 |
| 2009 | 411.93 | -411.31 |
| 2010 | 411.93 | -411.31 |
| 2011 | 411.93 | -411.31 |
| 2012 | 411.93 | -411.31 |
| 2013 | 411.93 | -411.31 |
| 2014 | 411.93 | -411.31 |
| 2015 | 411.93 | -411.31 |
| 2016 | 411.93 | -411.31 |
| 2017 | 411.93 | -411.31 |
| 2018 | 411.93 | -411.31 |
| 2019 | 411.93 | -411.31 |
| 2020 | 411.93 | -411.31 |
| 2021 | 411.93 | -411.31 |
| 2022 | 411.93 | -411.31 |
| 2023 | 411.93 | -411.31 |
| 2024 | 411.93 | -411.31 |
| 2025 | 411.93 | -411.31 |
| 2026 | 411.93 | -411.31 |
| 2027 | 411.93 | -411.31 |
| 2028 | 411.93 | -411.31 |
| 2029 | 411.93 | -411.31 |
| 2030 | 411.93 | -411.31 |
| 2031 | 411.93 | -411.31 |
| 2032 | 411.93 | -411.31 |
| 2033 | 411.93 | -411.31 |
| 2034 | 411.93 | -411.31 |
| 2035 | 411.93 | -411.31 |
| 2036 | 411.93 | -411.31 |
| 2037 | 411.93 | -411.31 |
| 2038 | 411.93 | -411.31 |
| 2039 | 411.93 | -411.31 |
| 2040 | 411.93 | -411.31 |
| 2041 | 411.93 | -411.31 |
| 2042 | 411.93 | -411.31 |
| 2043 | 411.93 | -411.31 |
| 2044 | 411.93 | -411.31 |
| 2045 | 411.93 | -411.31 |
| 2046 | 411.93 | -411.31 |
| 2047 | 411.93 | -411.31 |
| 2048 | 411.93 | -411.31 |
| 2049 | 411.93 | -411.31 |
| 2050 | 411.93 | -411.31 |
| 2051 | 411.93 | -411.31 |
| 2052 | 411.93 | -411.31 |
| 2053 | 411.93 | -411.31 |
| 2054 | 411.93 | -411.31 |
| 2055 | 411.93 | -411.31 |
| 2056 | 411.93 | -411.31 |
| 2057 | 411.93 | -411.31 |
| 2058 | 411.93 | -411.31 |
| 2059 | 411.93 | -411.31 |
| 2060 | 411.93 | -411.31 |
| 2061 | 411.93 | -411.31 |
| 2062 | 411.93 | -411.31 |
| 2063 | 411.93 | -411.31 |
| 2064 | 411.93 | -411.31 |
| 2065 | 411.93 | -411.31 |
| 2066 | 411.93 | -411.31 |
| 2067 | 411.93 | -411.31 |
| 2068 | 411.93 | -411.31 |
| 2069 | 411.93 | -411.31 |
| 2070 | 411.93 | -411.31 |
| 2071 | 411.93 | -411.31 |
| 2072 | 411.93 | -411.31 |
| 2073 | 411.93 | -411.31 |
| 2074 | 411.93 | -411.31 |
| 2075 | 411.93 | -411.31 |
| 2076 | 411.93 | -411.31 |
| 2077 | 411.93 | -411.31 |
| 2078 | 411.93 | -411.31 |
| 2079 | 411.93 | -411.31 |
| 2080 | 411.93 | -411.31 |
| 2081 | 411.93 | -411.31 |
| 2082 | 411.93 | -411.31 |
| 2083 | 411.93 | -411.31 |

|  |        |         |
|--|--------|---------|
|  | 413.37 | -412.75 |
|  |        | -412.86 |

|        |         |
|--------|---------|
| 411.62 | -410.99 |
| 122.72 | 122.82  |

ae 1  
406.73  
-406.09

# SURVEY CALCULATION PROGRAM

5/2/17 17:14

|             |                                  |
|-------------|----------------------------------|
| Company:    | Matador Production Co.           |
| Well Name:  | Kathy Coleman 14-23S-27E RB 206H |
| Location:   | Eddy County, NM                  |
| Rig:        | Patterson #297                   |
| Job Number: | DDMO-170244                      |
| API #:      | 30-015-44057                     |

