

## Saguaro State 28, Well #1

Eddy County, New Mexico  
Section 28, T18S, R28EGL Elevation: 3542'  
Estimated RKB: 3557'

## Proposed Casing Design

(not to scale)

**17 1/2" Open Hole ±450' MD/ TVD**Surface Casing: 13 3/8", 48#, H-40, STC @  
±450' MD/ TVD

Mud: Freshwater &amp; gel

MWT @ TD: 8.4 ppg

Cement to Surface (hole volume): ±312 cu.ft

*Type of Cmt - 14.8# Premium  
Plus "C"*20", J-55, 53#, Pre-drill  
conductor set @ ±40' MD/TVD  
Red-Mix Cement to surface**11" Open Hole @ ±3100' MD/ TVD**Intermediate Casing: 8 5/8", 32#, J-55, LTC @  
±3100' MD/ TVD

Mud: Natural Brine &amp; gel

MWT @ TD: 10 ppg

Cement to Surface (hole volume): ±1274 cu.ft

*Type of Cmt - 11.9#/gal - CLASS "C"*

KOP: ±6,500' MD/TVD

**7 7/8" Open Hole TD @ 10,872' MD / 10,830' TVD**

Production Casing: 5 1/2", 17#, P-110, LTC @ ±10,830' MD/TVD

Mud: Freshwater / Brine &amp; Gel to 9,500'

MWT to 9500': (8.8 ppg - 9.0 ppg)

Mud: Freshwater/ Brine/ Gel &amp; Starch 9,500' to TD.

MWT 9500' - TD: (9.5 ppg to 10.2 ppg)

Top of Tail Cmt: ±9,300' MD/ TVD

Top of Lead Cmt: ±8,000' MD/TVD

Cement (hole volume): 395 cu.ft.

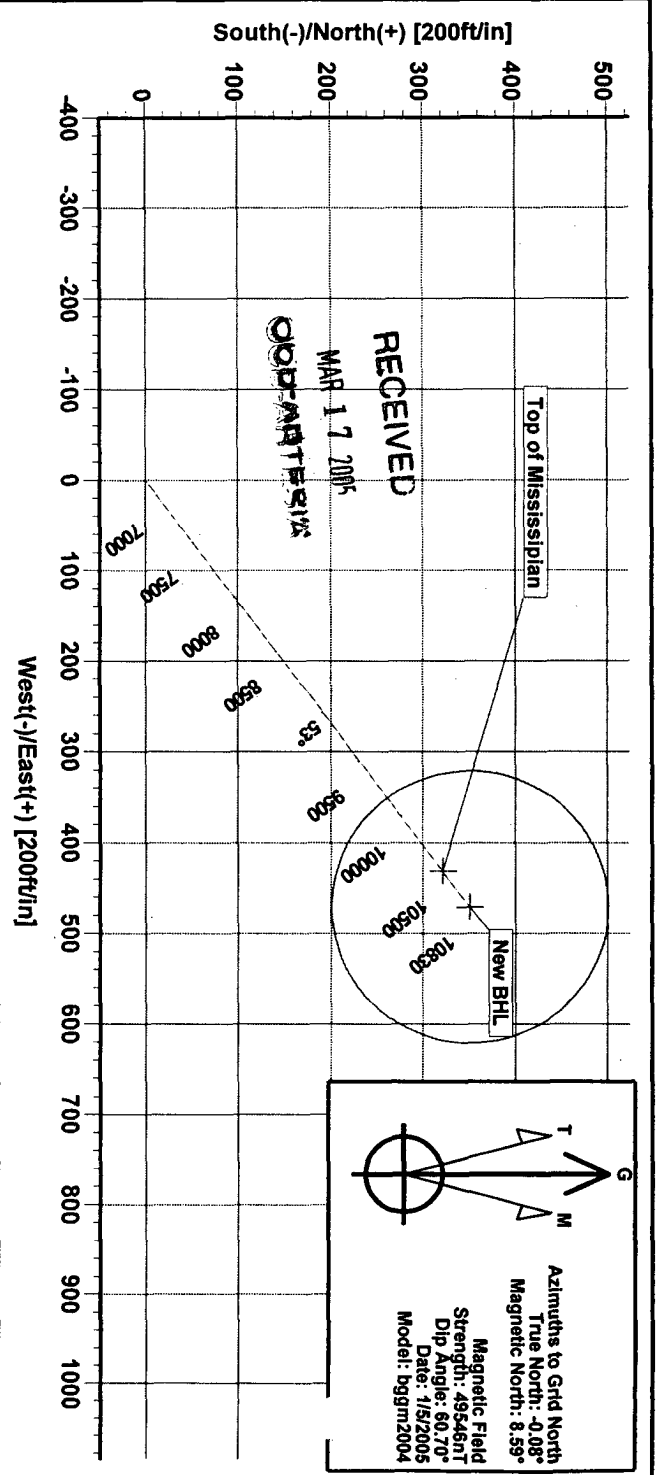
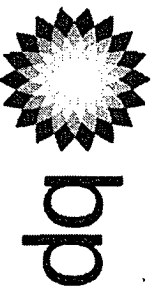
*Type of Cmt - 14.8# Premium Plus "C"*Target Sands

