



Ursa Operating Company, LLC

Rio Blanco County, Colorado

BR C-240

BR C-240 FED 32B-25-2-98

Wellbore #1

Plan: Design #1 APD

Standard Planning Report

07 July, 2018



| | | | |
|------------------|-----------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BR C-240 FED 32B-25-2-98 |
| Company: | Ursa Operating Company, LLC | TVD Reference: | BR C-240 FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Project: | Rio Blanco County, Colorado | MD Reference: | BR C-240 FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Site: | BR C-240 | North Reference: | True |
| Well: | BR C-240 FED 32B-25-2-98 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 APD | | |

| | | | |
|--------------------|-----------------------------|----------------------|-----------------------------|
| Project | Rio Blanco County, Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| | | | |
|------------------------------|----------|--------------------------|-------------------|
| Site | BR C-240 | | |
| Site Position: | | Northing: | 1,203,233.70 usft |
| From: | Map | Easting: | 2,203,189.00 usft |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " |
| | | Latitude: | 39.856238800 |
| | | Longitude: | -108.338695300 |
| | | Grid Convergence: | -1.83 ° |

| | | | |
|-----------------------------|---|----------------------------|------------------------------------|
| Well | BR C-240 FED 32B-25-2-98, SHL: Lat 39.856091705 Long -108.338476510 | | |
| Well Position | +N/-S | -53.6 usft | Northing: 1,203,178.18 usft |
| | +E/-W | 61.4 usft | Easting: 2,203,248.68 usft |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | 6,325.5 usft |
| | | Ground Level: | 6,304.5 usft |

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|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 7/7/2018 | 9.79 | 65.80 | 51,558 |

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|--------------------------|--------------------------------|---------------------|----------------------|----------------------|--|
| Design | Design #1 APD | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 | |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 198.79 | |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|-----------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,789.9 | 31.15 | 198.79 | 1,746.7 | -223.4 | -76.0 | 3.50 | 3.50 | 0.00 | 198.79 | |
| 5,549.4 | 31.15 | 198.79 | 4,964.3 | -2,064.3 | -702.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,439.3 | 0.00 | 0.00 | 5,811.0 | -2,287.6 | -778.3 | 3.50 | -3.50 | 0.00 | 180.00 | 32B-25-2-98 TGT |
| 11,343.3 | 0.00 | 0.00 | 10,715.0 | -2,287.6 | -778.3 | 0.00 | 0.00 | 0.00 | 0.00 | |

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|------------------|-----------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BR C-24O FED 32B-25-2-98 |
| Company: | Ursa Operating Company, LLC | TVD Reference: | BR C-24O FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Project: | Rio Blanco County, Colorado | MD Reference: | BR C-24O FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Site: | BR C-24O | North Reference: | True |
| Well: | BR C-24O FED 32B-25-2-98 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 APD | | |

