



Project: SECTION 15, T6N, R66W
Site: HARVESTERS STATE 7-15 PAD
Well: HARVESTERS STATE 13C-16-M
Wellbore: OH
Design: PLAN #1
Lat: 40.4899679
Long: -104.7625200

T

M

8.19°

Magnetic North

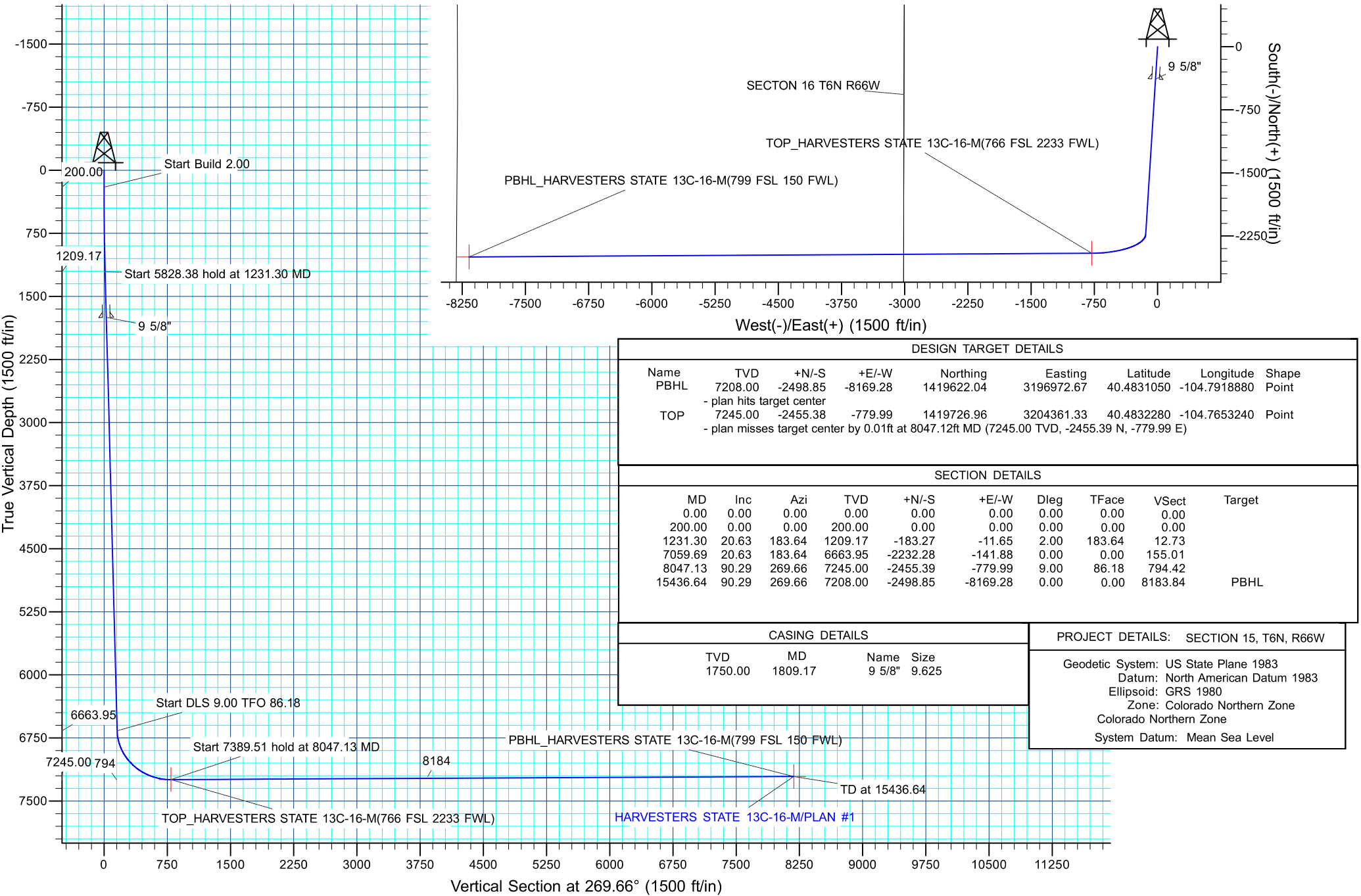
Magnetic Field

Strength: 52407.1snT

Dip Angle: 66.92°

Date: 9/28/2017

Model: IGRF2015





SRC ENERGY

**SECTION 15, T6N, R66W
HARVESTERS STATE 7-15 PAD
HARVESTERS STATE 13C-16-M**

OH

Plan: PLAN #1

Standard Planning Report

02 October, 2017





| | | | |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| Database: | EDM 5000.14 Single User Db | Local Co-ordinate Reference: | Well HARVESTERS STATE 13C-16- |
| Company: | SRC ENERGY | TVD Reference: | M KB @ 4819.00ft |
| Project: | SECTION 15, T6N, R66W | MD Reference: | KB @ 4819.00ft |
| Site: | HARVESTERS STATE 7-15 PAD | North Reference: | True |
| Well: | HARVESTERS STATE 13C-16- | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | M OH | | |
| Design: | PLAN #1 | | |

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|--------------------|---------------------------|----------------------|----------------|
| Project | SECTION 15, T6N, R66W | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

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|------------------------------|---------------------------|---------------------|-------------------|---------------------------------|
| Site | HARVESTERS STATE 7-15 PAD | | | |
| Site Position: | | Northing: | 1,422,648.53 usft | Latitude: 40.4912300 |
| From: | Lat/Long | Easting: | 3,205,120.94 usft | Longitude: -104.7625060 |
| Position Uncertainty: | 3.28 ft | Slot Radius: | 13.200 in | Grid Convergence: 0.48 ° |

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|-----------------------------|--|------------|----------------------------|----------------------------------|
| Well | HARVESTERS STATE 13C-16-M, 2053' FNL & 2337' FEL | | | |
| Well Position | +N/-S | -459.77 ft | Northing: | 1,422,188.74 usft |
| | +E/-W | -3.89 ft | Easting: | 3,205,120.87 usft |