REFERENCED TO GRID NORTH

Magnetic Declination: 7.32

Proposed Direction: 269.77

|                            |                   |
|----------------------------|-------------------|
| Vertical Section Azimuth:  | 269.77            |
| Survey Calculation Method: | Minimum Curvature |

| PTB: | MD            |                | INC            |             | AZM         |             | TVD                 |          | N/S             |             | E/W          |  | VS     |  |
|------|---------------|----------------|----------------|-------------|-------------|-------------|---------------------|----------|-----------------|-------------|--------------|--|--------|--|
|      | 14,154        |                | 92.5           |             | 269.8       |             | 9122.32             |          | -168.12         |             | -4781.77     |  | 4782.4 |  |
| #    | Depth<br>Feet | Inc<br>Degrees | Azm<br>Degrees | TVD<br>Feet | N/S<br>Feet | E/W<br>Feet | Surface<br>Vert Sec | Distance | Closure<br>Azim | DLS/<br>100 | BUR/<br>100' |  |        |  |
| 34   | 6,313         | 1.80           | 268.00         | 6287.46     | -157.69     | 401.19      | -400.55             | 431.07   | 111.46          | 0.11        | 0.11         |  |        |  |
| 35   | 6,501         | 0.60           | 194.70         | 6475.42     | -158.75     | 397.99      | -397.35             | 428.48   | 111.75          | 0.92        | -0.64        |  |        |  |
| 36   | 6,688         | 0.60           | 353.40         | 6662.42     | -158.72     | 397.63      | -396.99             | 428.13   | 111.76          | 0.63        | 0.00         |  |        |  |
| 37   | 6,875         | 0.30           | 341.50         | 6849.41     | -157.28     | 397.36      | -396.72             | 427.36   | 111.59          | 0.17        | -0.16        |  |        |  |
| 38   | 7,062         | 0.40           | 236.40         | 7036.41     | -157.18     | 396.66      | -396.03             | 426.67   | 111.62          | 0.30        | 0.05         |  |        |  |
| 39   | 7,250         | 2.40           | 206.90         | 7224.35     | -161.06     | 394.33      | -393.68             | 425.95   | 112.22          | 1.10        | 1.06         |  |        |  |
| 40   | 7,437         | 0.40           | 331.30         | 7411.30     | -163.98     | 392.25      | -391.59             | 425.14   | 112.69          | 1.42        | -1.07        |  |        |  |
| 41   | 7,624         | 0.50           | 93.00          | 7598.29     | -163.45     | 392.75      | -392.09             | 425.40   | 112.60          | 0.42        | 0.05         |  |        |  |
| 42   | 7,811         | 0.20           | 183.60         | 7785.29     | -163.81     | 393.54      | -392.88             | 426.28   | 112.60          | 0.29        | -0.16        |  |        |  |
| 43   | 7,998         | 0.50           | 344.50         | 7972.29     | -163.35     | 393.30      | -392.64             | 425.88   | 112.55          | 0.37        | 0.16         |  |        |  |
| 44   | 8,185         | 0.50           | 53.90          | 8159.28     | -162.09     | 393.74      | -393.09             | 425.80   | 112.37          | 0.30        | 0.00         |  |        |  |
| 45   | 8,372         | 0.50           | 92.50          | 8346.28     | -161.64     | 395.22      | -394.57             | 427.00   | 112.24          | 0.18        | 0.00         |  |        |  |
| 46   | 8,560         | 0.90           | 159.20         | 8534.26     | -163.06     | 396.56      | -395.91             | 428.78   | 112.35          | 0.45        | 0.21         |  |        |  |
| 47   | 8,676         | 4.40           | 272.90         | 8650.15     | -163.68     | 392.44      | -391.78             | 425.21   | 112.64          | 4.17        | 3.02         |  |        |  |
