

## RECORD OF SURVEY

**Chevron U.S.A.**  
Monument 11 State #30  
Lea County, New Mexico

SUR: 754/50 330E  
BHL: 347/50 353/E  
P-11-195-36e  
30-025-34778

**BAKER HUGHES INTEQ**  
**WEST TEXAS DISTRICT**

November 01, 2000



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**INTEQ**



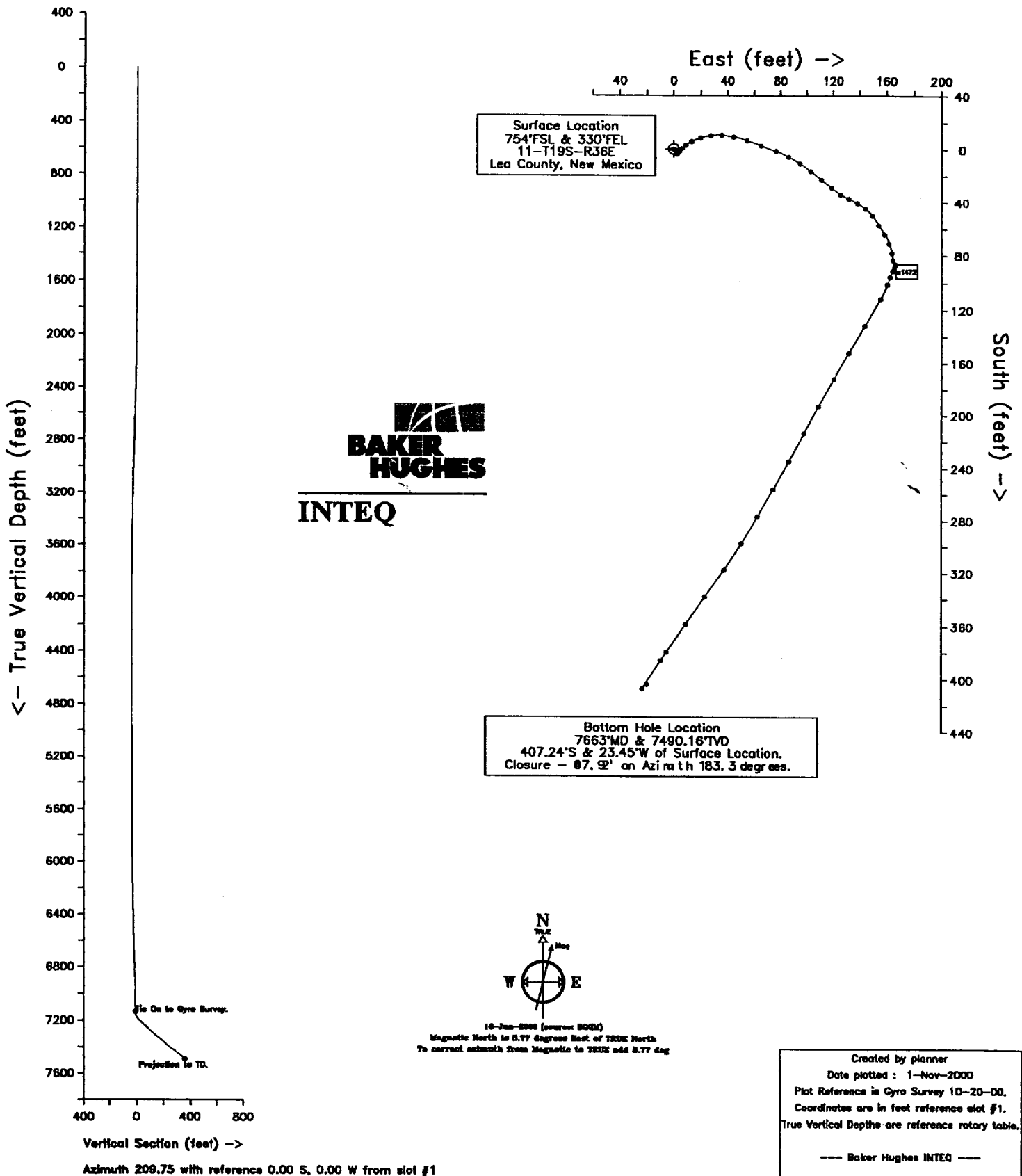
# CHEVRON U.S.A.