| Position Uncertainty | | 3.28 ft | Wellhead Elevation: | Latitude: 40.4899680 |
| | | | | Longitude: -104.7625200 |
| | | | | Ground Level: 4,799.00 ft |

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|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 9/28/2017 | 8.19 | 66.92 | 52,407 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | PLAN #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 269.66 |

| | | | | |
|---------------------------------|----------------------|--------------------------|------------------|----------------|
| Plan Survey Tool Program | Date | 10/2/2017 | | |
| Depth From (ft) | Depth To (ft) | Survey (Wellbore) | Tool Name | Remarks |
| 1 | 0.00 | 15,436.55 PLAN #1 (OH) | MWD+IFR1 | |
| | | | OWSG MWD + IFR1 | |

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|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|-----------------------------|----------------------------|----------------|-----------------|
| 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 |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,231.31 | 20.63 | 183.64 | 1,209.17 | -183.27 | -11.65 | 2.00 | 2.00 | 0.00 | 183.64 | |
| 7,059.69 | 20.63 | 183.64 | 6,663.95 | -2,232.28 | -141.88 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,047.13 | 90.29 | 269.66 | 7,245.00 | -2,455.39 | -779.99 | 9.00 | 7.05 | 8.71 | 86.18 | |
| 15,436.64 | 90.29 | 269.66 | 7,208.00 | -2,498.86 | -8,169.28 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL_HARVESTERS |

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|------------------|----------------------------|-------------------------------------|-------------------------------|
| Database: | EDM 5000.14 Single User Db | Local Co-ordinate Reference: | Well HARVESTERS STATE 13C-16- |
| Company: | SRC ENERGY | TVD Reference: | M KB @ 4819.00ft |
| Project: | SECTION 15, T6N, R66W | MD Reference: | KB @ 4819.00ft |
| Site: | HARVESTERS STATE 7-15 PAD | North Reference: | True |
| Well: | HARVESTERS STATE 13C-16- | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | M OH | | |
| Design: | PLAN #1 | | |