| 48   | 8,723         | 11.50          | 278.40         | 8696.67     | -162.91     | 386.00      | -385.34             | 418.97   | 112.88          | 15.18       | 15.11        |  |        |  |
| 49   | 8,770         | 18.50          | 278.60         | 8742.04     | -161.11     | 373.97      | -373.32             | 407.20   | 113.31          | 14.89       | 14.89        |  |        |  |
| 50   | 8,816         | 23.30          | 277.50         | 8785.00     | -158.83     | 357.73      | -357.09             | 391.40   | 113.94          | 10.47       | 10.43        |  |        |  |
| 51   | 8,863         | 27.00          | 277.90         | 8827.54     | -156.15     | 337.94      | -337.31             | 372.27   | 114.80          | 7.88        | 7.87         |  |        |  |
| 52   | 8,910         | 29.30          | 279.90         | 8868.98     | -152.70     | 316.04      | -315.42             | 351.00   | 115.79          | 5.29        | 4.89         |  |        |  |
| 53   | 8,957         | 32.60          | 275.80         | 8909.29     | -149.44     | 292.10      | -291.50             | 328.11   | 117.09          | 8.33        | 7.02         |  |        |  |
| 54   | 9,004         | 37.20          | 268.90         | 8947.84     | -148.44     | 265.28      | -264.68             | 303.98   | 119.23          | 12.88       | 9.79         |  |        |  |
| 55   | 9,051         | 40.10          | 268.30         | 8984.54     | -149.16     | 235.93      | -235.33             | 279.13   | 122.30          | 6.22        | 6.17         |  |        |  |
| 56   | 9,097         | 44.20          | 269.60         | 9018.64     | -149.71     | 205.08      | -204.48             | 253.91   | 126.13          | 9.11        | 8.91         |  |        |  |
| 57   | 9,144         | 48.30          | 271.10         | 9051.13     | -149.49     | 171.14      | -170.54             | 227.23   | 131.14          | 9.02        | 8.72         |  |        |  |
| 58   | 9,191         | 52.00          | 271.20         | 9081.25     | -148.76     | 135.07      | -134.47             | 200.93   | 137.76          | 7.87        | 7.87         |  |        |  |
| 59   | 9,238         | 55.40          | 270.60         | 9109.07     | -148.17     | 97.20       | -96.60              | 177.21   | 146.74          | 7.31        | 7.23         |  |        |  |
| 60   | 9,285         | 58.70          | 269.50         | 9134.63     | -148.14     | 57.77       | -57.17              | 159.01   | 158.70          | 7.29        | 7.02         |  |        |  |
| 61   | 9,332         | 61.00          | 269.00         | 9158.23     | -148.68     | 17.13       | -16.53              | 149.66   | 173.43          | 4.98        | 4.89         |  |        |  |
| 62   | 9,378         | 63.00          | 268.80         | 9179.83     | -149.46     | -23.48      | 24.08               | 151.29   | 188.93          | 4.36        | 4.35         |  |        |  |
| 63   | 9,425         | 67.10          | 268.90         | 9199.65     | -150.31     | -66.07      | 66.67               | 164.19   | 203.73          | 8.73        | 8.72         |  |        |  |
| 64   | 9,472         | 72.20          | 270.60         | 9215.99     | -150.49     | -110.12     | 110.72              | 186.48   | 216.19          | 11.37       | 10.85        |  |        |  |
| 65   | 9,607         | 81.30          | 270.90         | 9246.90     | -148.77     | -241.38     | 241.97              | 283.54   | 238.35          | 6.74        | 6.74         |  |        |  |
| 66   | 9,702         | 83.80          | 269.40         | 9259.22     | -148.53     | -335.57     | 336.16              | 366.97   | 246.13          | 3.06        | 2.63         |  |        |  |
| 67   | 9,796         | 92.10          | 265.10         | 9262.58     | -153.04     | -429.29     | 429.90              | 455.75   | 250.38          | 9.94        | 8.83         |  |        |  |