| Planned Survey | | | | | | | | | | |
|----------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 0.1 | 0.00 | 0.00 | 0.1 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| SHL 39.856091705, -108.338476510 | | | | | | | | | | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 479.0 | 0.00 | 0.00 | 479.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| Mahogany Bench | | | | | | | | | | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 536.0 | 0.00 | 0.00 | 536.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| Dissolution Surface | | | | | | | | | | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | |
| Start Build 3.50 | | | | | | | | | | |
| 1,000.0 | 3.50 | 198.79 | 999.9 | -2.9 | -1.0 | 3.1 | 3.50 | 3.50 | 0.00 | |
| 1,100.0 | 7.00 | 198.79 | 1,099.5 | -11.6 | -3.9 | 12.2 | 3.50 | 3.50 | 0.00 | |
| 1,200.0 | 10.50 | 198.79 | 1,198.3 | -26.0 | -8.8 | 27.4 | 3.50 | 3.50 | 0.00 | |
| 1,300.0 | 14.00 | 198.79 | 1,296.0 | -46.0 | -15.7 | 48.6 | 3.50 | 3.50 | 0.00 | |
| 1,400.0 | 17.50 | 198.79 | 1,392.3 | -71.7 | -24.4 | 75.8 | 3.50 | 3.50 | 0.00 | |
| 1,500.0 | 21.00 | 198.79 | 1,486.7 | -102.9 | -35.0 | 108.7 | 3.50 | 3.50 | 0.00 | |
| 1,600.0 | 24.50 | 198.79 | 1,578.9 | -139.5 | -47.5 | 147.4 | 3.50 | 3.50 | 0.00 | |
| 1,669.0 | 26.91 | 198.79 | 1,641.0 | -167.9 | -57.1 | 177.3 | 3.50 | 3.50 | 0.00 | |
| Garden Gulch Mbr | | | | | | | | | | |
| 1,700.0 | 28.00 | 198.79 | 1,668.5 | -181.4 | -61.7 | 191.6 | 3.50 | 3.50 | 0.00 | |
| 1,789.9 | 31.15 | 198.79 | 1,746.7 | -223.4 | -76.0 | 236.0 | 3.50 | 3.50 | 0.00 | |
| Start 3759.5 hold at 1789.9 MD | | | | | | | | | | |
| 1,800.0 | 31.15 | 198.79 | 1,755.4 | -228.4 | -77.7 | 241.2 | 0.00 | 0.00 | 0.00 | |
| 1,862.7 | 31.15 | 198.79 | 1,809.0 | -259.0 | -88.1 | 273.6 | 0.00 | 0.00 | 0.00 | |
| Wasatch | | | | | | | | | | |
| 1,900.0 | 31.15 | 198.79 | 1,840.9 | -277.3 | -94.3 | 292.9 | 0.00 | 0.00 | 0.00 | |
| 2,000.0 | 31.15 | 198.79 | 1,926.5 | -326.3 | -111.0 | 344.6 | 0.00 | 0.00 | 0.00 | |
| 2,100.0 | 31.15 | 198.79 | 2,012.1 | -375.2 | -127.7 | 396.4 | 0.00 | 0.00 | 0.00 | |
| 2,200.0 | 31.15 | 198.79 | 2,097.7 | -424.2 | -144.3 | 448.1 | 0.00 | 0.00 | 0.00 | |
| 2,300.0 | 31.15 | 198.79 | 2,183.3 | -473.2 | -161.0 | 499.8 | 0.00 | 0.00 | 0.00 | |
| 2,400.0 | 31.15 | 198.79 | 2,268.9 | -522.1 | -177.6 | 551.5 | 0.00 | 0.00 | 0.00 | |
| 2,500.0 | 31.15 | 198.79 | 2,354.5 | -571.1 | -194.3 | 603.3 | 0.00 | 0.00 | 0.00 | |
| 2,600.0 | 31.15 | 198.79 | 2,440.0 | -620.1 | -211.0 | 655.0 | 0.00 | 0.00 | 0.00 | |
| 2,700.0 | 31.15 | 198.79 | 2,525.6 | -669.0 | -227.6 | 706.7 | 0.00 | 0.00 | 0.00 | |
| 2,800.0 | 31.15 | 198.79 | 2,611.2 | -718.0 | -244.3 | 758.4 | 0.00 | 0.00 | 0.00 | |
| 2,900.0 | 31.15 | 198.79 | 2,696.8 | -767.0 | -260.9 | 810.1 | 0.00 | 0.00 | 0.00 | |
| 3,000.0 | 31.15 | 198.79 | 2,782.4 | -815.9 | -277.6 | 861.9 | 0.00 | 0.00 | 0.00 | |
| 3,100.0 | 31.15 | 198.79 | 2,868.0 | -864.9 | -294.3 | 913.6 | 0.00 | 0.00 | 0.00 | |
| 3,200.0 | 31.15 | 198.79 | 2,953.6 | -913.9 | -310.9 | 965.3 | 0.00 | 0.00 | 0.00 | |
| 3,300.0 | 31.15 | 198.79 | 3,039.1 | -962.8 | -327.6 | 1,017.0 | 0.00 | 0.00 | 0.00 | |
| 3,400.0 | 31.15 | 198.79 | 3,124.7 | -1,011.8 | -344.2 | 1,068.7 | 0.00 | 0.00 | 0.00 | |
| 3,500.0 | 31.15 | 198.79 | 3,210.3 | -1,060.8 | -360.9 | 1,120.5 | 0.00 | 0.00 | 0.00 | |
| 3,600.0 | 31.15 | 198.79 | 3,295.9 | -1,109.7 | -377.6 | 1,172.2 | 0.00 | 0.00 | 0.00 | |
| 3,700.0 | 31.15 | 198.79 | 3,381.5 | -1,158.7 | -394.2 | 1,223.9 | 0.00 | 0.00 | 0.00 | |
| 3,800.0 | 31.15 | 198.79 | 3,467.1 | -1,207.7 | -410.9 | 1,275.6 | 0.00 | 0.00 | 0.00 | |