Structure : Monument 11 State No.30

Slot : slot #1

Field :

Location : LEA COUNTY, NEW MEXICO



CHEVRON U.S.A.  
Monument 11 State No.30

slot #1

LEA COUNTY, NEW MEXICO

S U R V E Y L I S T I N G

by  
Baker Hughes INTEQ

Your ref : Gyro Survey 10-20-00  
Our ref : svy1472  
License :

Date printed : 1-Nov-2000  
Date created : 1-Nov-2000  
Last revised : 1-Nov-2000

Field is centred on n32 58 13.100,w103 14 15.6  
Structure is centred on n32 58 13.100,w103 14 15.6

Slot location is n32 58 13.100,w103 14 15.600  
Slot Grid coordinates are N 718458.262, E 836033.931  
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is True North

CHEVRON U.S.A.  
Monument 11 State No.30,slot #1  
LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 1  
Your ref : Gyro Survey 10-20-00  
Last revised : 1-Nov-2000

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S |          | Dogleg<br>Deg/100ft | Vert<br>Sect |
|-------------------|--------------------|--------------------|--------------------|------------------------------------------------|----------|---------------------|--------------|
| 0.00              | 0.00               | 0.00               | 0.00               | 0.00 N                                         | 0.00 E   | 0.00                | 0.00         |
| 200.00            | 0.53               | 124.51             | 200.00             | 0.52 S                                         | 0.76 E   | 0.27                | 0.08         |
| 400.00            | 0.27               | 146.54             | 399.99             | 1.44 S                                         | 1.78 E   | 0.15                | 0.37         |
| 600.00            | 0.32               | 166.17             | 599.99             | 2.38 S                                         | 2.18 E   | 0.06                | 0.98         |
| 800.00            | 0.20               | 194.27             | 799.99             | 3.26 S                                         | 2.23 E   | 0.09                | 1.72         |
| 1000.00           | 0.07               | 118.32             | 999.99             | 3.65 S                                         | 2.25 E   | 0.10                | 2.06         |
| 1200.00           | 0.02               | 197.83             | 1199.99            | 3.74 S                                         | 2.34 E   | 0.03                | 2.09         |
| 1400.00           | 0.06               | 59.88              | 1399.99            | 3.73 S                                         | 2.42 E   | 0.04                | 2.03         |
| 1600.00           | 0.08               | 103.02             | 1599.99            | 3.70 S                                         | 2.65 E   | 0.03                | 1.90         |
| 1800.00           | 0.52               | 37.80              | 1799.98            | 3.02 S                                         | 3.34 E   | 0.25                | 0.96         |
| 2000.00           | 0.74               | 40.44              | 1999.97            | 1.32 S                                         | 4.74 E   | 0.11                | -1.21        |
| 2200.00           | 0.72               | 36.35              | 2199.96            | 0.68 N                                         | 6.32 E   | 0.03                | -3.72        |
| 2400.00           | 1.22               | 54.83              | 2399.93            | 2.91 N                                         | 8.80 E   | 0.29                | -6.90        |
| 2600.00           | 1.80               | 62.64              | 2599.86            | 5.58 N                                         | 13.33 E  | 0.31                | -11.47       |
| 2800.00           | 2.17               | 70.80              | 2799.74            | 8.27 N                                         | 19.70 E  | 0.23                | -16.96       |
| 3000.00           | 2.38               | 79.98              | 2999.58            | 10.24 N                                        | 27.37 E  | 0.21                | -22.47       |
| 3200.00           | 2.39               | 96.72              | 3199.41            | 10.48 N                                        | 35.60 E  | 0.35                | -26.76       |
| 3400.00           | 2.83               | 100.19             | 3399.20            | 9.11 N                                         | 44.60 E  | 0.23                | -30.05       |
| 3600.00           | 3.11               | 108.27             | 3598.93            | 6.54 N                                         | 54.61 E  | 0.25                | -32.78       |
| 3800.00           | 3.48               | 111.42             | 3798.60            | 2.62 N                                         | 65.41 E  | 0.21                | -34.74       |
| 4000.00           | 3.28               | 109.59             | 3998.25            | 1.51 S                                         | 76.45 E  | 0.11                | -36.63       |
| 4200.00           | 2.84               | 118.85             | 4197.97            | 5.82 S                                         | 86.18 E  | 0.33                | -37.72       |
| 4400.00           | 2.87               | 119.39             | 4397.72            | 10.67 S                                        | 94.88 E  | 0.02                | -37.83       |
| 4600.00           | 3.00               | 129.93             | 4597.46            | 16.49 S                                        | 103.26 E | 0.28                | -36.93       |
| 4800.00           | 2.92               | 128.36             | 4797.19            | 23.01 S                                        | 111.27 E | 0.06                | -35.25       |
| 5000.00           | 2.67               | 127.94             | 4996.96            | 29.03 S                                        | 118.94 E | 0.13                | -33.82       |
| 5200.00           | 2.15               | 122.76             | 5196.78            | 33.93 S                                        | 125.77 E | 0.28                | -32.96       |
| 5400.00           | 1.99               | 115.91             | 5396.65            | 37.47 S                                        | 132.04 E | 0.15                | -33.00       |
| 5600.00           | 2.13               | 118.17             | 5596.52            | 40.75 S                                        | 138.44 E | 0.08                | -33.33       |
| 5800.00           | 1.97               | 129.34             | 5796.39            | 44.68 S                                        | 144.38 E | 0.21                | -32.86       |
| 6000.00           | 2.23               | 140.69             | 5996.26            | 49.87 S                                        | 149.50 E | 0.24                | -30.90       |
| 6200.00           | 2.58               | 147.88             | 6196.08            | 56.69 S                                        | 154.36 E | 0.23                | -27.39       |
| 6400.00           | 2.20               | 148.33             | 6395.91            | 63.77 S                                        | 158.77 E | 0.19                | -23.43       |
| 6600.00           | 2.37               | 161.56             | 6595.75            | 70.96 S                                        | 162.09 E | 0.28                | -18.84       |
| 6800.00           | 1.91               | 169.82             | 6795.61            | 78.17 S                                        | 163.99 E | 0.28                | -13.52       |
| 7000.00           | 1.17               | 172.14             | 6995.54            | 83.47 S                                        | 164.86 E | 0.37                | -9.35        |
| 7142.00           | 1.83               | 137.78             | 7137.49            | 86.58 S                                        | 166.58 E | 0.77                | -7.50        |