SURVEY CALCULATION PROGRAM

5/2/17 17:14

Company: Matador Production Co.  
Well Name: Kathy Coleman 14-23S-27E RB 206H  
Location: Eddy County, NM  
Rig: Patterson #297  
Job Number: DDMO-170244  
API #: 30-015-44057

REFERENCED TO GRID NORTH

Magnetic Declination: 7.32

Proposed Direction: 269.77

Vertical Section Azimuth: 269.77

Minimum Curvature

Survey Calculation Method: MD

PTB: 14,154

INC 92.5

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

TVD Feet

N/S Feet

Azm 269.8

|                            |            |                                  |             |          |          |          |                  |          |             |          |           |     |  |        |  |
|----------------------------|------------|----------------------------------|-------------|----------|----------|----------|------------------|----------|-------------|----------|-----------|-----|--|--------|--|
| Company:                   |            | Matador Production Co.           |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Well Name:                 |            | Kathy Coleman 14-23S-27E RB 206H |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Location:                  |            | Eddy County, NM                  |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Rig:                       |            | Patterson #297                   |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Job Number:                |            | DDMO-170244                      |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| API #:                     |            | 30-015-44057                     |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Vertical Section Azimuth:  |            | 269.77                           |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| Survey Calculation Method: |            | Minimum Curvature                |             |          |          |          |                  |          |             |          |           |     |  |        |  |
| PTB:                       |            | MD                               |             | INC      |          | AZM      |                  | TVD      |             | N/S      |           | E/W |  | VS     |  |
|                            |            | 14,154                           |             | 92.5     |          | 269.8    |                  |          |             |          |           |     |  | 4782.4 |  |
| #                          | Depth Feet | Inc Degrees                      | Azm Degrees | TVD Feet | N/S Feet | E/W Feet | Surface Vert Sec | Distance | Closure Azm | DLS/ 100 | BUR/ 100' |     |  |        |  |
| 68                         | 9,891      | 91.80                            | 265.40      | 9259.34  | -160.90  | -523.91  | 524.55           | 548.06   | 252.93      | 0.45     | -0.32     |     |  |        |  |
| 69                         | 9,985      | 92.20                            | 266.00      | 9256.06  | -167.94  | -617.59  | 618.26           | 640.02   | 254.79      | 0.77     | 0.43      |     |  |        |  |
| 70                         | 10,080     | 92.10                            | 267.10      | 9252.50  | -173.66  | -712.35  | 713.04           | 733.21   | 256.30      | 1.16     | -0.11     |     |  |        |  |
| 71                         | 10,174     | 93.20                            | 268.40      | 9248.15  | -177.34  | -806.17  | 806.88           | 825.45   | 257.59      | 1.81     | 1.17      |     |  |        |  |
| 72                         | 10,268     | 94.80                            | 269.40      | 9241.60  | -179.14  | -899.92  | 900.63           | 917.58   | 258.74      | 2.01     | 1.70      |     |  |        |  |
| 73                         | 10,363     | 95.00                            | 271.20      | 9233.48  | -178.65  | -994.57  | 995.28           | 1010.49  | 259.82      | 1.90     | 0.21      |     |  |        |  |
| 74                         | 10,457     | 93.10                            | 272.90      | 9226.84  | -175.29  | -1088.27 | 1088.96          | 1102.29  | 260.85      | 2.71     | -2.02     |     |  |        |  |
| 75                         | 10,552     | 90.90                            | 272.10      | 9223.53  | -171.15  | -1183.11 | 1183.79          | 1195.43  | 261.77      | 2.46     | -2.32     |     |  |        |  |
| 76                         | 10,646     | 91.10                            | 271.20      | 9221.89  | -168.45  | -1277.06 | 1277.72          | 1288.12  | 262.49      | 0.98     | 0.21      |     |  |        |  |
| 77                         | 10,740     | 92.60                            | 272.30      | 9218.85  | -165.58  | -1370.96 | 1371.61          | 1380.92  | 263.11      | 1.98     | 1.60      |     |  |        |  |
| 78                         | 10,835     | 91.70                            | 271.80      | 9215.29  | -162.18  | -1465.83 | 1466.47          | 1474.78  | 263.69      | 1.08     | -0.95     |     |  |        |  |