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| Site: | BR C-240 | North Reference: | True |
| Well: | BR C-240 FED 32B-25-2-98 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 APD | | |

| Planned Survey | | | | | | | | | |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 3,838.5 | 31.15 | 198.79 | 3,500.0 | -1,226.5 | -417.3 | 1,295.5 | 0.00 | 0.00 | 0.00 |
| Surface Casing | | | | | | | | | |
| 3,900.0 | 31.15 | 198.79 | 3,552.7 | -1,256.6 | -427.5 | 1,327.4 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 31.15 | 198.79 | 3,638.2 | -1,305.6 | -444.2 | 1,379.1 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 31.15 | 198.79 | 3,723.8 | -1,354.6 | -460.8 | 1,430.8 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 31.15 | 198.79 | 3,809.4 | -1,403.5 | -477.5 | 1,482.5 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 31.15 | 198.79 | 3,895.0 | -1,452.5 | -494.2 | 1,534.2 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 31.15 | 198.79 | 3,980.6 | -1,501.4 | -510.8 | 1,586.0 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 31.15 | 198.79 | 4,066.2 | -1,550.4 | -527.5 | 1,637.7 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 31.15 | 198.79 | 4,151.8 | -1,599.4 | -544.1 | 1,689.4 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 31.15 | 198.79 | 4,237.3 | -1,648.3 | -560.8 | 1,741.1 | 0.00 | 0.00 | 0.00 |
| 4,714.8 | 31.15 | 198.79 | 4,250.0 | -1,655.6 | -563.3 | 1,748.8 | 0.00 | 0.00 | 0.00 |
| Ft Union | | | | | | | | | |
| 4,800.0 | 31.15 | 198.79 | 4,322.9 | -1,697.3 | -577.5 | 1,792.9 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 31.15 | 198.79 | 4,408.5 | -1,746.3 | -594.1 | 1,844.6 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 31.15 | 198.79 | 4,494.1 | -1,795.2 | -610.8 | 1,896.3 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 31.15 | 198.79 | 4,579.7 | -1,844.2 | -627.4 | 1,948.0 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 31.15 | 198.79 | 4,665.3 | -1,893.2 | -644.1 | 1,999.7 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 31.15 | 198.79 | 4,750.9 | -1,942.1 | -660.8 | 2,051.5 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 31.15 | 198.79 | 4,836.4 | -1,991.1 | -677.4 | 2,103.2 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 31.15 | 198.79 | 4,922.0 | -2,040.1 | -694.1 | 2,154.9 | 0.00 | 0.00 | 0.00 |
| 5,549.4 | 31.15 | 198.79 | 4,964.3 | -2,064.3 | -702.3 | 2,180.5 | 0.00 | 0.00 | 0.00 |
| Start Drop -3.50 | | | | | | | | | |
| 5,600.0 | 29.37 | 198.79 | 5,008.0 | -2,088.4 | -710.5 | 2,206.0 | 3.50 | -3.50 | 0.00 |
| 5,700.0 | 25.87 | 198.79 | 5,096.6 | -2,132.3 | -725.4 | 2,252.3 | 3.50 | -3.50 | 0.00 |
| 5,800.0 | 22.37 | 198.79 | 5,187.8 | -2,171.0 | -738.6 | 2,293.2 | 3.50 | -3.50 | 0.00 |
| 5,900.0 | 18.87 | 198.79 | 5,281.4 | -2,204.3 | -750.0 | 2,328.4 | 3.50 | -3.50 | 0.00 |
| 6,000.0 | 15.37 | 198.79 | 5,377.0 | -2,232.2 | -759.4 | 2,357.8 | 3.50 | -3.50 | 0.00 |
| 6,100.0 | 11.87 | 198.79 | 5,474.1 | -2,254.5 | -767.0 | 2,381.4 | 3.50 | -3.50 | 0.00 |
| 6,200.0 | 8.37 | 198.79 | 5,572.6 | -2,271.1 | -772.7 | 2,399.0 | 3.50 | -3.50 | 0.00 |
| 6,248.9 | 6.67 | 198.79 | 5,621.0 | -2,277.2 | -774.7 | 2,405.4 | 3.50 | -3.50 | 0.00 |
| Ohio Creek | | | | | | | | | |
| 6,300.0 | 4.87 | 198.79 | 5,671.9 | -2,282.0 | -776.4 | 2,410.5 | 3.50 | -3.50 | 0.00 |
| 6,400.0 | 1.37 | 198.79 | 5,771.7 | -2,287.2 | -778.2 | 2,416.0 | 3.50 | -3.50 | 0.00 |
| 6,439.3 | 0.00 | 0.00 | 5,811.0 | -2,287.6 | -778.3 | 2,416.4 | 3.50 | -3.50 | 0.00 |
| Start 4904.0 hold at 6439.3 MD - Back to Vertical - William Fork - Top of Gas - 32B-25-2-98 TGT | | | | | | | | | |
| 6,500.0 | 0.00 | 0.00 | 5,871.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 5,971.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 0.00 | 0.00 | 6,071.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,171.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 0.00 | 0.00 | 6,271.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,371.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 0.00 | 0.00 | 6,471.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 6,571.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 0.00 | 0.00 | 6,671.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 0.00 | 0.00 | 6,771.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 0.00 | 0.00 | 6,871.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 0.00 | 0.00 | 6,971.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 0.00 | 0.00 | 7,071.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 0.00 | 0.00 | 7,171.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 0.00 | 0.00 | 7,271.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 |