All data is in feet unless otherwise stated.  
Coordinates from slot #1 and TVD from rotary table.  
Bottom hole distance is 187.74 on azimuth 117.46 degrees from wellhead.  
Vertical section is from S 0.00 W 0.00 on azimuth 209.75 degrees.  
Calculation uses the minimum curvature method.  
Presented by Baker Hughes INTEQ

CHEVRON U.S.A.  
Monument 11 State No.30

slot #1

LEA COUNTY, NEW MEXICO

SURVEY LISTING

by  
Baker Hughes INTEQ

Your ref : MWD Survey 10-20-00  
Our ref : svy1473  
License :

Date printed : 1-Nov-2000  
Date created : 1-Nov-2000  
Last revised : 1-Nov-2000

Field is centred on n32 58 13.100,w103 14 15.6  
Structure is centred on n32 58 13.100,w103 14 15.6

Slot location is n32 58 13.100,w103 14 15.600  
Slot Grid coordinates are N 718458.262, E 836033.931  
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is True North

CHEVRON U.S.A.  
Monument 11 State No.30, slot #1  
LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 1  
Your ref : MWD Survey 10-20-00  
Last revised : 1-Nov-2000

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S |          | Dogleg<br>Deg/100ft | Vert<br>Sect                 |
|-------------------|--------------------|--------------------|--------------------|------------------------------------------------|----------|---------------------|------------------------------|
| 0.00              | 0.00               | 0.00               | 0.00               | 0.00 N                                         | 0.00 E   | 0.00                | 0.00                         |
| 200.00            | 0.53               | 124.51             | 200.00             | 0.52 S                                         | 0.76 E   | 0.27                | 0.08                         |
| 400.00            | 0.27               | 146.54             | 399.99             | 1.44 S                                         | 1.78 E   | 0.15                | 0.37                         |
| 600.00            | 0.32               | 166.17             | 599.99             | 2.38 S                                         | 2.18 E   | 0.06                | 0.98                         |
| 800.00            | 0.20               | 194.27             | 799.99             | 3.26 S                                         | 2.23 E   | 0.09                | 1.72                         |
| 1000.00           | 0.07               | 118.32             | 999.99             | 3.65 S                                         | 2.25 E   | 0.10                | 2.06                         |
| 1200.00           | 0.02               | 197.83             | 1199.99            | 3.74 S                                         | 2.34 E   | 0.03                | 2.09                         |
| 1400.00           | 0.06               | 59.88              | 1399.99            | 3.73 S                                         | 2.42 E   | 0.04                | 2.03                         |
| 1600.00           | 0.08               | 103.02             | 1599.99            | 3.70 S                                         | 2.65 E   | 0.03                | 1.90                         |
| 1800.00           | 0.52               | 37.80              | 1799.98            | 3.02 S                                         | 3.34 E   | 0.25                | 0.96                         |
| 2000.00           | 0.74               | 40.44              | 1999.97            | 1.32 S                                         | 4.74 E   | 0.11                | -1.21                        |
| 2200.00           | 0.72               | 36.35              | 2199.96            | 0.68 N                                         | 6.32 E   | 0.03                | -3.72                        |
| 2400.00           | 1.22               | 54.83              | 2399.93            | 2.91 N                                         | 8.80 E   | 0.29                | -6.90                        |
| 2600.00           | 1.80               | 62.64              | 2599.86            | 5.58 N                                         | 13.33 E  | 0.31                | -11.47                       |
| 2800.00           | 2.17               | 70.80              | 2799.74            | 8.27 N                                         | 19.70 E  | 0.23                | -16.96                       |
| 3000.00           | 2.38               | 79.98              | 2999.58            | 10.24 N                                        | 27.37 E  | 0.21                | -22.47                       |
| 3200.00           | 2.39               | 96.72              | 3199.41            | 10.48 N                                        | 35.60 E  | 0.35                | -26.76                       |
| 3400.00           | 2.83               | 100.19             | 3399.20            | 9.11 N                                         | 44.60 E  | 0.23                | -30.05                       |
| 3600.00           | 3.11               | 108.27             | 3598.93            | 6.54 N                                         | 54.61 E  | 0.25                | -32.78                       |
| 3800.00           | 3.48               | 111.42             | 3798.60            | 2.62 N                                         | 65.41 E  | 0.21                | -34.74                       |
| 4000.00           | 3.28               | 109.59             | 3998.25            | 1.51 S                                         | 76.45 E  | 0.11                | -36.63                       |
| 4200.00           | 2.84               | 118.85             | 4197.97            | 5.82 S                                         | 86.18 E  | 0.33                | -37.72                       |