Top Mississippian: 10,500' TVD / 10,461' MD

revision0jr.2/19/05



Field: EDDY COUNTY, NM  
Site: SEC 28-T18S-R28E  
Well: SAQURO STATE #28  
Wellpath: ORIGINAL HOLE  
Plan: Plan #3



SECTION DETAILS

| Sec | MD       | Inc  | Azi   | TVD      | +N/-S  | +E/-W  | Dleg  | TFace | VSec   | Target  |
|-----|----------|------|-------|----------|--------|--------|-------|-------|--------|---------|
| 1   | 0.00     | 0.00 | 0.00  | 0.00     | 0.00   | 0.00   | 0.00  | 0.00  | 0.00   |         |
| 2   | 6500.00  | 0.00 | 0.00  | 6500.00  | 0.00   | 0.00   | 0.00  | 0.00  | 0.00   |         |
| 3   | 7356.52  | 8.57 | 53.32 | 7353.34  | 0.00   | 38.18  | 51.25 | 53.32 | 63.91  |         |
| 4   | 10872.41 | 8.57 | 53.32 | 10830.00 | 351.01 | 471.24 | 0.00  | 0.00  | 587.60 | New BHL |

TARGET DETAILS

| Name                 | TVD      | +N/-S  | +E/-W  | Northing  | Easting   | Shape                |
|----------------------|----------|--------|--------|-----------|-----------|----------------------|
| Top of Mississippian | 10500.00 | 321.32 | 431.38 | 624396.79 | 545412.04 | Point                |
| New BHL              | 10830.00 | 351.01 | 471.24 | 624426.48 | 545451.90 | Circle (Radius: 150) |

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Centre: SAQURO STATE #28, Grid North  
Vertical (TVD) Reference: GL 3542+25° 3567.00  
Section (VS) Reference: User Defined (0.00N,0.00E)  
Measured Depth Reference: GL 3542+25° 3567.00  
Calculation Method: Minimum Curvature

WELL DETAILS

| Name             | +N/-S | +E/-W | Northing  | Easting   | Latitude      | Longitude      | Spot |
|------------------|-------|-------|-----------|-----------|---------------|----------------|------|
| SAQURO STATE #28 | 0.00  | 0.00  | 624075.50 | 544980.70 | 32°42'56.142N | 104°11'13.505W | N/A  |

Vertical Section at 53.32° [700ft/in]

|                                                                                                                                                         |                                                                                                                                                                                                                                              |                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>Company:</b> BP<br><b>Field:</b> EDDY COUNTY, NM<br><b>Site:</b> SEC 28-T18S-R28E<br><b>Well:</b> SAQURO STATE #28<br><b>Wellpath:</b> ORIGINAL HOLE | <b>Date:</b> 1/12/2005<br><b>Co-ordinate(NE) Reference:</b> Well: SAQURO STATE #28, Grid North<br><b>Vertical (TVD) Reference:</b> GL'3542'+25' 3567.0<br><b>Section (VS) Reference:</b> User (0.00N,0.00E,53.32Azi)<br><b>Plan:</b> Plan #3 | <b>Time:</b> 11:33:41<br><b>Page:</b> 1 |
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|                                                                                                                                                                                                  |                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Field:</b> EDDY COUNTY, NM<br>EDDY COUNTY, NM<br>USA<br><b>Map System:</b> US State Plane Coordinate System 1927<br><b>Geo Datum:</b> NAD27 (Clarke 1866)<br><b>Sys Datum:</b> Mean Sea Level | <b>Map Zone:</b> New Mexico, Eastern Zone<br><b>Coordinate System:</b> Well Centre<br><b>Geomagnetic Model:</b> bggm2004 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|