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| Company: | Ursa Operating Company, LLC | TVD Reference: | BR C-240 FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Project: | Rio Blanco County, Colorado | MD Reference: | BR C-240 FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Site: | BR C-240 | North Reference: | True |
| Well: | BR C-240 FED 32B-25-2-98 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 APD | | |

| Planned Survey | | | | | | | | | | |
|---|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
| 8,000.0 | 0.00 | 0.00 | 7,371.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,100.0 | 0.00 | 0.00 | 7,471.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,200.0 | 0.00 | 0.00 | 7,571.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,300.0 | 0.00 | 0.00 | 7,671.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,400.0 | 0.00 | 0.00 | 7,771.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,500.0 | 0.00 | 0.00 | 7,871.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,600.0 | 0.00 | 0.00 | 7,971.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,700.0 | 0.00 | 0.00 | 8,071.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,800.0 | 0.00 | 0.00 | 8,171.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 8,900.0 | 0.00 | 0.00 | 8,271.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,000.0 | 0.00 | 0.00 | 8,371.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,100.0 | 0.00 | 0.00 | 8,471.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,200.0 | 0.00 | 0.00 | 8,571.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,300.0 | 0.00 | 0.00 | 8,671.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,400.0 | 0.00 | 0.00 | 8,771.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,500.0 | 0.00 | 0.00 | 8,871.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,548.3 | 0.00 | 0.00 | 8,920.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| Cameo | | | | | | | | | | |
| 9,600.0 | 0.00 | 0.00 | 8,971.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,700.0 | 0.00 | 0.00 | 9,071.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,800.0 | 0.00 | 0.00 | 9,171.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 9,900.0 | 0.00 | 0.00 | 9,271.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,000.0 | 0.00 | 0.00 | 9,371.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,093.3 | 0.00 | 0.00 | 9,465.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| Rollins | | | | | | | | | | |
| 10,100.0 | 0.00 | 0.00 | 9,471.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,200.0 | 0.00 | 0.00 | 9,571.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,237.3 | 0.00 | 0.00 | 9,609.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| Cozzette | | | | | | | | | | |
| 10,300.0 | 0.00 | 0.00 | 9,671.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,400.0 | 0.00 | 0.00 | 9,771.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,468.3 | 0.00 | 0.00 | 9,840.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| Corcoran | | | | | | | | | | |
| 10,500.0 | 0.00 | 0.00 | 9,871.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,600.0 | 0.00 | 0.00 | 9,971.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,700.0 | 0.00 | 0.00 | 10,071.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,755.3 | 0.00 | 0.00 | 10,127.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| Upper Sego | | | | | | | | | | |
| 10,800.0 | 0.00 | 0.00 | 10,171.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 10,900.0 | 0.00 | 0.00 | 10,271.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 11,000.0 | 0.00 | 0.00 | 10,371.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 11,100.0 | 0.00 | 0.00 | 10,471.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 11,200.0 | 0.00 | 0.00 | 10,571.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 11,300.0 | 0.00 | 0.00 | 10,671.7 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| 11,343.3 | 0.00 | 0.00 | 10,715.0 | -2,287.6 | -778.3 | 2,416.4 | 0.00 | 0.00 | 0.00 | |
| TD at 11343.3 - BHL 39.8498117, -108.3412485 | | | | | | | | | | |

