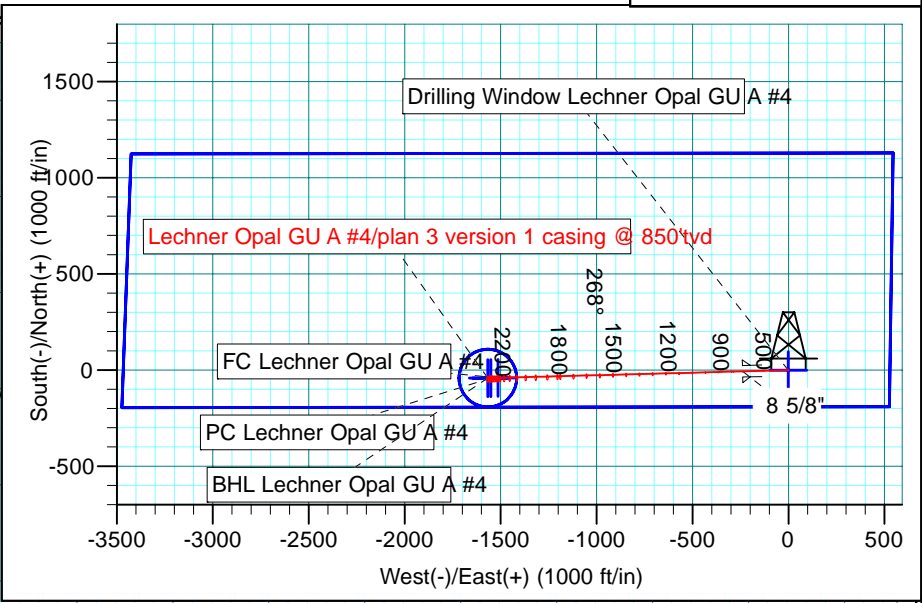
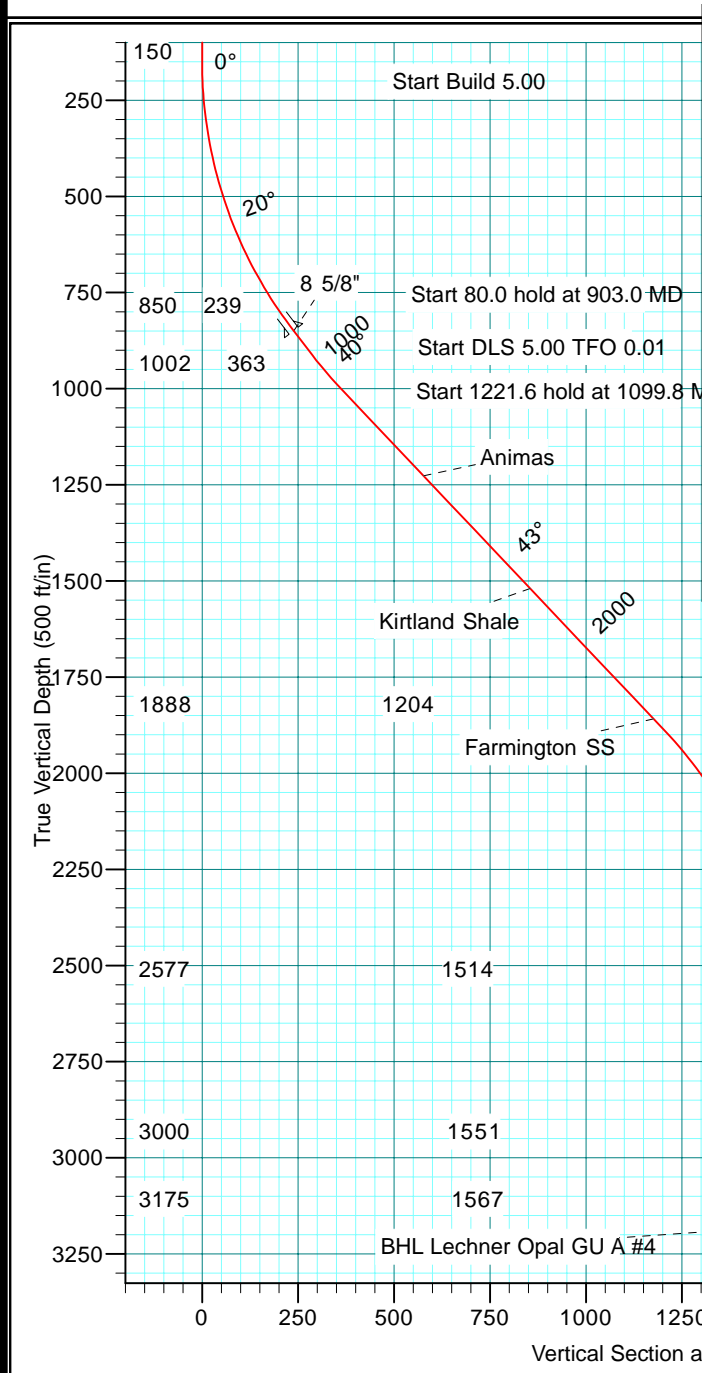
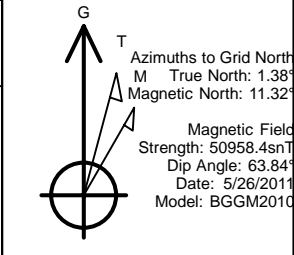