| 4400.00           | 2.87               | 119.39             | 4397.72            | 10.67 S                                        | 94.88 E  | 0.02                | -37.83                       |
| 4600.00           | 3.00               | 129.93             | 4597.46            | 16.49 S                                        | 103.26 E | 0.28                | -36.93                       |
| 4800.00           | 2.92               | 128.36             | 4797.19            | 23.01 S                                        | 111.27 E | 0.06                | -35.25                       |
| 5000.00           | 2.67               | 127.94             | 4996.96            | 29.03 S                                        | 118.94 E | 0.13                | -33.82                       |
| 5200.00           | 2.15               | 122.76             | 5196.78            | 33.93 S                                        | 125.77 E | 0.28                | -32.96                       |
| 5400.00           | 1.99               | 115.91             | 5396.65            | 37.47 S                                        | 132.04 E | 0.15                | -33.00                       |
| 5600.00           | 2.13               | 118.17             | 5596.52            | 40.75 S                                        | 138.44 E | 0.08                | -33.33                       |
| 5800.00           | 1.97               | 129.34             | 5796.39            | 44.68 S                                        | 144.38 E | 0.21                | -32.86                       |
| 6000.00           | 2.23               | 140.69             | 5996.26            | 49.87 S                                        | 149.50 E | 0.24                | -30.90                       |
| 6200.00           | 2.58               | 147.88             | 6196.08            | 56.69 S                                        | 154.36 E | 0.23                | -27.39                       |
| 6400.00           | 2.20               | 148.33             | 6395.91            | 63.77 S                                        | 158.77 E | 0.19                | -23.43                       |
| 6600.00           | 2.37               | 161.56             | 6595.75            | 70.96 S                                        | 162.09 E | 0.28                | -18.84                       |
| 6800.00           | 1.91               | 169.82             | 6795.61            | 78.17 S                                        | 163.99 E | 0.28                | -13.52                       |
| 7000.00           | 1.17               | 172.14             | 6995.54            | 83.47 S                                        | 164.86 E | 0.37                | -9.35                        |
| 7142.00           | 1.83               | 137.78             | 7137.49            | 86.58 S                                        | 166.58 E | 0.77                | -7.50 Tie On to Gyro Survey. |
| 7158.00           | 13.60              | 208.80             | 7153.33            | 88.43 S                                        | 165.84 E | 81.98               | -5.53                        |
| 7168.00           | 20.80              | 206.10             | 7162.88            | 91.06 S                                        | 164.49 E | 72.42               | -2.58                        |
| 7180.00           | 27.90              | 200.60             | 7173.80            | 95.61 S                                        | 162.57 E | 62.05               | 2.32                         |
| 7191.00           | 33.00              | 199.70             | 7183.28            | 100.84 S                                       | 160.65 E | 46.55               | 7.82                         |
| 7210.00           | 44.40              | 209.30             | 7198.10            | 111.55 S                                       | 155.63 E | 67.66               | 19.61                        |
| 7242.00           | 48.50              | 210.40             | 7220.14            | 131.66 S                                       | 144.08 E | 13.05               | 42.80                        |
| 7274.00           | 47.70              | 210.70             | 7241.51            | 152.17 S                                       | 131.98 E | 2.60                | 66.61                        |
| 7305.00           | 47.30              | 208.80             | 7262.46            | 172.01 S                                       | 120.64 E | 4.70                | 89.47                        |
| 7337.00           | 48.80              | 208.20             | 7283.85            | 192.93 S                                       | 109.28 E | 4.89                | 113.26                       |
| 7368.00           | 48.30              | 208.10             | 7304.37            | 213.41 S                                       | 98.32 E  | 1.63                | 136.48                       |
| 7400.00           | 50.30              | 209.70             | 7325.24            | 234.65 S                                       | 86.59 E  | 7.31                | 160.74                       |
| 7432.00           | 50.50              | 209.20             | 7345.64            | 256.12 S                                       | 74.47 E  | 1.36                | 185.40                       |
| 7463.00           | 50.30              | 209.10             | 7365.40            | 276.98 S                                       | 62.83 E  | 0.69                | 209.28                       |