| 79                         | 10,929     | 90.20                            | 271.10      | 9213.73  | -159.80  | -1559.79 | 1560.41          | 1567.95  | 264.15      | 1.76     | -1.60     |     |  |        |  |
| 80                         | 11,024     | 92.50                            | 269.40      | 9211.49  | -159.39  | -1654.75 | 1655.37          | 1662.41  | 264.50      | 3.01     | 2.42      |     |  |        |  |
| 81                         | 11,118     | 92.60                            | 269.40      | 9207.31  | -160.37  | -1748.65 | 1749.28          | 1755.99  | 264.76      | 0.11     | 0.11      |     |  |        |  |
| 82                         | 11,212     | 92.80                            | 269.00      | 9202.88  | -161.68  | -1842.54 | 1843.17          | 1849.62  | 264.99      | 0.48     | 0.21      |     |  |        |  |
| 83                         | 11,307     | 94.20                            | 269.70      | 9197.08  | -162.76  | -1937.35 | 1937.99          | 1944.17  | 265.20      | 1.65     | 1.47      |     |  |        |  |
| 84                         | 11,401     | 92.80                            | 271.90      | 9191.34  | -161.45  | -2031.16 | 2031.79          | 2037.56  | 265.46      | 2.77     | -1.49     |     |  |        |  |
| 85                         | 11,496     | 92.00                            | 271.70      | 9187.36  | -158.47  | -2126.03 | 2126.65          | 2131.92  | 265.74      | 0.87     | -0.84     |     |  |        |  |
| 86                         | 11,590     | 92.20                            | 271.40      | 9183.92  | -155.93  | -2219.93 | 2220.54          | 2225.40  | 265.98      | 0.38     | 0.21      |     |  |        |  |
| 87                         | 11,684     | 94.00                            | 271.90      | 9178.84  | -153.22  | -2313.75 | 2314.34          | 2318.82  | 266.21      | 1.99     | 1.91      |     |  |        |  |
| 88                         | 11,778     | 91.40                            | 270.30      | 9174.41  | -151.42  | -2407.62 | 2408.20          | 2412.37  | 266.40      | 3.25     | -2.77     |     |  |        |  |
| 89                         | 11,873     | 91.50                            | 269.60      | 9172.00  | -151.51  | -2502.58 | 2503.17          | 2507.17  | 266.54      | 0.74     | 0.11      |     |  |        |  |
| 90                         | 11,966     | 91.90                            | 270.50      | 9169.24  | -151.42  | -2595.54 | 2596.13          | 2599.96  | 266.66      | 1.06     | 0.43      |     |  |        |  |
| 91                         | 12,060     | 91.30                            | 271.90      | 9166.62  | -149.46  | -2689.48 | 2690.06          | 2693.63  | 266.82      | 1.62     | -0.64     |     |  |        |  |
| 92                         | 12,154     | 89.80                            | 272.70      | 9165.72  | -145.68  | -2783.40 | 2783.96          | 2787.21  | 267.00      | 1.81     | -1.60     |     |  |        |  |
| 93                         | 12,248     | 91.70                            | 271.10      | 9164.49  | -142.57  | -2877.33 | 2877.88          | 2880.86  | 267.16      | 2.64     | 2.02      |     |  |        |  |
| 94                         | 12,342     | 91.10                            | 271.20      | 9162.19  | -140.68  | -2971.28 | 2971.82          | 2974.61  | 267.29      | 0.65     | -0.64     |     |  |        |  |
| 95                         | 12,436     | 89.80                            | 271.40      | 9161.45  | -138.55  | -3065.25 | 3065.79          | 3068.38  | 267.41      | 1.40     | -1.38     |     |  |        |  |
| 96                         | 12,530     | 88.50                            | 271.00      | 9162.85  | -136.58  | -3159.22 | 3159.74          | 3162.17  | 267.52      | 1.45     | -1.38     |     |  |        |  |
| 97                         | 12,624     | 89.30                            | 269.70      | 9164.65  | -136.01  | -3253.20 | 3253.72          | 3256.04  | 267.61      | 1.62     | 0.85      |     |  |        |  |
| 98                         | 12,719     | 89.80                            | 269.00      | 9165.40  | -137.08  | -3348.19 | 3348.71          | 3351.00  | 267.66      | 0.91     | 0.53      |     |  |        |  |
| 99                         | 12,813     | 90.40                            | 268.40      | 9165.23  | -139.22  | -3442.16 | 3442.70          | 3444.98  | 267.68      | 0.90     | 0.64      |     |  |        |  |
| 100                        | 12,907     | 90.40                            | 268.20      | 9164.58  | -142.01  | -3536.12 | 3536.66          | 3538.97  | 267.70      | 0.21     | 0.00      |     |  |        |  |
| 101                        | 13,001     | 90.40                            | 267.60      | 9163.92  | -145.45  | -3630.06 | 3630.61          | 3632.97  | 267.71      | 0.64     | 0.00      |     |  |        |  |