| 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) |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start Build 2.00 | | | | | | | | | |
| 300.00 | 2.00 | 183.64 | 299.98 | -1.74 | -0.11 | 0.12 | 2.00 | 2.00 | 0.00 |
| 400.00 | 4.00 | 183.64 | 399.84 | -6.96 | -0.44 | 0.48 | 2.00 | 2.00 | 0.00 |
| 500.00 | 6.00 | 183.64 | 499.45 | -15.66 | -1.00 | 1.09 | 2.00 | 2.00 | 0.00 |
| 600.00 | 8.00 | 183.64 | 598.70 | -27.82 | -1.77 | 1.93 | 2.00 | 2.00 | 0.00 |
| 700.00 | 10.00 | 183.64 | 697.47 | -43.43 | -2.76 | 3.02 | 2.00 | 2.00 | 0.00 |
| 800.00 | 12.00 | 183.64 | 795.62 | -62.48 | -3.97 | 4.34 | 2.00 | 2.00 | 0.00 |
| 900.00 | 14.00 | 183.64 | 893.06 | -84.93 | -5.40 | 5.90 | 2.00 | 2.00 | 0.00 |
| 1,000.00 | 16.00 | 183.64 | 989.64 | -110.75 | -7.04 | 7.69 | 2.00 | 2.00 | 0.00 |
| 1,100.00 | 18.00 | 183.64 | 1,085.27 | -139.93 | -8.89 | 9.72 | 2.00 | 2.00 | 0.00 |
| 1,200.00 | 20.00 | 183.64 | 1,179.82 | -172.42 | -10.96 | 11.97 | 2.00 | 2.00 | 0.00 |
| 1,231.31 | 20.63 | 183.64 | 1,209.17 | -183.27 | -11.65 | 12.73 | 2.00 | 2.00 | 0.00 |
| Start 5828.38 hold at 1231.30 MD | | | | | | | | | |
| 1,300.00 | 20.63 | 183.64 | 1,273.47 | -207.42 | -13.18 | 14.40 | 0.00 | 0.00 | 0.00 |
| 1,400.00 | 20.63 | 183.64 | 1,367.06 | -242.57 | -15.42 | 16.84 | 0.00 | 0.00 | 0.00 |
| 1,500.00 | 20.63 | 183.64 | 1,460.64 | -277.73 | -17.65 | 19.28 | 0.00 | 0.00 | 0.00 |
| 1,600.00 | 20.63 | 183.64 | 1,554.23 | -312.88 | -19.89 | 21.73 | 0.00 | 0.00 | 0.00 |
| 1,700.00 | 20.63 | 183.64 | 1,647.82 | -348.04 | -22.12 | 24.17 | 0.00 | 0.00 | 0.00 |
| 1,800.00 | 20.63 | 183.64 | 1,741.41 | -383.20 | -24.36 | 26.61 | 0.00 | 0.00 | 0.00 |
| 1,809.17 | 20.63 | 183.64 | 1,750.00 | -386.42 | -24.56 | 26.83 | 0.00 | 0.00 | 0.00 |
| 9 5/8" | | | | | | | | | |
| 1,900.00 | 20.63 | 183.64 | 1,835.00 | -418.35 | -26.59 | 29.05 | 0.00 | 0.00 | 0.00 |
| 2,000.00 | 20.63 | 183.64 | 1,928.59 | -453.51 | -28.82 | 31.49 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 20.63 | 183.64 | 2,022.18 | -488.66 | -31.06 | 33.93 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 20.63 | 183.64 | 2,115.77 | -523.82 | -33.29 | 36.37 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 20.63 | 183.64 | 2,209.36 | -558.97 | -35.53 | 38.81 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 20.63 | 183.64 | 2,302.95 | -594.13 | -37.76 | 41.26 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 20.63 | 183.64 | 2,396.54 | -629.29 | -40.00 | 43.70 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 20.63 | 183.64 | 2,490.13 | -664.44 | -42.23 | 46.14 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 20.63 | 183.64 | 2,583.72 | -699.60 | -44.46 | 48.58 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 20.63 | 183.64 | 2,677.31 | -734.75 | -46.70 | 51.02 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 20.63 | 183.64 | 2,770.90 | -769.91 | -48.93 | 53.46 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 20.63 | 183.64 | 2,864.49 | -805.07 | -51.17 | 55.90 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 20.63 | 183.64 | 2,958.08 | -840.22 | -53.40 | 58.34 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 20.63 | 183.64 | 3,051.67 | -875.38 | -55.64 | 60.78 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 20.63 | 183.64 | 3,145.26 | -910.53 | -57.87 | 63.23 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 20.63 | 183.64 | 3,238.85 | -945.69 | -60.11 | 65.67 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 20.63 | 183.64 | 3,332.44 | -980.84 | -62.34 | 68.11 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 20.63 | 183.64 | 3,426.03 | -1,016.00 | -64.57 | 70.55 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 20.63 | 183.64 | 3,519.62 | -1,051.16 | -66.81 | 72.99 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 20.63 | 183.64 | 3,613.21 | -1,086.31 | -69.04 | 75.43 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 20.63 | 183.64 | 3,706.80 | -1,121.47 | -71.28 | 77.87 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 20.63 | 183.64 | 3,800.39 | -1,156.62 | -73.51 | 80.31 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 20.63 | 183.64 | 3,893.98 | -1,191.78 | -75.75 | 82.76 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 20.63 | 183.64 | 3,987.57 | -1,226.94 | -77.98 | 85.20 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 20.63 | 183.64 | 4,081.16 | -1,262.09 | -80.22 | 87.64 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 20.63 | 183.64 | 4,174.75 | -1,297.25 | -82.45 | 90.08 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 20.63 | 183.64 | 4,268.34 | -1,332.40 | -84.68 | 92.52 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 20.63 | 183.64 | 4,361.93 | -1,367.56 | -86.92 | 94.96 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 20.63 | 183.64 | 4,455.52 | -1,402.72 | -89.15 | 97.40 | 0.00 | 0.00 | 0.00 |