**Site:** SEC 28-T18S-R28E

|                                                                                                                   |                                                               |                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Position:</b><br><b>From:</b> Map<br><b>Position Uncertainty:</b> 0.00 ft<br><b>Ground Level:</b> 0.00 ft | <b>Northing:</b> 624075.50 ft<br><b>Easting:</b> 544980.70 ft | <b>Latitude:</b> 32 42 56.142 N<br><b>Longitude:</b> 104 11 13.505 W<br><b>North Reference:</b> Grid<br><b>Grid Convergence:</b> 0.08 deg |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                      |
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| <b>Well:</b> SAQURO STATE #28<br><br><b>Surface Position:</b> +N/-S 0.00 ft<br>+E/-W 0.00 ft<br><b>Position Uncertainty:</b> 0.00 ft<br><b>Reference Point:</b> +N/-S 0.00 ft<br>+E/-W 0.00 ft | <b>Slot Name:</b><br><br><b>Northing:</b> 624075.50 ft<br><b>Easting:</b> 544980.70 ft<br><b>Latitude:</b> 32 42 56.142 N<br><b>Longitude:</b> 104 11 13.505 W<br><b>Measured Depth:</b> 3567.00 ft<br><b>Vertical Depth:</b> 3567.00 ft<br><b>Inclination:</b> 0.00 deg<br><b>Azimuth:</b> 0.00 deg |
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|                                                                                                                                                                                                  |                                             |                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Wellpath:</b> ORIGINAL HOLE<br><br><b>Current Datum:</b> GL'3542'+25'<br><b>Magnetic Data:</b> 1/5/2005<br><b>Field Strength:</b> 49546 nT<br><b>Vertical Section:</b> Depth From (TVD)<br>ft | <b>Height</b> 3567.00 ft<br><br>+N/-S<br>ft | <b>Drilled From:</b> Well Ref. Point<br><b>Tie-on Depth:</b> 3567.00 ft<br><b>Above System Datum:</b> Mean Sea Level<br><b>Declination:</b> 8.67 deg<br><b>Mag Dip Angle:</b> 60.70 deg<br>+E/-W<br>ft<br>Direction<br>deg |
| 3567.00                                                                                                                                                                                          | 0.00                                        | 0.00 53.32                                                                                                                                                                                                                 |

|                                                   |                                                                                              |
|---------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Plan:</b> Plan #3<br><br><b>Principal:</b> Yes | <b>Date Composed:</b> 1/5/2005<br><b>Version:</b> 3<br><b>Tied-to:</b> From: Definitive Path |
|---------------------------------------------------|----------------------------------------------------------------------------------------------|

**Plan Section Information**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg | Target  |
|----------|-------------|-------------|-----------|-------------|-------------|------------------|--------------------|-------------------|------------|---------|
| 0.00     | 0.00        | 0.00        | 0.00      | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |         |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |         |
| 7356.52  | 8.57        | 53.32       | 7353.34   | 38.18       | 51.25       | 1.00             | 1.00               | 6.23              | 53.32      |         |
| 10872.41 | 8.57        | 53.32       | 10830.00  | 351.01      | 471.24      | 0.00             | 0.00               | 0.00              | 0.00       | New BHL |

**Section 1 : Start Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 0.00     | 0.00        | 0.00        | 0.00      | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6000.00  | 0.00        | 0.00        | 6000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6100.00  | 0.00        | 0.00        | 6100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6200.00  | 0.00        | 0.00        | 6200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6300.00  | 0.00        | 0.00        | 6300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6400.00  | 0.00        | 0.00        | 6400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |

**Section 2 : Start DLS 1.00 TFO 53.32**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 6600.00  | 1.00        | 53.32       | 6599.99   | 0.52        | 0.70        | 0.87     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6700.00  | 2.00        | 53.32       | 6699.96   | 2.09        | 2.80        | 3.49     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6800.00  | 3.00        | 53.32       | 6799.86   | 4.69        | 6.30        | 7.85     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6900.00  | 4.00        | 53.32       | 6899.68   | 8.34        | 11.19       | 13.96    | 1.00             | 1.00               | 0.00              | 0.00       |

|                                                                                                                                                         |                                                                                                                                                                                                                                              |
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| <b>Company:</b> BP<br><b>Field:</b> EDDY COUNTY, NM<br><b>Site:</b> SEC 28-T18S-R28E<br><b>Well:</b> SAQURO STATE #28<br><b>Wellpath:</b> ORIGINAL HOLE | <b>Date:</b> 1/12/2005<br><b>Co-ordinate(NE) Reference:</b> Well: SAQURO STATE #28, Grid North<br><b>Vertical (TVD) Reference:</b> GL'3542'+25' 3567.0<br><b>Section (VS) Reference:</b> User (0.00N,0.00E,53.32Azi)<br><b>Plan:</b> Plan #3 |
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**Section 2 : Start DLS 1.00 TFO 53.32**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 7000.00  | 5.00        | 53.32       | 6999.37   | 13.03       | 17.49       | 21.80    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7100.00  | 6.00        | 53.32       | 7098.90   | 18.75       | 25.17       | 31.39    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7200.00  | 7.00        | 53.32       | 7198.26   | 25.51       | 34.25       | 42.71    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7300.00  | 8.00        | 53.32       | 7297.40   | 33.31       | 44.72       | 55.77    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7356.52  | 8.57        | 53.32       | 7353.34   | 38.18       | 51.25       | 63.91    | 1.00             | 1.00               | 0.00              | 0.00       |