| SECTION DETAILS | | | | | | | | | |
|-----------------|-------|--------|--------|-------|---------|------|---------|--------|--------|
| MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 150.0 | 0.00 | 268.48 | 150.0 | 0.0 | 0.0 | 0.00 | 268.48 | 0.0 | |
| 903.0 | 37.65 | 268.48 | 850.0 | -6.3 | -238.6 | 5.00 | 268.48 | 238.7 | |
| 983.0 | 37.65 | 268.48 | 913.3 | -7.6 | -287.4 | 0.00 | 0.00 | 287.5 | |
| 1099.8 | 43.49 | 268.48 | 1002.0 | -9.6 | -363.3 | 5.00 | 0.01 | 363.4 | |
| 2321.4 | 43.49 | 268.48 | 1888.2 | -31.9 | -1203.7 | 0.00 | 0.00 | 1204.1 | |
| 3091.2 | 5.00 | 268.48 | 2577.0 | -40.1 | -1513.8 | 5.00 | -180.00 | 1514.3 | FC |
| 3515.8 | 5.00 | 268.48 | 3000.0 | -41.1 | -1550.8 | 0.00 | 0.00 | 1551.3 | PC |
| 3691.4 | 5.00 | 268.48 | 3175.0 | -41.5 | -1566.1 | 0.00 | 0.00 | 1566.7 | BHL |

| WELL DETAILS: Lechner Opal GU A #4 | | | |
|--|------------|----------|------------|
| Ground Level: | 6536.0 | Latitude | Longitude |
| Northing | 1178626.93 | Easting | 2342915.39 |
| PROJECT DETAILS: Western - San Juan North (NAD 83) | | | |
| Geodetic System: US State Plane 1983 | | | |
| Datum: North American Datum 1983 | | | |
| Ellipsoid: GRS 1980 | | | |
| Zone: Colorado Southern Zone | | | |
| System Datum: Mean Sea Level | | | |

| WELLBORE TARGET DETAILS (MAP CO-ORDINATES) | | | | | | |
|--|--------|-------|---------|------------|------------|-----------------------|
| Name | TVD | +N/-S | +E/-W | Northing | Easting | Polygon |
| Drilling Window Lechner Opal GU A #4 | 0.0 | 0.0 | 0.0 | 1178626.89 | 2342915.39 | Polygon |
| FC Lechner Opal GU A #4 | 2577.0 | -40.1 | -1513.8 | 1178586.78 | 2341401.56 | Point |
| PC Lechner Opal GU A #4 | 3000.0 | -41.1 | -1550.8 | 1178585.78 | 2341364.56 | Point |
| BHL Lechner Opal GU A #4 | 3175.0 | -41.5 | -1566.1 | 1178585.38 | 2341349.26 | Point (Radius: 150.0) |



North America - Onshore US - BP

Western - San Juan North (NAD 83)

Sec 6-T33N-R8W

Lechner Opal GU A #4

OH

Plan: plan 3 version 1 casing @ 850'tvd

Standard Planning Report

26 May, 2011

BPPASSPORT

Planning Report

| | | |
|---|---|--|
| Database: EDM .16 Hou Prod - WH21P | Local Co-ordinate Reference: Well Lechner Opal GU A #4 | |
| Company: North America - Onshore US - BP | TVD Reference: KBE Well @ 6552.0ft (H&P 291) | |
| Project: Western - San Juan North (NAD 83) | MD Reference: KBE Well @ 6552.0ft (H&P 291) | |
| Site: Sec 6-T33N-R8W | North Reference: Grid | |
| Well: Lechner Opal GU A #4 | Survey Calculation Method: Minimum Curvature | |
| Wellbore: OH | | |
| Design: plan 3 version 1 casing @ 850'tvd | | |