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|------------------|----------------------------|-------------------------------------|-------------------------------|
| Database: | EDM 5000.14 Single User Db | Local Co-ordinate Reference: | Well HARVESTERS STATE 13C-16- |
| Company: | SRC ENERGY | TVD Reference: | M KB @ 4819.00ft |
| Project: | SECTION 15, T6N, R66W | MD Reference: | KB @ 4819.00ft |
| Site: | HARVESTERS STATE 7-15 PAD | North Reference: | True |
| Well: | HARVESTERS STATE 13C-16- | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | M OH | | |
| Design: | PLAN #1 | | |

| 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) |
| 4,800.00 | 20.63 | 183.64 | 4,549.11 | -1,437.87 | -91.39 | 99.84 | 0.00 | 0.00 | 0.00 |
| 4,900.00 | 20.63 | 183.64 | 4,642.70 | -1,473.03 | -93.62 | 102.28 | 0.00 | 0.00 | 0.00 |
| 5,000.00 | 20.63 | 183.64 | 4,736.29 | -1,508.18 | -95.86 | 104.73 | 0.00 | 0.00 | 0.00 |
| 5,100.00 | 20.63 | 183.64 | 4,829.88 | -1,543.34 | -98.09 | 107.17 | 0.00 | 0.00 | 0.00 |
| 5,200.00 | 20.63 | 183.64 | 4,923.47 | -1,578.49 | -100.33 | 109.61 | 0.00 | 0.00 | 0.00 |
| 5,300.00 | 20.63 | 183.64 | 5,017.06 | -1,613.65 | -102.56 | 112.05 | 0.00 | 0.00 | 0.00 |
| 5,400.00 | 20.63 | 183.64 | 5,110.65 | -1,648.81 | -104.79 | 114.49 | 0.00 | 0.00 | 0.00 |
| 5,500.00 | 20.63 | 183.64 | 5,204.24 | -1,683.96 | -107.03 | 116.93 | 0.00 | 0.00 | 0.00 |
| 5,600.00 | 20.63 | 183.64 | 5,297.83 | -1,719.12 | -109.26 | 119.37 | 0.00 | 0.00 | 0.00 |
| 5,700.00 | 20.63 | 183.64 | 5,391.42 | -1,754.27 | -111.50 | 121.81 | 0.00 | 0.00 | 0.00 |
| 5,800.00 | 20.63 | 183.64 | 5,485.01 | -1,789.43 | -113.73 | 124.26 | 0.00 | 0.00 | 0.00 |
| 5,900.00 | 20.63 | 183.64 | 5,578.60 | -1,824.59 | -115.97 | 126.70 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 20.63 | 183.64 | 5,672.19 | -1,859.74 | -118.20 | 129.14 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 20.63 | 183.64 | 5,765.78 | -1,894.90 | -120.44 | 131.58 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 20.63 | 183.64 | 5,859.37 | -1,930.05 | -122.67 | 134.02 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 20.63 | 183.64 | 5,952.96 | -1,965.21 | -124.90 | 136.46 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 20.63 | 183.64 | 6,046.55 | -2,000.37 | -127.14 | 138.90 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 20.63 | 183.64 | 6,140.14 | -2,035.52 | -129.37 | 141.34 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 20.63 | 183.64 | 6,233.73 | -2,070.68 | -131.61 | 143.78 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 20.63 | 183.64 | 6,327.32 | -2,105.83 | -133.84 | 146.23 | 0.00 | 0.00 | 0.00 |
| 6,800.00 | 20.63 | 183.64 | 6,420.91 | -2,140.99 | -136.08 | 148.67 | 0.00 | 0.00 | 0.00 |
| 6,900.00 | 20.63 | 183.64 | 6,514.50 | -2,176.14 | -138.31 | 151.11 | 0.00 | 0.00 | 0.00 |
| 7,000.00 | 20.63 | 183.64 | 6,608.09 | -2,211.30 | -140.55 | 153.55 | 0.00 | 0.00 | 0.00 |
| 7,059.69 | 20.63 | 183.64 | 6,663.95 | -2,232.28 | -141.88 | 155.01 | 0.00 | 0.00 | 0.00 |
| Start DLS 9.00 TFO 86.18 | | | | | | | | | |
| 7,100.00 | 21.17 | 193.71 | 6,701.63 | -2,246.45 | -144.05 | 157.27 | 9.00 | 1.34 | 24.98 |
| 7,200.00 | 24.75 | 215.04 | 6,793.85 | -2,281.20 | -160.39 | 173.80 | 9.00 | 3.59 | 21.33 |