**Section 3 : Start Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 7400.00  | 8.57        | 53.32       | 7396.33   | 42.05       | 56.45       | 70.38    | 0.00             | 0.00               | 0.00              | 0.00       |
| 7500.00  | 8.57        | 53.32       | 7495.21   | 50.94       | 68.39       | 85.28    | 0.00             | 0.00               | 0.00              | 0.00       |
| 7600.00  | 8.57        | 53.32       | 7594.10   | 59.84       | 80.34       | 100.17   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7700.00  | 8.57        | 53.32       | 7692.98   | 68.74       | 92.28       | 115.07   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7800.00  | 8.57        | 53.32       | 7791.87   | 77.64       | 104.23      | 129.96   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7900.00  | 8.57        | 53.32       | 7890.75   | 86.53       | 116.17      | 144.86   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8000.00  | 8.57        | 53.32       | 7989.63   | 95.43       | 128.12      | 159.75   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8100.00  | 8.57        | 53.32       | 8088.52   | 104.33      | 140.06      | 174.65   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8200.00  | 8.57        | 53.32       | 8187.40   | 113.23      | 152.01      | 189.54   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8300.00  | 8.57        | 53.32       | 8286.29   | 122.12      | 163.96      | 204.44   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8400.00  | 8.57        | 53.32       | 8385.17   | 131.02      | 175.90      | 219.34   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8500.00  | 8.57        | 53.32       | 8484.06   | 139.92      | 187.85      | 234.23   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8600.00  | 8.57        | 53.32       | 8582.94   | 148.82      | 199.79      | 249.13   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8700.00  | 8.57        | 53.32       | 8681.83   | 157.72      | 211.74      | 264.02   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8800.00  | 8.57        | 53.32       | 8780.71   | 166.61      | 223.68      | 278.92   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8900.00  | 8.57        | 53.32       | 8879.59   | 175.51      | 235.63      | 293.81   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9000.00  | 8.57        | 53.32       | 8978.48   | 184.41      | 247.57      | 308.71   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9100.00  | 8.57        | 53.32       | 9077.36   | 193.31      | 259.52      | 323.60   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9200.00  | 8.57        | 53.32       | 9176.25   | 202.20      | 271.46      | 338.50   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9300.00  | 8.57        | 53.32       | 9275.13   | 211.10      | 283.41      | 353.39   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9400.00  | 8.57        | 53.32       | 9374.02   | 220.00      | 295.35      | 368.29   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9500.00  | 8.57        | 53.32       | 9472.90   | 228.90      | 307.30      | 383.18   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9600.00  | 8.57        | 53.32       | 9571.79   | 237.79      | 319.25      | 398.08   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9700.00  | 8.57        | 53.32       | 9670.67   | 246.69      | 331.19      | 412.97   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9800.00  | 8.57        | 53.32       | 9769.55   | 255.59      | 343.14      | 427.87   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9900.00  | 8.57        | 53.32       | 9868.44   | 264.49      | 355.08      | 442.76   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10000.00 | 8.57        | 53.32       | 9967.32   | 273.39      | 367.03      | 457.66   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10100.00 | 8.57        | 53.32       | 10066.21  | 282.28      | 378.97      | 472.55   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10200.00 | 8.57        | 53.32       | 10165.09  | 291.18      | 390.92      | 487.45   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10300.00 | 8.57        | 53.32       | 10263.98  | 300.08      | 402.86      | 502.34   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10400.00 | 8.57        | 53.32       | 10362.86  | 308.98      | 414.81      | 517.24   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10500.00 | 8.57        | 53.32       | 10461.75  | 317.87      | 426.75      | 532.13   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10538.69 | 8.57        | 53.32       | 10500.00  | 321.32      | 431.38      | 537.89   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10600.00 | 8.57        | 53.32       | 10560.63  | 326.77      | 438.70      | 547.03   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10700.00 | 8.57        | 53.32       | 10659.52  | 335.67      | 450.65      | 561.92   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10800.00 | 8.57        | 53.32       | 10758.40  | 344.57      | 462.59      | 576.82   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10872.41 | 8.57        | 53.32       | 10830.00  | 351.01      | 471.24      | 587.60   | 0.00             | 0.00               | 0.00              | 0.00       |