All data is in feet unless otherwise stated.  
Coordinates from slot #1 and TVD from rotary table.  
Bottom hole distance is 407.92 on azimuth 183.30 degrees from wellhead.  
Vertical section is from S 0.00 W 0.00 on azimuth 209.75 degrees.  
Calculation uses the minimum curvature method.  
Presented by Baker Hughes INTEQ

CHEVRON U.S.A.  
Monument 11 State No.30,slot #1  
,LEA COUNTY, NEW MEXICO

SURVEY LISTING Page 2  
Your ref : MWD Survey 10-20-00  
Last revised : 1-Nov-2000

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S |         | Dogleg<br>Deg/100ft | Vert<br>Sect             |
|-------------------|--------------------|--------------------|--------------------|------------------------------------------------|---------|---------------------|--------------------------|
| 7494.00           | 50.50              | 212.10             | 7385.16            | 297.53 S                                       | 50.68 E | 7.48                | 233.16                   |
| 7525.00           | 51.40              | 214.80             | 7404.69            | 317.62 S                                       | 37.41 E | 7.36                | 257.18                   |
| 7557.00           | 51.50              | 214.70             | 7424.63            | 338.18 S                                       | 23.14 E | 0.40                | 282.11                   |
| 7589.00           | 51.70              | 214.80             | 7444.51            | 358.78 S                                       | 8.85 E  | 0.67                | 307.09                   |
| 7621.00           | 51.90              | 213.50             | 7464.30            | 379.59 S                                       | 5.27 W  | 3.25                | 332.16                   |
| 7631.00           | 52.00              | 213.30             | 7470.46            | 386.17 S                                       | 9.60 W  | 1.87                | 340.02                   |
| 7663.00           | 52.00              | 213.30             | 7490.16            | 407.24 S                                       | 23.45 W | 0.00                | 365.19 Projection to TD. |

All data is in feet unless otherwise stated.  
Coordinates from slot #1 and TVD from rotary table.  
Bottom hole distance is 407.92 on azimuth 183.30 degrees from wellhead.  
Vertical section is from S 0.00 W 0.00 on azimuth 209.75 degrees.  
Calculation uses the minimum curvature method.  
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