| 7,300.00 | 30.53 | 230.02 | 6,882.50 | -2,314.73 | -191.93 | 205.54 | 9.00 | 5.78 | 14.98 |
| 7,400.00 | 37.50 | 240.26 | 6,965.41 | -2,346.21 | -237.92 | 251.71 | 9.00 | 6.97 | 10.24 |
| 7,500.00 | 45.10 | 247.59 | 7,040.53 | -2,374.88 | -297.21 | 311.17 | 9.00 | 7.60 | 7.33 |
| 7,600.00 | 53.06 | 253.16 | 7,106.00 | -2,400.01 | -368.35 | 382.46 | 9.00 | 7.96 | 5.57 |
| 7,700.00 | 61.23 | 257.66 | 7,160.23 | -2,421.00 | -449.58 | 463.81 | 9.00 | 8.17 | 4.50 |
| 7,800.00 | 69.53 | 261.50 | 7,201.86 | -2,437.32 | -538.91 | 553.23 | 9.00 | 8.30 | 3.84 |
| 7,900.00 | 77.90 | 264.94 | 7,229.88 | -2,448.58 | -634.13 | 648.52 | 9.00 | 8.37 | 3.44 |
| 8,000.00 | 86.32 | 268.17 | 7,243.60 | -2,454.50 | -732.90 | 747.33 | 9.00 | 8.41 | 3.23 |
| 8,047.12 | 90.29 | 269.66 | 7,245.00 | -2,455.39 | -779.99 | 794.41 | 9.00 | 8.42 | 3.17 |
| Start 7389.51 hold at 8047.13 MD - TOP_HARVESTERS STATE 13C-16-M(766 FSL 2233 FWL) | | | | | | | | | |
| 8,100.00 | 90.29 | 269.66 | 7,244.73 | -2,455.70 | -832.86 | 847.29 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 90.29 | 269.66 | 7,244.23 | -2,456.29 | -932.86 | 947.29 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 90.29 | 269.66 | 7,243.73 | -2,456.88 | -1,032.86 | 1,047.29 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 90.29 | 269.66 | 7,243.23 | -2,457.47 | -1,132.85 | 1,147.29 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 90.29 | 269.66 | 7,242.73 | -2,458.06 | -1,232.85 | 1,247.29 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 90.29 | 269.66 | 7,242.23 | -2,458.64 | -1,332.85 | 1,347.29 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 90.29 | 269.66 | 7,241.73 | -2,459.23 | -1,432.84 | 1,447.28 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 90.29 | 269.66 | 7,241.23 | -2,459.82 | -1,532.84 | 1,547.28 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 90.29 | 269.66 | 7,240.73 | -2,460.41 | -1,632.84 | 1,647.28 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 90.29 | 269.66 | 7,240.23 | -2,461.00 | -1,732.84 | 1,747.28 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 90.29 | 269.66 | 7,239.73 | -2,461.58 | -1,832.83 | 1,847.28 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 90.29 | 269.66 | 7,239.23 | -2,462.17 | -1,932.83 | 1,947.28 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 90.29 | 269.66 | 7,238.72 | -2,462.76 | -2,032.83 | 2,047.28 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 90.29 | 269.66 | 7,238.22 | -2,463.35 | -2,132.82 | 2,147.28 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 90.29 | 269.66 | 7,237.72 | -2,463.94 | -2,232.82 | 2,247.27 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 90.29 | 269.66 | 7,237.22 | -2,464.53 | -2,332.82 | 2,347.27 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 90.29 | 269.66 | 7,236.72 | -2,465.11 | -2,432.81 | 2,447.27 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| Database: | EDM 5000.14 Single User Db | Local Co-ordinate Reference: | Well HARVESTERS STATE 13C-16- |
| Company: | SRC ENERGY | TVD Reference: | M KB @ 4819.00ft |
| Project: | SECTION 15, T6N, R66W | MD Reference: | KB @ 4819.00ft |
| Site: | HARVESTERS STATE 7-15 PAD | North Reference: | True |
| Well: | HARVESTERS STATE 13C-16- | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | M OH | | |
| Design: | PLAN #1 | | |