**Survey**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 6000.00  | 0.00        | 0.00        | 6000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6100.00  | 0.00        | 0.00        | 6100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6200.00  | 0.00        | 0.00        | 6200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6300.00  | 0.00        | 0.00        | 6300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6400.00  | 0.00        | 0.00        | 6400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | MWD ISCWSA   |
| 6600.00  | 1.00        | 53.32       | 6599.99   | 0.52        | 0.70        | 0.87     | 1.00             | 1.00               | 0.00              | MWD ISCWSA   |
| 6700.00  | 2.00        | 53.32       | 6699.96   | 2.09        | 2.80        | 3.49     | 1.00             | 1.00               | 0.00              | MWD ISCWSA   |
| 6800.00  | 3.00        | 53.32       | 6799.86   | 4.69        | 6.30        | 7.85     | 1.00             | 1.00               | 0.00              | MWD ISCWSA   |
| 6900.00  | 4.00        | 53.32       | 6899.68   | 8.34        | 11.19       | 13.96    | 1.00             | 1.00               | 0.00              | MWD ISCWSA   |



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## Targets

| Name                                                 | Description<br>Dip. | Dir. | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | Map<br>Northing<br>ft | Map<br>Easting<br>ft | <--- Latitude ---><br>Deg Min Sec | <--- Longitude ---><br>Deg Min Sec |
|------------------------------------------------------|---------------------|------|-----------|-------------|-------------|-----------------------|----------------------|-----------------------------------|------------------------------------|
| Top of Mississippian<br>-Plan hit target             |                     |      | 10500.00  | 321.32      | 431.38      | 624396.79             | 545412.04            | 32 42 59.316 N                    | 104 11 8.451 W                     |
| New BHL<br>-Circle (Radius: 150)<br>-Plan hit target |                     |      | 10830.00  | 351.01      | 471.24      | 624426.48             | 545451.90            | 32 42 59.609 N                    | 104 11 7.984 W                     |

|                                                                                                                                                         |                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Company:</b> BP<br><b>Field:</b> EDDY COUNTY, NM<br><b>Site:</b> SEC 28-T18S-R28E<br><b>Well:</b> SAQURO STATE #28<br><b>Wellpath:</b> ORIGINAL HOLE | <b>Date:</b> 1/12/2005<br><b>Co-ordinate(NE) Reference:</b> Well: SAQURO STATE #28, Grid North<br><b>Vertical (TVD) Reference:</b> GL'3542'+25' 3567.0<br><b>Section (VS) Reference:</b> User (0.00N,0.00E,53.32Azi)<br><b>Plan:</b> Plan #3 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                  |                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Field:</b> EDDY COUNTY, NM<br>EDDY COUNTY, NM<br>USA<br><b>Map System:</b> US State Plane Coordinate System 1927<br><b>Geo Datum:</b> NAD27 (Clarke 1866)<br><b>Sys Datum:</b> Mean Sea Level | <b>Map Zone:</b> New Mexico, Eastern Zone<br><b>Coordinate System:</b> Well Centre<br><b>Geomagnetic Model:</b> bggm2004 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|

**Site:** SEC 28-T18S-R28E

|                                      |                               |                                   |
|--------------------------------------|-------------------------------|-----------------------------------|
| <b>Site Position:</b>                | <b>Northing:</b> 624075.50 ft | <b>Latitude:</b> 32 42 56.142 N   |
| <b>From:</b> Map                     | <b>Easting:</b> 544980.70 ft  | <b>Longitude:</b> 104 11 13.505 W |
| <b>Position Uncertainty:</b> 0.00 ft |                               | <b>North Reference:</b> Grid      |
| <b>Ground Level:</b> 0.00 ft         |                               | <b>Grid Convergence:</b> 0.08 deg |

|                                        |                                   |
|----------------------------------------|-----------------------------------|
| <b>Well:</b> SAQURO STATE #28          | <b>Slot Name:</b>                 |
| <b>Surface Position:</b> +N/-S 0.00 ft | <b>Latitude:</b> 32 42 56.142 N   |
| +E/-W 0.00 ft                          | <b>Longitude:</b> 104 11 13.505 W |
| <b>Position Uncertainty:</b> 0.00 ft   |                                   |
| <b>Reference Point:</b> +N/-S 0.00 ft  | <b>Latitude:</b> 32 42 56.142 N   |
| +E/-W 0.00 ft                          | <b>Longitude:</b> 104 11 13.505 W |
|                                        | <b>Measured Depth:</b> 3567.00 ft |
|                                        | <b>Inclination:</b> 0.00 deg      |
|                                        | <b>Vertical Depth:</b> 3567.00 ft |
|                                        | <b>Azimuth:</b> 0.00 deg          |