7.32

REFERENCED TO GRID NORTH

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V05.04.02

# SURVEY CALCULATION PROGRAM

5/2/17 17:14

|             |                                  |
|-------------|----------------------------------|
| Company:    | Matador Production Co.           |
| Well Name:  | Kathy Coleman 14-23S-27E RB 206H |
| Location:   | Eddy County, NM                  |
| Rig:        | Patterson #297                   |
| Job Number: | DDMO-170244                      |
| API #:      | 30-015-44057                     |

REFERENCED TO GRID NORTH

|                       |      |
|-----------------------|------|
| Magnetic Declination: | 7.32 |
|-----------------------|------|

|                     |        |
|---------------------|--------|
| Proposed Direction: | 269.77 |
|---------------------|--------|

|                            |                   |
|----------------------------|-------------------|
| Vertical Section Azimuth:  | 269.77            |
| Survey Calculation Method: | Minimum Curvature |

|      |        |      |       |     |      |
|------|--------|------|-------|-----|------|
| PTB: | MD     | INC  | AZM   | N/S | Feet |
|      | 14,154 | 92.5 | 269.8 |     |      |

| #    | Depth<br>Feet | Inc     |         | Azim<br>Degrees | TVD<br>Feet | N/S<br>Feet | E/W<br>Feet | Surface  |          | Closure |       | DLS/<br>100 | BUR/<br>100' |
|------|---------------|---------|---------|-----------------|-------------|-------------|-------------|----------|----------|---------|-------|-------------|--------------|
|      |               | Degrees | Degrees |                 |             |             |             | Vert Sec | Distance | Azim    |       |             |              |
| 102  | 13,095        | 90.30   | 267.60  | 9163.35         | -149.39     | -3723.97    | 3724.54     | 3726.97  | 267.70   | 0.11    | -0.11 |             |              |
| 103  | 13,189        | 93.60   | 269.00  | 9160.15         | -152.17     | -3817.86    | 3818.44     | 3820.89  | 267.72   | 3.81    | 3.51  |             |              |
| 104  | 13,284        | 91.80   | 268.50  | 9155.67         | -154.24     | -3912.73    | 3913.32     | 3915.77  | 267.74   | 1.97    | -1.89 |             |              |
| 105  | 13,378        | 90.60   | 267.60  | 9153.71         | -157.44     | -4006.65    | 4007.25     | 4009.74  | 267.75   | 1.60    | -1.28 |             |              |
| 106  | 13,473        | 94.80   | 270.20  | 9149.23         | -159.27     | -4101.50    | 4102.10     | 4104.59  | 267.78   | 5.20    | 4.42  |             |              |
| 107  | 13,567        | 93.70   | 268.90  | 9142.26         | -160.00     | -4195.23    | 4195.84     | 4198.28  | 267.82   | 1.81    | -1.17 |             |              |
| 108  | 13,661        | 91.20   | 268.30  | 9138.25         | -162.30     | -4289.11    | 4289.73     | 4292.18  | 267.83   | 2.73    | -2.66 |             |              |
| 109  | 13,755        | 92.40   | 268.70  | 9135.29         | -164.76     | -4383.03    | 4383.66     | 4386.13  | 267.85   | 1.35    | 1.28  |             |              |
| 110  | 13,849        | 92.00   | 269.70  | 9131.68         | -166.07     | -4476.95    | 4477.58     | 4480.03  | 267.88   | 1.15    | -0.43 |             |              |
| 111  | 13,943        | 90.20   | 269.10  | 9129.88         | -167.05     | -4570.92    | 4571.56     | 4573.98  | 267.91   | 2.02    | -1.91 |             |              |
| 112  | 14,037        | 92.70   | 270.00  | 9127.50         | -167.79     | -4664.88    | 4665.52     | 4667.90  | 267.94   | 2.83    | 2.66  |             |              |
| 113  | 14,081        | 92.50   | 269.80  | 9125.51         | -167.87     | -4708.84    | 4709.47     | 4711.83  | 267.96   | 0.64    | -0.45 |             |              |
| PTB: | 14,154        | 92.50   | 269.80  | 9122.32         | -168.12     | -4781.77    | 4782.40     | 4784.72  | 267.99   | 0.00    | 0.00  |             |              |