| | | |
|--|-------------------------------------|-----------------------------|
| Project Western - San Juan North (NAD 83), LAPLATA COUNTY COLORADO, USA | | |
| Map System: US State Plane 1983 | System Datum: Mean Sea Level | |
| Geo Datum: North American Datum 1983 | | |
| Map Zone: Colorado Southern Zone | | Using geodetic scale factor |

| | | | | | |
|------------------------------|----------|---------------------|-----------------|--------------------------|-------------------|
| Site Sec 6-T33N-R8W | | | | | |
| Site Position: | | Northing: | 1,178,690.90 ft | Latitude: | 37° 8' 8.304 N |
| From: | Lat/Long | Easting: | 2,342,981.09 ft | Longitude: | 107° 45' 14.400 W |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " | Grid Convergence: | -1.38 ° |

| | | | | | |
|----------------------------------|--------------|--------|----------------------------|-----------------|-------------------------------------|
| Well Lechner Opal GU A #4 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,178,626.93 ft | Latitude: 37° 8' 7.656 N |
| | +E/-W | 0.0 ft | Easting: | 2,342,915.39 ft | Longitude: 107° 45' 15.192 W |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: 6,536.0 ft |

| | | | | | |
|--------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| Wellbore OH | | | | | |
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | BGGM2010 | 5/26/2011 | (°) 9.93 | (°) 63.84 | (nT) 50,958 |

| | | | | |
|---|-------------------------|--------------|----------------------|------------------|
| Design plan 3 version 1 casing @ 850'tvd | | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction |
| | (ft) | (ft) | (ft) | (°) |
| | 0.0 | 0.0 | 0.0 | 268.48 |

| Plan Sections | | | | | | | | | | |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 150.0 | 0.00 | 268.48 | 150.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 268.48 | |
| 903.0 | 37.65 | 268.48 | 850.0 | -6.3 | -238.6 | 5.00 | 5.00 | 0.00 | 268.48 | |
| 983.0 | 37.65 | 268.48 | 913.3 | -7.6 | -287.4 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,099.8 | 43.49 | 268.48 | 1,002.0 | -9.6 | -363.3 | 5.00 | 5.00 | 0.00 | 0.01 | |
| 2,321.4 | 43.49 | 268.48 | 1,888.2 | -31.9 | -1,203.7 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,091.2 | 5.00 | 268.48 | 2,577.0 | -40.1 | -1,513.8 | 5.00 | -5.00 | 0.00 | -180.00 | FC Lechner Opal GU |
| 3,515.8 | 5.00 | 268.48 | 3,000.0 | -41.1 | -1,550.8 | 0.00 | 0.00 | 0.00 | 0.00 | PC Lechner Opal GU |
| 3,691.4 | 5.00 | 268.48 | 3,175.0 | -41.5 | -1,566.1 | 0.00 | 0.00 | 0.00 | 0.00 | BHL Lechner Opal GU |