|                                           |                                           |
|-------------------------------------------|-------------------------------------------|
| <b>Wellpath:</b> ORIGINAL HOLE            | <b>Drilled From:</b> Well Ref. Point      |
| <b>Current Datum:</b> GL'3542'+25'        | <b>Tie-on Depth:</b> 3567.00 ft           |
| <b>Magnetic Data:</b> 1/5/2005            | <b>Above System Datum:</b> Mean Sea Level |
| <b>Field Strength:</b> 49546 nT           | <b>Declination:</b> 8.67 deg              |
| <b>Vertical Section:</b> Depth From (TVD) | <b>Mag Dip Angle:</b> 60.70 deg           |
| ft                                        | <b>+E/-W</b> Direction                    |
|                                           | deg                                       |
| 3567.00                                   | 0.00                                      |
| 0.00                                      | 53.32                                     |

|                       |                                       |
|-----------------------|---------------------------------------|
| <b>Plan:</b> Plan #3  | <b>Date Composed:</b> 1/5/2005        |
|                       | <b>Version:</b> 3                     |
| <b>Principal:</b> Yes | <b>Tied-to:</b> From: Definitive Path |

### Plan Section Information

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg | Target  |
|----------|-------------|-------------|-----------|-------------|-------------|------------------|--------------------|-------------------|------------|---------|
| 0.00     | 0.00        | 0.00        | 0.00      | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |         |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 0.00             | 0.00               | 0.00              | 0.00       |         |
| 7356.52  | 8.57        | 53.32       | 7353.34   | 38.18       | 51.25       | 1.00             | 1.00               | 6.23              | 53.32      |         |
| 10872.41 | 8.57        | 53.32       | 10830.00  | 351.01      | 471.24      | 0.00             | 0.00               | 0.00              | 0.00       | New BHL |

### Section 1 : Start Hold

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 0.00     | 0.00        | 0.00        | 0.00      | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6000.00  | 0.00        | 0.00        | 6000.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6100.00  | 0.00        | 0.00        | 6100.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6200.00  | 0.00        | 0.00        | 6200.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6300.00  | 0.00        | 0.00        | 6300.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6400.00  | 0.00        | 0.00        | 6400.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 0.00     | 0.00             | 0.00               | 0.00              | 0.00       |

### Section 2 : Start DLS 1.00 TFO 53.32

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 6600.00  | 1.00        | 53.32       | 6599.99   | 0.52        | 0.70        | 0.87     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6700.00  | 2.00        | 53.32       | 6699.96   | 2.09        | 2.80        | 3.49     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6800.00  | 3.00        | 53.32       | 6799.86   | 4.69        | 6.30        | 7.85     | 1.00             | 1.00               | 0.00              | 0.00       |
| 6900.00  | 4.00        | 53.32       | 6899.68   | 8.34        | 11.19       | 13.96    | 1.00             | 1.00               | 0.00              | 0.00       |

**Company:** BP  
**Field:** EDDY COUNTY, NM  
**Site:** SEC 28-T18S-R28E  
**Well:** SAQURO STATE #28  
**Wellpath:** ORIGINAL HOLE

**Date:** 1/12/2005 **Time:** 11:34:49 **Page:** 2  
**Co-ordinate(NE) Reference:** Well: SAQURO STATE #28, Grid North  
**Vertical (TVD) Reference:** GL'3542'+25' 3567.0  
**Section (VS) Reference:** User (0.00N,0.00E,53.32Azi)  
**Plan:** Plan #3

### Section 2 : Start DLS 1.00 TFO 53.32

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 7000.00  | 5.00        | 53.32       | 6999.37   | 13.03       | 17.49       | 21.80    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7100.00  | 6.00        | 53.32       | 7098.90   | 18.75       | 25.17       | 31.39    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7200.00  | 7.00        | 53.32       | 7198.26   | 25.51       | 34.25       | 42.71    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7300.00  | 8.00        | 53.32       | 7297.40   | 33.31       | 44.72       | 55.77    | 1.00             | 1.00               | 0.00              | 0.00       |
| 7356.52  | 8.57        | 53.32       | 7353.34   | 38.18       | 51.25       | 63.91    | 1.00             | 1.00               | 0.00              | 0.00       |