| | | | |
|------------------|-----------------------------|-------------------------------------|--|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well BR C-24O FED 32B-25-2-98 |
| Company: | Ursa Operating Company, LLC | TVD Reference: | BR C-24O FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Project: | Rio Blanco County, Colorado | MD Reference: | BR C-24O FED 32B-25-2-98 @ 6325.5usft (EST KB) |
| Site: | BR C-24O | North Reference: | True |
| Well: | BR C-24O FED 32B-25-2-98 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 APD | | |

Design Targets

Target Name

| - hit/miss target | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|--------------|----------------|
| - Shape | | | | | | | | | |
| 32B-25-2-98 TGT | 0.00 | 0.00 | 5,811.0 | -2,287.6 | -778.3 | 1,200,916.66 | 2,202,397.57 | 39.849811700 | -108.341248500 |
| - plan hits target center | | | | | | | | | |
| - Rectangle (sides W100.0 H40.0 D4,904.0) | | | | | | | | | |

Formations

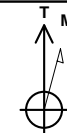
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------------|-----------------------------|---------------------|-----------|------------|-------------------------|
| 479.0 | 479.0 | Mahogany Bench | | 0.00 | |
| 536.0 | 536.0 | Dissolution Surface | | 0.00 | |
| 1,669.0 | 1,641.0 | Garden Gulch Mbr | | 0.00 | |
| 1,862.7 | 1,809.0 | Wasatch | | 0.00 | |
| 4,714.8 | 4,250.0 | Ft Union | | 0.00 | |
| 6,248.9 | 5,621.0 | Ohio Creek | | 0.00 | |
| 6,439.3 | 5,811.0 | William Fork | | 0.00 | |
| 6,439.3 | 5,811.0 | Top of Gas | | 0.00 | |
| 9,548.3 | 8,920.0 | Cameo | | 0.00 | |
| 10,093.3 | 9,465.0 | Rollins | | 0.00 | |
| 10,237.3 | 9,609.0 | Cozzette | | 0.00 | |
| 10,468.3 | 9,840.0 | Corcoran | | 0.00 | |
| 10,755.3 | 10,127.0 | Upper Sego | | 0.00 | |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------------|-----------------------------|-------------------|-----------------|----------------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 0.1 | 0.1 | 0.0 | 0.0 | SHL 39.856091705, -108.338476510 |
| 900.0 | 900.0 | 0.0 | 0.0 | Start Build 3.50 |
| 1,789.9 | 1,746.7 | -223.4 | -76.0 | Start 3759.5 hold at 1789.9 MD |
| 3,838.5 | 3,500.0 | -1,226.5 | -417.3 | Surface Casing |
| 5,549.4 | 4,964.3 | -2,064.3 | -702.3 | Start Drop -3.50 |
| 6,439.3 | 5,811.0 | -2,287.6 | -778.3 | Start 4904.0 hold at 6439.3 MD |
| 6,439.3 | 5,811.0 | -2,287.6 | -778.3 | Back to Vertical |
| 11,343.3 | 10,715.0 | -2,287.6 | -778.3 | TD at 11343.3 |
| 11,343.3 | 10,715.0 | -2,287.6 | -778.3 | BHL 39.8498117, -108.3412485 |



