

30-015-37271

A Gyrodata Directional Survey

for

BOPCO LP

Lease: James Ranch Well: 104-H, 4 1/2" Drillpipe  
Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD1109GMS228

Run Date: 10 Nov 2009

Surveyor: Jason Solomon

Calculation Method: MINIMUM CURVATURE

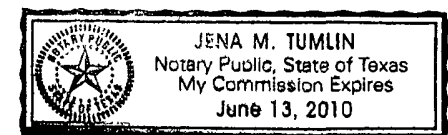
Survey surface coordinates obtained from: Directional Drilling Company  
Survey Latitude: 32.350333 deg. N Longitude: 103.837083 deg. W

Azimuth Correction:  
Gyro: -0.27000 deg to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location



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| MEASURED<br>DEPTH<br>feet                                                 | I N C L<br>deg. | AZIMUTH<br>deg. | BORE HOLE<br>BEARING<br>deg. min. | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. | HORIZONTAL<br>COORDINATES<br>feet |
|---------------------------------------------------------------------------|-----------------|-----------------|-----------------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 0.00                                                                      | 0.00            | 0.00            | N 0 0 E                           | 0.00                                   | 0.00                      | 0.0 0.0                               | 0.00 N 0.00 E                     |
| -----                                                                     |                 |                 |                                   |                                        |                           |                                       |                                   |
| 0 TO 6702 FT RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4 1/2" DRILLPIPE |                 |                 |                                   |                                        |                           |                                       |                                   |
| ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO MCVAY #5 RKB 19 FT      |                 |                 |                                   |                                        |                           |                                       |                                   |
| -----                                                                     |                 |                 |                                   |                                        |                           |                                       |                                   |
| 100.00                                                                    | 0.31            | 158.99          | S 21 1 E                          | 0.31                                   | 100.00                    | 0.3 159.0                             | 0.25 S 0.10 E                     |
| 200.00                                                                    | 0.19            | 207.87          | S 27 52 W                         | 0.23                                   | 200.00                    | 0.7 169.9                             | 0.65 S 0.12 E                     |
| 300.00                                                                    | 0.25            | 266.53          | S 86 32 W                         | 0.23                                   | 300.00                    | 0.8 192.7                             | 0.81 S 0.18 W                     |
| 400.00                                                                    | 0.27            | 259.73          | S 79 44 W                         | 0.03                                   | 400.00                    | 1.1 216.3                             | 0.87 S 0.64 W                     |
| 500.00                                                                    | 0.46            | 270.96          | N 89 3 W                          | 0.20                                   | 499.99                    | 1.6 234.6                             | 0.90 S 1.27 W                     |
| 600.00                                                                    | 0.42            | 303.28          | N 56 43 W                         | 0.25                                   | 599.99                    | 2.1 250.6                             | 0.69 S 1.97 W                     |
| 700.00                                                                    | 0.13            | 231.46          | S 51 28 W                         | 0.40                                   | 699.99                    | 2.4 256.6                             | 0.56 S 2.37 W                     |
| 800.00                                                                    | 0.17            | 328.36          | N 31 38 W                         | 0.23                                   | 799.99                    | 2.6 258.7                             | 0.51 S 2.54 W                     |
| 900.00                                                                    | 0.09            | 116.06          | S 63 56 E                         | 0.25                                   | 899.99                    | 2.6 260.7                             | 0.42 S 2.54 W                     |
| 1000.00                                                                   | 0.17            | 259.36          | S 79 22 W                         | 0.25                                   | 999.99                    | 2.7 259.6                             | 0.48 S 2.62 W                     |
| 1100.00                                                                   | 0.17            | 323.72          | N 36 17 W                         | 0.18                                   | 1099.99                   | 2.9 262.3                             | 0.39 S 2.85 W                     |
| 1200.00                                                                   | 0.20            | 217.03          | S 37 2 W                          | 0.30                                   | 1199.99                   | 3.1 262.4                             | 0.41 S 3.05 W                     |
| 1300.00                                                                   | 0.15            | 342.98          | N 17 1 W                          | 0.31                                   | 1299.99                   | 3.2 262.5                             | 0.42 S 3.19 W                     |
| 1400.00                                                                   | 0.14            | 166.18          | S 13 49 E                         | 0.29                                   | 1399.99                   | 3.2 262.6                             | 0.41 S 3.20 W                     |
| 1500.00                                                                   | 0.17            | 233.97          | S 53 58 W                         | 0.17                                   | 1499.99                   | 3.3 259.3                             | 0.62 S 3.29 W                     |
| 1600.00                                                                   | 0.24            | 264.46          | S 84 28 W                         | 0.13                                   | 1599.99                   | 3.7 258.6                             | 0.73 S 3.62 W                     |
| 1700.00                                                                   | 0.06            | 134.50          | S 45 30 E                         | 0.28                                   | 1699.99                   | 3.9 258.3                             | 0.78 S 3.79 W                     |
| 1800.00                                                                   | 0.18            | 193.71          | S 13 43 W                         | 0.16                                   | 1799.99                   | 3.9 255.6                             | 0.97 S 3.79 W                     |
| 1900.00                                                                   | 0.11            | 312.63          | N 47 22 W                         | 0.25                                   | 1899.99                   | 4.0 254.8                             | 1.06 S 3.90 W                     |
| 2000.00                                                                   | 0.16            | 70.31           | N 70 19 E                         | 0.23                                   | 1999.99                   | 4.0 256.1                             | 0.95 S 3.84 W                     |