### Section 3 : Start Hold

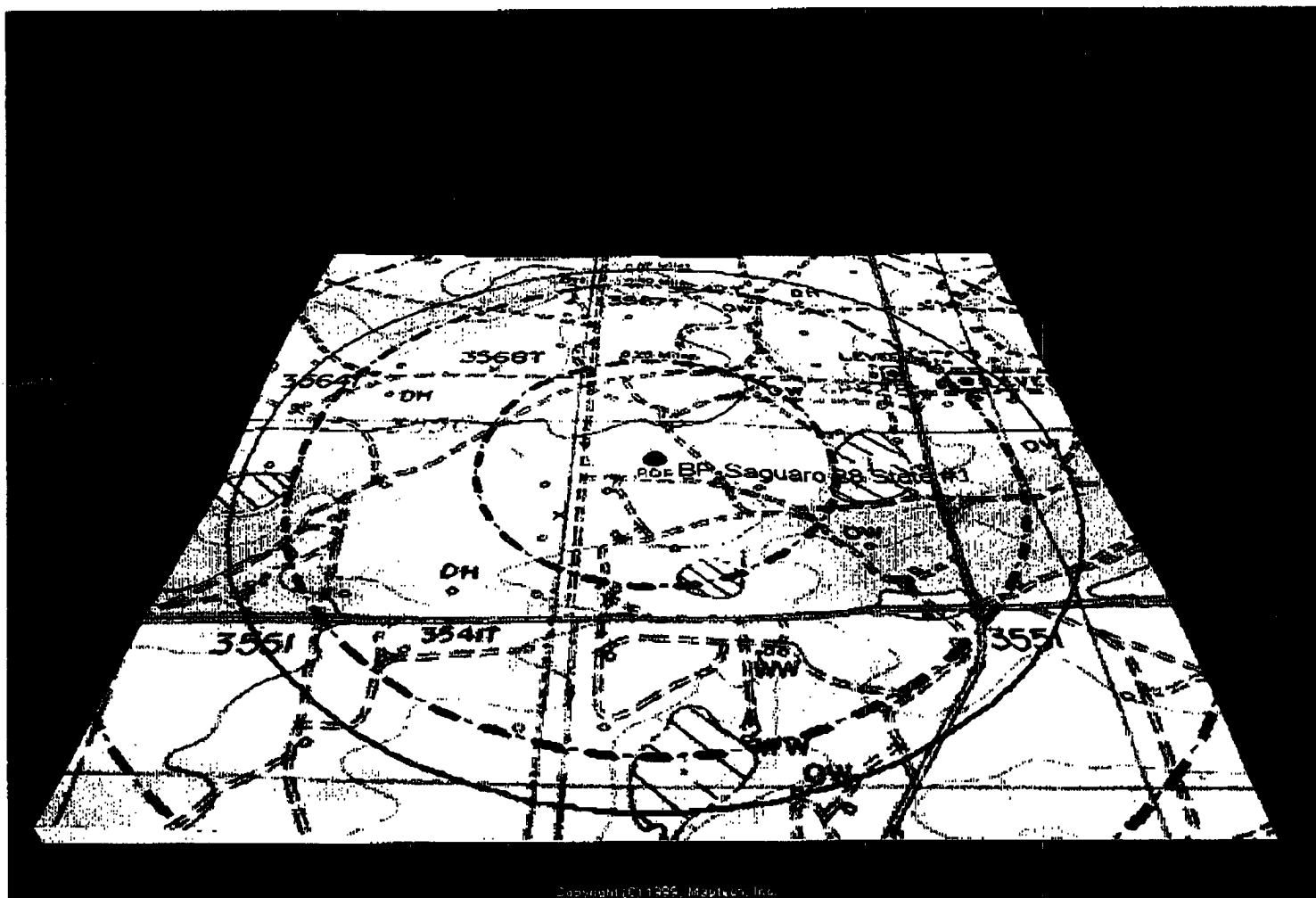
| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>deg/100ft | Build<br>deg/100ft | Turn<br>deg/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|------------|
| 7400.00  | 8.57        | 53.32       | 7396.33   | 42.05       | 56.45       | 70.38    | 0.00             | 0.00               | 0.00              | 0.00       |
| 7500.00  | 8.57        | 53.32       | 7495.21   | 50.94       | 68.39       | 85.28    | 0.00             | 0.00               | 0.00              | 0.00       |
| 7600.00  | 8.57        | 53.32       | 7594.10   | 59.84       | 80.34       | 100.17   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7700.00  | 8.57        | 53.32       | 7692.98   | 68.74       | 92.28       | 115.07   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7800.00  | 8.57        | 53.32       | 7791.87   | 77.64       | 104.23      | 129.96   | 0.00             | 0.00               | 0.00              | 0.00       |
| 7900.00  | 8.57        | 53.32       | 7890.75   | 86.53       | 116.17      | 144.86   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8000.00  | 8.57        | 53.32       | 7989.63   | 95.43       | 128.12      | 159.75   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8100.00  | 8.57        | 53.32       | 8088.52   | 104.33      | 140.06      | 174.65   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8200.00  | 8.57        | 53.32       | 8187.40   | 113.23      | 152.01      | 189.54   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8300.00  | 8.57        | 53.32       | 8286.29   | 122.12      | 163.96      | 204.44   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8400.00  | 8.57        | 53.32       | 8385.17   | 131.02      | 175.90      | 219.34   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8500.00  | 8.57        | 53.32       | 8484.06   | 139.92      | 187.85      | 234.23   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8600.00  | 8.57        | 53.32       | 8582.94   | 148.82      | 199.79      | 249.13   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8700.00  | 8.57        | 53.32       | 8681.83   | 157.72      | 211.74      | 264.02   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8800.00  | 8.57        | 53.32       | 8780.71   | 166.61      | 223.68      | 278.92   | 0.00             | 0.00               | 0.00              | 0.00       |
| 8900.00  | 8.57        | 53.32       | 8879.59   | 175.51      | 235.63      | 293.81   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9000.00  | 8.57        | 53.32       | 8978.48   | 184.41      | 247.57      | 308.71   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9100.00  | 8.57        | 53.32       | 9077.36   | 193.31      | 259.52      | 323.60   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9200.00  | 8.57        | 53.32       | 9176.25   | 202.20      | 271.46      | 338.50   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9300.00  | 8.57        | 53.32       | 9275.13   | 211.10      | 283.41      | 353.39   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9400.00  | 8.57        | 53.32       | 9374.02   | 220.00      | 295.35      | 368.29   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9500.00  | 8.57        | 53.32       | 9472.90   | 228.90      | 307.30      | 383.18   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9600.00  | 8.57        | 53.32       | 9571.79   | 237.79      | 319.25      | 398.08   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9700.00  | 8.57        | 53.32       | 9670.67   | 246.69      | 331.19      | 412.97   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9800.00  | 8.57        | 53.32       | 9769.55   | 255.59      | 343.14      | 427.87   | 0.00             | 0.00               | 0.00              | 0.00       |
| 9900.00  | 8.57        | 53.32       | 9868.44   | 264.49      | 355.08      | 442.76   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10000.00 | 8.57        | 53.32       | 9967.32   | 273.39      | 367.03      | 457.66   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10100.00 | 8.57        | 53.32       | 10066.21  | 282.28      | 378.97      | 472.55   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10200.00 | 8.57        | 53.32       | 10165.09  | 291.18      | 390.92      | 487.45   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10300.00 | 8.57        | 53.32       | 10263.98  | 300.08      | 402.86      | 502.34   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10400.00 | 8.57        | 53.32       | 10362.86  | 308.98      | 414.81      | 517.24   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10500.00 | 8.57        | 53.32       | 10461.75  | 317.87      | 426.75      | 532.13   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10538.69 | 8.57        | 53.32       | 10500.00  | 321.32      | 431.38      | 537.89   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10600.00 | 8.57        | 53.32       | 10560.63  | 326.77      | 438.70      | 547.03   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10700.00 | 8.57        | 53.32       | 10659.52  | 335.67      | 450.65      | 561.92   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10800.00 | 8.57        | 53.32       | 10758.40  | 344.57      | 462.59      | 576.82   | 0.00             | 0.00               | 0.00              | 0.00       |
| 10872.41 | 8.57        | 53.32       | 10830.00  | 351.01      | 471.24      | 587.60   | 0.00             | 0.00               | 0.00              | 0.00       |