Well Name: BR C-24O FED 32B-25-2-98
Surface Location: BR C-24O
North American Datum 1983, US State Plane 1983, Colorado Northern Zone
Ground Elevation: 6304.5
+N/-S +E/-W Northing Easting Latitude Longitude
0.0 0.0 1203178.19 2203248.68 39.856091705 -108.338476510
EST KB BR C-24O FED 32B-25-2-98 @ 6325.5usft (EST KB)



Azimuths to True North
Magnetic North: 9.79°
Magnetic Field
Strength: 51557.9nT
Dip Angle: 65.80°
Date: 7/7/2018
Model: IGRF2015

BR C-24O
BR C-24O FED 32B-25-2-98
Design #1 APD
11:50, July 07 2018

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape |
|-----------------|--------|---------|--------|------------|------------|--------------|----------------|---------------------------------|
| 32B-25-2-98 TGT | 5811.0 | -2287.6 | -778.3 | 1200916.66 | 2202397.57 | 39.849811700 | -108.341248500 | Rectangle (Sides: L40.0 W100.0) |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | Vsect | Target |
|-----|---------|-------|--------|---------|---------|--------|------|--------|--------|-----------------|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1789.9 | 31.15 | 198.79 | 1746.7 | -223.4 | -76.0 | 3.50 | 198.79 | 236.0 | |
| 4 | 5549.4 | 31.15 | 198.79 | 4964.3 | -2064.3 | -702.3 | 0.00 | 0.00 | 2180.5 | |
| 5 | 6439.3 | 0.00 | 0.00 | 5811.0 | -2287.6 | -778.3 | 3.50 | 180.00 | 2416.4 | 32B-25-2-98 TGT |
| 6 | 11343.3 | 0.00 | 0.00 | 10715.0 | -2287.6 | -778.3 | 0.00 | 0.00 | 2416.4 | |

ANNOTATIONS

| TVD | MD | Annotation |
|---------|---------|----------------------------------|
| 0.1 | 0.1 | SHL 39.856091705, -108.338476510 |
| 900.0 | 900.0 | Start Build 3.50 |
| 1746.7 | 1789.9 | Start 3759.5 hold at 1789.9 MD |
| 3500.0 | 3838.5 | Surface Casing |
| 4964.3 | 5549.4 | Start Drop -3.50 |
| 5811.0 | 6439.3 | Start 4904.0 hold at 6439.3 MD |
| 5811.0 | 6439.3 | Back to Vertical |
| 10715.0 | 11343.3 | TD at 11343.3 |
| 10715.0 | 11343.3 | BHL 39.8498117, -108.3412485 |

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation | DipAngle | DipDir |
|---------|---------|---------------------|----------|--------|
| 479.0 | 479.0 | Mahogany Bench | 0.00 | |
| 536.0 | 536.0 | Dissolution Surface | 0.00 | |
| 1641.0 | 1669.0 | Garden Gulch Mbr | 0.00 | |
| 1809.0 | 1862.7 | Wasatch | 0.00 | |
| 4250.0 | 4714.8 | Ft Union | 0.00 | |
| 5621.0 | 6248.9 | Ohio Creek | 0.00 | |
| 5811.0 | 6439.3 | Top of Gas | 0.00 | |
| 5811.0 | 6439.3 | William Fork | 0.00 | |
| 8920.0 | 9548.3 | Cameo | 0.00 | |
| 9465.0 | 10093.3 | Rollins | 0.00 | |
| 9609.0 | 10237.3 | Cozzette | 0.00 | |
| 9840.0 | 10468.3 | Corcoran | 0.00 | |
| 10127.0 | 10755.3 | Upper Sego | 0.00 | |