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BOPCO LP

Lease: James Ranch Well: 104-H, 4 1/2" Drillpipe

Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD1109GMS228

| MEASURED<br>DEPTH<br>feet | I N C L<br>deg. | AZIMUTH<br>deg. | BORE HOLE<br>BEARING<br>deg. min. | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. | HORIZONTAL<br>COORDINATES<br>feet |
|---------------------------|-----------------|-----------------|-----------------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 2100.00                   | 0.13            | 253.11          | S 73 7 W                          | 0.29                                   | 2099.99                   | 3.9 256.2                             | 0.93 S 3.81 W                     |
| 2200.00                   | 0.18            | 215             | N 2 9 E                           | 0.25                                   | 2199.99                   | 4.0 258.3                             | 0.81 S 3.91 W                     |
| 2300.00                   | 0.10            | 200.80          | S 20 48 W                         | 0.28                                   | 2299.99                   | 4.0 259.4                             | 0.74 S 3.94 W                     |
| 2400.00                   | 0.14            | 277.46          | N 82 32 W                         | 0.15                                   | 2399.99                   | 4.2 258.9                             | 0.80 S 4.09 W                     |
| 2500.00                   | 0.18            | 62.44           | N 62 26 E                         | 0.31                                   | 2499.99                   | 4.1 260.1                             | 0.71 S 4.07 W                     |
| 2600.00                   | 0.35            | 159.03          | S 20 58 E                         | 0.41                                   | 2599.99                   | 3.9 256.4                             | 0.93 S 3.83 W                     |
| 2700.00                   | 0.56            | 150.08          | S 29 55 E                         | 0.22                                   | 2699.98                   | 3.8 244.8                             | 1.63 S 3.47 W                     |
| 2800.00                   | 0.36            | 140.48          | S 39 31 E                         | 0.21                                   | 2799.98                   | 3.8 232.8                             | 2.30 S 3.03 W                     |
| 2900.00                   | 0.78            | 144.00          | S 36 0 E                          | 0.42                                   | 2899.97                   | 3.9 218.1                             | 3.09 S 2.43 W                     |
| 3000.00                   | 1.20            | 151.18          | S 28 49 E                         | 0.44                                   | 2999.96                   | 4.8 198.5                             | 4.56 S 1.52 W                     |
| 3100.00                   | 1.48            | 145.16          | S 34 50 E                         | 0.31                                   | 3099.93                   | 6.5 182.5                             | 6.54 S 0.28 W                     |
| 3200.00                   | 0.71            | 144.73          | S 35 16 E                         | 0.77                                   | 3199.91                   | 8.1 174.3                             | 8.10 S 0.81 E                     |
| 3300.00                   | 0.67            | 160.08          | S 19 55 E                         | 0.19                                   | 3299.91                   | 9.3 171.5                             | 9.16 S 1.37 E                     |
| 3400.00                   | 0.76            | 150.69          | S 29 19 E                         | 0.15                                   | 3399.90                   | 10.5 169.6                            | 10.29 S 1.90 E                    |
| 3500.00                   | 0.66            | 142.16          | S 37 50 E                         | 0.15                                   | 3499.89                   | 11.6 167.2                            | 11.32 S 2.57 E                    |
| 3600.00                   | 0.36            | 189.09          | S 9 5 W                           | 0.49                                   | 3599.89                   | 12.4 166.6                            | 12.09 S 2.88 E                    |
| 3700.00                   | 0.37            | 213.24          | S 33 14 W                         | 0.15                                   | 3699.88                   | 12.9 168.2                            | 12.67 S 2.65 E                    |
| 3800.00                   | 0.15            | 198.54          | S 18 32 W                         | 0.23                                   | 3799.88                   | 13.3 169.5                            | 13.06 S 2.43 E                    |
| 3900.00                   | 0.24            | 156.67          | S 23 20 E                         | 0.16                                   | 3899.88                   | 13.6 169.5                            | 13.38 S 2.47 E                    |
| 4000.00                   | 0.34            | 186.77          | S 6 46 W                          | 0.18                                   | 3999.88                   | 14.1 169.7                            | 13.86 S 2.52 E                    |
| 4100.00                   | 0.16            | 226.85          | S 46 51 W                         | 0.24                                   | 4099.88                   | 14.5 170.5                            | 14.25 S 2.38 E                    |
| 4200.00                   | 0.25            | 217.79          | S 37 47 W                         | 0.10                                   | 4199.88                   | 14.7 171.6                            | 14.52 S 2.15 E                    |
| 4300.00                   | 0.27            | 243.83          | S 63 50 W                         | 0.12                                   | 4299.88                   | 14.9 173.1                            | 14.80 S 1.80 E                    |
| 4400.00                   | 0.22            | 244.47          | S 64 28 W                         | 0.05                                   | 4399.88                   | 15.1 174.6                            | 14.98 S 1.42 E                    |

