

# KAMBI TEXAS LP - MWD SURVEY REPORT

API #: 30-015-41892

|           |                      |                   |          |                    |                   |
|-----------|----------------------|-------------------|----------|--------------------|-------------------|
| Company:  | Lime Rock Resources  | Job Number:       | CD-14058 | Calculation Method | Minimum Curvature |
| Well:     | Williams Federal #15 | Magnetic Decl.:   | 7.68     | Proposed Azimuth   | 162.39            |
| Location: | Eddy Co., N.M.       | Grid Corr.:       |          | WELL API #         | 30-015-41829      |
| Rig:      | UDI 33               | Total Grid Corr.: | 7.68     | Tie Into:          | Surface           |

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |          | Closure       |             | Dogleg Severity (d/100') | Build Rate (d/100') |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|----------|---------------|-------------|--------------------------|---------------------|
|          |                  |                   |                   |               |                    |                          |                       | N/S (ft)    | E/W (ft) | Distance (ft) | Angle (deg) |                          |                     |
| Tie      | GL               | 0                 | 0.00              | 0.00          | 0                  | 0                        | 0                     | 0           | 0        | 0             | 0           | 0                        | 0                   |
| 1        | MWD              | 476.00            | 0.00              | 121.40        | 476                | 476.00                   | #DIV/0!               | 0.00 N      | 0.00 E   | 0.00          | #DIV/0!     | 0.00                     | 0.00                |
| 2        | MWD              | 566.00            | 1.90              | 171.80        | 90                 | 565.98                   | 1.47                  | 1.48 S      | 0.21 E   | 1.49          | 171.80      | 2.11                     | 2.11                |
| 3        | MWD              | 662.00            | 4.40              | 157.30        | 96                 | 661.83                   | 6.71                  | 6.45 S      | 1.86 E   | 6.71          | 163.90      | 2.71                     | 2.60                |
| 4        | MWD              | 758.00            | 5.80              | 157.50        | 96                 | 757.45                   | 15.21                 | 14.33 S     | 5.14 E   | 15.22         | 160.27      | 1.46                     | 1.46                |
| 5        | MWD              | 853.00            | 6.90              | 161.10        | 95                 | 851.87                   | 25.70                 | 24.16 S     | 8.82 E   | 25.72         | 159.94      | 1.23                     | 1.16                |
| 6        | MWD              | 949.00            | 6.40              | 161.50        | 96                 | 947.22                   | 36.82                 | 34.69 S     | 12.39 E  | 36.84         | 160.35      | 0.52                     | -0.52               |
| 7        | MWD              | 1045.00           | 6.90              | 165.40        | 96                 | 1042.57                  | 47.92                 | 45.35 S     | 15.54 E  | 47.94         | 161.08      | 0.70                     | 0.52                |
| 8        | MWD              | 1141.00           | 7.60              | 161.60        | 96                 | 1137.81                  | 60.03                 | 56.95 S     | 19.00 E  | 60.04         | 161.55      | 0.88                     | 0.73                |
| 9        | MWD              | 1238.00           | 6.80              | 160.30        | 97                 | 1234.04                  | 72.18                 | 68.44 S     | 22.96 E  | 72.19         | 161.46      | 0.84                     | -0.82               |
| 10       | mwd              | 1429.00           | 6.90              | 161.70        | 191                | 1423.68                  | 94.96                 | 89.98 S     | 30.37 E  | 94.97         | 161.35      | 0.10                     | 0.05                |
| 11       | MWD              | 1526.00           | 6.40              | 160.10        | 97                 | 1520.02                  | 106.18                | 100.60 S    | 34.04 E  | 106.20        | 161.30      | 0.55                     | -0.52               |
| 12       | MWD              | 1621.00           | 6.20              | 157.10        | 95                 | 1614.45                  | 116.58                | 110.30 S    | 37.84 E  | 116.61        | 161.06      | 0.41                     | -0.21               |
| 13       | MWD              | 1717.00           | 4.70              | 166.70        | 96                 | 1710.02                  | 125.67                | 118.91 S    | 40.76 E  | 125.70        | 161.08      | 1.82                     | -1.56               |
| 14       | MWD              | 1820.00           | 2.00              | 186.80        | 103                | 1812.83                  | 131.51                | 124.80 S    | 41.52 E  | 131.53        | 161.60      | 2.82                     | -2.62               |
| 15       | MWD              | 1916.00           | 0.60              | 39.80         | 96                 | 1908.82                  | 132.77                | 126.08 S    | 41.65 E  | 132.78        | 161.72      | 2.63                     | -1.46               |
| 16       | MWD              | 2107.00           | 0.80              | 25.00         | 191                | 2099.80                  | 131.25                | 124.10 S    | 42.85 E  | 131.29        | 160.95      | 0.14                     | 0.10                |
| 17       | MWD              | 2205.00           | 0.40              | 269.30        | 98                 | 2197.80                  | 130.64                | 123.48 S    | 42.80 E  | 130.69        | 160.89      | 1.06                     | -0.41               |
| 18       | MWD              | 2397.00           | 0.70              | 244.40        | 192                | 2389.79                  | 130.61                | 124.00 S    | 41.07 E  | 130.62        | 161.68      | 0.20                     | 0.16                |
| 19       | MWD              | 2492.00           | 0.80              | 229.20        | 95                 | 2484.78                  | 130.95                | 124.68 S    | 40.04 E  | 130.96        | 162.20      | 0.23                     | 0.11                |
| 20       | MWD              | 2688.00           | 0.50              | 255.50        | 196                | 2680.77                  | 131.45                | 125.79 S    | 38.18 E  | 131.46        | 163.12      | 0.21                     | -0.15               |
| 21       | MWD              | 2876.00           | 0.60              | 268.40        | 188                | 2868.76                  | 131.13                | 126.02 S    | 36.40 E  | 131.18        | 163.89      | 0.08                     | 0.05                |
| 22       | MWD              | 3068.00           | 0.40              | 164.60        | 192                | 3060.76                  | 131.52                | 126.70 S    | 35.57 E  | 131.60        | 164.32      | 0.41                     | -0.10               |
| 23       | MWD              | 3260.00           | 0.40              | 187.30        | 192                | 3252.75                  | 132.80                | 128.01 S    | 35.67 E  | 132.89        | 164.43      | 0.08                     | 0.00                |
| 24       | MWD              | 3451.00           | 0.20              | 117.40        | 191                | 3443.75                  | 133.64                | 128.82 S    | 35.88 E  | 133.73        | 164.44      | 0.20                     | -0.10               |
| 25       | MWD              | 3561.00           | 0.40              | 2.70          | 110                | 3553.75                  | 133.42                | 128.53 S    | 36.07 E  | 133.49        | 164.33      | 0.47                     | 0.18                |
| Proj to  | Bit              | 3607.00           | 0.40              | 2.70          | 46                 | 3599.75                  | 133.12                | 128.21 S    | 36.08 E  | 133.19        | 164.28      | 0.00                     | 0.00                |