BPPASSPORT

Planning Report

| | | | |
|------------------|-----------------------------------|-------------------------------------|-------------------------------|
| Database: | EDM .16 Hou Prod - WH21P | Local Co-ordinate Reference: | Well Lechner Opal GU A #4 |
| Company: | North America - Onshore US - BP | TVD Reference: | KBE Well @ 6552.0ft (H&P 291) |
| Project: | Western - San Juan North (NAD 83) | MD Reference: | KBE Well @ 6552.0ft (H&P 291) |
| Site: | Sec 6-T33N-R8W | North Reference: | Grid |
| Well: | Lechner Opal GU A #4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | plan 3 version 1 casing @ 850'tvd | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 268.48 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 150.0 | 0.00 | 268.48 | 150.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 2.50 | 268.48 | 200.0 | 0.0 | -1.1 | 1.1 | 5.00 | 5.00 | 0.00 |
| 300.0 | 7.50 | 268.48 | 299.6 | -0.3 | -9.8 | 9.8 | 5.00 | 5.00 | 0.00 |
| 400.0 | 12.50 | 268.48 | 398.0 | -0.7 | -27.2 | 27.2 | 5.00 | 5.00 | 0.00 |
| 500.0 | 17.50 | 268.48 | 494.6 | -1.4 | -53.0 | 53.0 | 5.00 | 5.00 | 0.00 |
| 600.0 | 22.50 | 268.48 | 588.5 | -2.3 | -87.2 | 87.2 | 5.00 | 5.00 | 0.00 |
| 700.0 | 27.50 | 268.48 | 679.1 | -3.4 | -129.4 | 129.5 | 5.00 | 5.00 | 0.00 |
| 800.0 | 32.50 | 268.48 | 765.7 | -4.8 | -179.4 | 179.5 | 5.00 | 5.00 | 0.00 |
| 900.0 | 37.50 | 268.48 | 847.6 | -6.3 | -236.7 | 236.8 | 5.00 | 5.00 | 0.00 |
| 903.0 | 37.65 | 268.48 | 850.0 | -6.3 | -238.6 | 238.7 | 5.00 | 5.00 | 0.00 |
| 983.0 | 37.65 | 268.48 | 913.3 | -7.6 | -287.4 | 287.5 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 38.50 | 268.48 | 926.7 | -7.9 | -297.9 | 298.0 | 5.00 | 5.00 | 0.00 |
| 1,099.8 | 43.49 | 268.48 | 1,002.0 | -9.6 | -363.3 | 363.4 | 5.00 | 5.00 | 0.00 |
| 1,100.0 | 43.49 | 268.48 | 1,002.1 | -9.6 | -363.4 | 363.6 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 43.49 | 268.48 | 1,074.7 | -11.5 | -432.2 | 432.4 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 43.49 | 268.48 | 1,147.2 | -13.3 | -501.0 | 501.2 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 43.49 | 268.48 | 1,219.8 | -15.1 | -569.8 | 570.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 43.49 | 268.48 | 1,292.3 | -16.9 | -638.6 | 638.9 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 43.49 | 268.48 | 1,364.9 | -18.8 | -707.4 | 707.7 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 43.49 | 268.48 | 1,437.4 | -20.6 | -776.2 | 776.5 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 43.49 | 268.48 | 1,510.0 | -22.4 | -845.0 | 845.3 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 43.49 | 268.48 | 1,582.5 | -24.2 | -913.8 | 914.1 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 43.49 | 268.48 | 1,655.1 | -26.1 | -982.6 | 983.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 43.49 | 268.48 | 1,727.6 | -27.9 | -1,051.4 | 1,051.8 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 43.49 | 268.48 | 1,800.2 | -29.7 | -1,120.2 | 1,120.6 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 43.49 | 268.48 | 1,872.7 | -31.5 | -1,189.0 | 1,189.4 | 0.00 | 0.00 | 0.00 |
| 2,321.4 | 43.49 | 268.48 | 1,888.2 | -31.9 | -1,203.7 | 1,204.1 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 39.56 | 268.48 | 1,947.1 | -33.3 | -1,255.8 | 1,256.3 | 5.00 | -5.00 | 0.00 |
| 2,500.0 | 34.56 | 268.48 | 2,026.9 | -34.9 | -1,316.0 | 1,316.5 | 5.00 | -5.00 | 0.00 |
| 2,600.0 | 29.56 | 268.48 | 2,111.6 | -36.3 | -1,369.1 | 1,369.6 | 5.00 | -5.00 | 0.00 |
| 2,700.0 | 24.56 | 268.48 | 2,200.6 | -37.5 | -1,414.5 | 1,415.0 | 5.00 | -5.00 | 0.00 |
| 2,800.0 | 19.56 | 268.48 | 2,293.3 | -38.5 | -1,452.1 | 1,452.6 | 5.00 | -5.00 | 0.00 |
| 2,900.0 | 14.56 | 268.48 | 2,388.8 | -39.3 | -1,481.4 | 1,481.9 | 5.00 | -5.00 | 0.00 |
| 3,000.0 | 9.56 | 268.48 | 2,486.6 | -39.8 | -1,502.3 | 1,502.8 | 5.00 | -5.00 | 0.00 |
| 3,091.2 | 5.00 | 268.48 | 2,577.0 | -40.1 | -1,513.8 | 1,514.3 | 5.00 | -5.00 | 0.00 |
| 3,100.0 | 5.00 | 268.48 | 2,585.8 | -40.2 | -1,514.6 | 1,515.1 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 5.00 | 268.48 | 2,685.4 | -40.4 | -1,523.3 | 1,523.8 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 5.00 | 268.48 | 2,785.1 | -40.6 | -1,532.0 | 1,532.5 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 5.00 | 268.48 | 2,884.7 | -40.9 | -1,540.7 | 1,541.3 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 5.00 | 268.48 | 2,984.3 | -41.1 | -1,549.4 | 1,550.0 | 0.00 | 0.00 | 0.00 |
| 3,515.8 | 5.00 | 268.48 | 3,000.0 | -41.1 | -1,550.8 | 1,551.3 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 5.00 | 268.48 | 3,083.9 | -41.3 | -1,558.1 | 1,558.7 | 0.00 | 0.00 | 0.00 |
| 3,691.4 | 5.00 | 268.48 | 3,175.0 | -41.5 | -1,566.1 | 1,566.7 | 0.00 | 0.00 | 0.00 |