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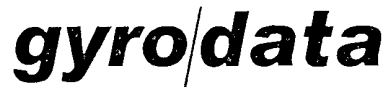
BOPCO LP

Lease: James Ranch Well: 104-H, 4 1/2" Drillpipe

Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD1109GMS228

| MEASURED<br>DEPTH<br>feet | I N C L<br>deg. | AZIMUTH<br>deg. | BORE HOLE<br>BEARING<br>deg. min. | DOGLEG<br>SEVERITY<br>deg./<br>100 ft. | VERTICAL<br>DEPTH<br>feet | CLOSURE<br>DIST. AZIMUTH<br>feet deg. | HORIZONTAL<br>COORDINATES<br>feet |
|---------------------------|-----------------|-----------------|-----------------------------------|----------------------------------------|---------------------------|---------------------------------------|-----------------------------------|
| 4500.00                   | 0.20            | 180.12          | S 0 7 W                           | 0.22                                   | 4499.88                   | 15.3 175.3                            | 15.24 S 1.24 E                    |
| 4600.00                   | 0.38            | 192.39          | S 12 23 W                         | 0.19                                   | 4599.88                   | 15.8 175.7                            | 15.74 S 1.17 E                    |
| 4700.00                   | 0.50            | 194.46          | S 14 28 W                         | 0.12                                   | 4699.87                   | 16.5 176.6                            | 16.49 S 0.99 E                    |
| 4800.00                   | 0.21            | 236.73          | S 56 44 W                         | 0.37                                   | 4799.87                   | 17.0 177.5                            | 17.01 S 0.73 E                    |
| 4900.00                   | 0.29            | 204.82          | S 24 49 W                         | 0.16                                   | 4899.87                   | 17.3 178.4                            | 17.34 S 0.47 E                    |
| 5000.00                   | 0.37            | 210.66          | S 30 40 W                         | 0.09                                   | 4999.87                   | 17.8 179.4                            | 17.85 S 0.20 E                    |
| 5100.00                   | 0.40            | 264.22          | S 84 13 W                         | 0.35                                   | 5099.87                   | 18.2 181.0                            | 18.16 S 0.31 W                    |
| 5200.00                   | 0.30            | 223.06          | S 43 4 W                          | 0.26                                   | 5199.87                   | 18.4 182.6                            | 18.39 S 0.84 W                    |
| 5300.00                   | 0.27            | 229.23          | S 49 14 W                         | 0.04                                   | 5299.86                   | 18.8 183.6                            | 18.73 S 1.19 W                    |
| 5400.00                   | 0.13            | 264.77          | S 84 46 W                         | 0.18                                   | 5399.86                   | 19.0 184.5                            | 18.90 S 1.49 W                    |
| 5500.00                   | 0.31            | 289.09          | N 70 55 W                         | 0.20                                   | 5499.86                   | 18.9 185.6                            | 18.82 S 1.85 W                    |
| 5600.00                   | 0.19            | 270.17          | N 89 50 W                         | 0.14                                   | 5599.86                   | 18.9 186.9                            | 18.73 S 2.28 W                    |