### Survey

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | Map<br>Northing<br>ft | Map<br>Easting<br>ft | Latitude<br>Deg Min Sec |    | Longitude<br>Deg Min Sec |                 |
|----------|-------------|-------------|-----------|-------------|-------------|-----------------------|----------------------|-------------------------|----|--------------------------|-----------------|
| 6000.00  | 0.00        | 0.00        | 6000.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6100.00  | 0.00        | 0.00        | 6100.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6200.00  | 0.00        | 0.00        | 6200.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6300.00  | 0.00        | 0.00        | 6300.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6400.00  | 0.00        | 0.00        | 6400.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6500.00  | 0.00        | 0.00        | 6500.00   | 0.00        | 0.00        | 624075.50             | 544980.70            | 32                      | 42 | 56.142 N                 | 104 11 13.505 W |
| 6600.00  | 1.00        | 53.32       | 6599.99   | 0.52        | 0.70        | 624076.02             | 544981.40            | 32                      | 42 | 56.148 N                 | 104 11 13.497 W |
| 6700.00  | 2.00        | 53.32       | 6699.96   | 2.09        | 2.80        | 624077.58             | 544983.50            | 32                      | 42 | 56.163 N                 | 104 11 13.472 W |
| 6800.00  | 3.00        | 53.32       | 6799.86   | 4.69        | 6.30        | 624080.19             | 544987.00            | 32                      | 42 | 56.189 N                 | 104 11 13.431 W |
| 6900.00  | 4.00        | 53.32       | 6899.68   | 8.34        | 11.19       | 624083.84             | 544991.89            | 32                      | 42 | 56.225 N                 | 104 11 13.374 W |







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