BPPASSPORT

Planning Report

| | | | |
|------------------|-----------------------------------|-------------------------------------|-------------------------------|
| Database: | EDM .16 Hou Prod - WH21P | Local Co-ordinate Reference: | Well Lechner Opal GU A #4 |
| Company: | North America - Onshore US - BP | TVD Reference: | KBE Well @ 6552.0ft (H&P 291) |
| Project: | Western - San Juan North (NAD 83) | MD Reference: | KBE Well @ 6552.0ft (H&P 291) |
| Site: | Sec 6-T33N-R8W | North Reference: | Grid |
| Well: | Lechner Opal GU A #4 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | plan 3 version 1 casing @ 850'tvd | | |

| Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|----------------|-------------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| FC Lechner Opal GU A ; - plan hits target center - Point | 0.00 | 0.00 | 2,577.0 | -40.1 | -1,513.8 | 1,178,586.78 | 2,341,401.56 | 37° 8' 6.898 N | 107° 45' 33.869 W |
| PC Lechner Opal GU A ; - plan hits target center - Point | 0.00 | 0.00 | 3,000.0 | -41.1 | -1,550.8 | 1,178,585.78 | 2,341,364.56 | 37° 8' 6.879 N | 107° 45' 34.325 W |
| BHL Lechner Opal GU A - plan hits target center - Circle (radius 150.0) | 0.00 | 0.00 | 3,175.0 | -41.5 | -1,566.1 | 1,178,585.38 | 2,341,349.26 | 37° 8' 6.871 N | 107° 45' 34.514 W |
| Drilling Window Lechner - plan hits target center - Polygon | 0.00 | 360.00 | 0.0 | 0.0 | 0.0 | 1,178,626.89 | 2,342,915.39 | 37° 8' 7.656 N | 107° 45' 15.192 W |
| Point 1 | | | 0.0 | 1,129.5 | 545.4 | 1,179,756.41 | 2,343,460.80 | | |
| Point 2 | | | 0.0 | 1,124.7 | -3,424.0 | 1,179,751.61 | 2,339,491.33 | | |
| Point 3 | | | 0.0 | -195.3 | -3,473.5 | 1,178,431.58 | 2,339,441.82 | | |
| Point 4 | | | 0.0 | -190.5 | 526.5 | 1,178,436.38 | 2,343,441.90 | | |

| Casing Points | | | | | |
|---------------------|---------------------|--------------------|---------------------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") | |
| 903.0 | 850.0 | 8 5/8" Surface Csg | 8-5/8 | 12-1/4 | |

| Formations | | | | | |
|---------------------|---------------------|--------------------|-----------|---------|-------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 1,409.9 | 1,227.0 | Animas | | 0.00 | 359.97 |
| 1,813.8 | 1,520.0 | Kirtland Shale | | 0.00 | 359.97 |
| 2,281.1 | 1,859.0 | Farmington SS | | 0.00 | 359.97 |
| 2,778.4 | 2,273.0 | Lower Kirtland Sh | | 0.00 | 359.97 |
| 3,091.2 | 2,577.0 | Fruitland Coal | | 0.00 | 359.97 |
| 3,515.8 | 3,000.0 | Pictured Cliffs SS | | 0.00 | 359.97 |

| Plan Annotations | | | | | |
|---------------------|---------------------|------------|------------|--------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Comment | |
| 150.0 | 150.0 | 0.0 | 0.0 | Start Build 5.00 | |
| 903.0 | 850.0 | -6.3 | -238.6 | Start 80.0 hold at 903.0 MD | |
| 983.0 | 913.3 | -7.6 | -287.4 | Start DLS 5.00 TFO 0.01 | |
| 1,099.8 | 1,002.0 | -9.6 | -363.3 | Start 1221.6 hold at 1099.8 MD | |
| 2,321.4 | 1,888.2 | -31.9 | -1,203.7 | Start DLS 5.00 TFO -180.00 | |
| 3,091.2 | 2,577.0 | -40.1 | -1,513.8 | Start 424.6 hold at 3091.2 MD | |
| 3,515.8 | 3,000.0 | -41.1 | -1,550.8 | Start 175.7 hold at 3515.8 MD | |
| 3,691.4 | 3,175.0 | -41.5 | -1,566.1 | TD at 3691.4 | |