| 5700.00                   | 0.31            | 226.06          | S 46 4 W                          | 0.22                                   | 5699.86                   | 19.1 187.9                            | 18.92 S 2.64 W                    |
| 5800.00                   | 0.49            | 225.94          | S 45 56 W                         | 0.18                                   | 5799.86                   | 19.7 189.2                            | 19.40 S 3.14 W                    |
| 5900.00                   | 0.47            | 214.68          | S 34 41 W                         | 0.10                                   | 5899.86                   | 20.4 190.4                            | 20.04 S 3.68 W                    |
| 6000.00                   | 0.78            | 210.60          | S 30 36 W                         | 0.31                                   | 5999.85                   | 21.4 191.5                            | 20.96 S 4.26 W                    |
| 6100.00                   | 0.83            | 206.94          | S 26 56 W                         | 0.07                                   | 6099.84                   | 22.7 192.5                            | 22.19 S 4.93 W                    |
| 6200.00                   | 0.93            | 218.84          | S 38 50 W                         | 0.21                                   | 6199.83                   | 24.2 193.8                            | 23.47 S 5.77 W                    |
| 6300.00                   | 0.83            | 223.99          | S 43 59 W                         | 0.13                                   | 6299.82                   | 25.5 195.4                            | 24.62 S 6.78 W                    |
| 6400.00                   | 0.98            | 221.43          | S 41 26 W                         | 0.16                                   | 6399.80                   | 27.0 196.9                            | 25.78 S 7.85 W                    |
| 6500.00                   | 1.00            | 214.36          | S 34 22 W                         | 0.12                                   | 6499.79                   | 28.6 198.2                            | 27.15 S 8.91 W                    |
| 6600.00                   | 1.26            | 210.18          | S 30 11 W                         | 0.27                                   | 6599.77                   | 30.5 199.1                            | 28.82 S 9.96 W                    |
| 6700.00                   | 1.63            | 203.48          | S 23 29 W                         | 0.41                                   | 6699.74                   | 33.0 199.6                            | 31.07 S 11.07 W                   |
| 6702.00                   | 1.50            | 201.61          | S 21 37 W                         | 6.98                                   | 6701.74                   | 33.0 199.6                            | 31.12 S 11.10 W                   |

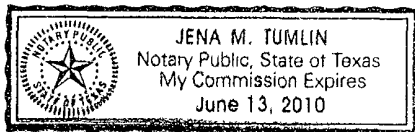


Gyrodata Incorporated  
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Odessa, TX 79765

432/561-8458  
Fax 432/563-7982

State of Texas  
County of Midland

I, Jena Tumlin, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Rate Gyroscopic Multishot survey from a depth of 0 feet to a depth of 6702 feet conducted on the day(s) of 11/10/09 through 11/10/09; that this survey was conducted at the request of Bass Enterprises (Bobco) for the James Ranch Well No. 104-H in Eddy County, New Mexico; that the data is true, correct, complete, and within the limitations of the tool as set forth by Gyrodata Inc; that I am authorized and qualified to make this report; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Gyrodata Inc.



  
Jena Tumlin  
Operations