## KAMBI TEXAS LP - MWD SURVEY REPORT

Company: Lime Rock Resources  
Well: Williams Federal #15  
Location: Eddy Co., N.M.  
Rig: UDI 33

|                   |          |
|-------------------|----------|
| Job Number:       | CD-14058 |
| Magnetic Decl.:   | 7.68     |
| Grid Corr.:       |          |
| Total Grid Corr.: | 7.68     |

|                    |                   |
|--------------------|-------------------|
| Calculation Method | Minimum Curvature |
| Proposed Azimuth   | 162.39            |
| WELL API #         | 30-015-41829      |
| Tie Into:          | Surface           |

| Survey # | Survey Tool Type | Survey Depth (ft) | Inclination (deg) | Azimuth (deg) | Course Length (ft) | True Vertical Depth (ft) | Vertical Section (ft) | Coordinates |          | Closure       |             | Dogleg Severity (d/100') | Build Rate (d/100') |
|----------|------------------|-------------------|-------------------|---------------|--------------------|--------------------------|-----------------------|-------------|----------|---------------|-------------|--------------------------|---------------------|
|          |                  |                   |                   |               |                    |                          |                       | N/S (ft)    | E/W (ft) | Distance (ft) | Angle (deg) |                          |                     |

State of New Mexico  
County of Eddy

I, Roy Wakefield, certify that: I am employed by Kambi Texas LP; that I did on the day(s) of 01-July-2014 through 05-July-2014 conduct or supervise the taking of a MWD Survey from a depth of 442.0 feet to a depth of 3607.0 feet and that the data is true, correct, complete and within the limitations of the tool as set forth by Kambi Texas LP; that I am authorized and qualified to make this report; that this survey was conducted at the request of Lime Rock Resources. for the State of New Mexico; Well Williams A Federal # 15 in Eddy County; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Kambi Texas LP.

Regards,

R. W. Wakefield

Roy Wakefield  
VP Operations, USA  
Kambi Texas LP

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~~Williams Federal #15 Surveys~~