| 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) |
| 9,800.00 | 90.29 | 269.66 | 7,236.22 | -2,465.70 | -2,532.81 | 2,547.27 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 90.29 | 269.66 | 7,235.72 | -2,466.29 | -2,632.81 | 2,647.27 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 90.29 | 269.66 | 7,235.22 | -2,466.88 | -2,732.81 | 2,747.27 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 90.29 | 269.66 | 7,234.72 | -2,467.47 | -2,832.80 | 2,847.27 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 90.29 | 269.66 | 7,234.22 | -2,468.05 | -2,932.80 | 2,947.27 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 90.29 | 269.66 | 7,233.72 | -2,468.64 | -3,032.80 | 3,047.26 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 90.29 | 269.66 | 7,233.22 | -2,469.23 | -3,132.79 | 3,147.26 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 90.29 | 269.66 | 7,232.72 | -2,469.82 | -3,232.79 | 3,247.26 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 90.29 | 269.66 | 7,232.22 | -2,470.41 | -3,332.79 | 3,347.26 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 90.29 | 269.66 | 7,231.72 | -2,471.00 | -3,432.78 | 3,447.26 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 90.29 | 269.66 | 7,231.21 | -2,471.58 | -3,532.78 | 3,547.26 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 90.29 | 269.66 | 7,230.71 | -2,472.17 | -3,632.78 | 3,647.26 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 90.29 | 269.66 | 7,230.21 | -2,472.76 | -3,732.78 | 3,747.26 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 90.29 | 269.66 | 7,229.71 | -2,473.35 | -3,832.77 | 3,847.25 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 90.29 | 269.66 | 7,229.21 | -2,473.94 | -3,932.77 | 3,947.25 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 90.29 | 269.66 | 7,228.71 | -2,474.52 | -4,032.77 | 4,047.25 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 90.29 | 269.66 | 7,228.21 | -2,475.11 | -4,132.76 | 4,147.25 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 90.29 | 269.66 | 7,227.71 | -2,475.70 | -4,232.76 | 4,247.25 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 90.29 | 269.66 | 7,227.21 | -2,476.29 | -4,332.76 | 4,347.25 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 90.29 | 269.66 | 7,226.71 | -2,476.88 | -4,432.75 | 4,447.25 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 90.29 | 269.66 | 7,226.21 | -2,477.47 | -4,532.75 | 4,547.25 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 90.29 | 269.66 | 7,225.71 | -2,478.05 | -4,632.75 | 4,647.24 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 90.29 | 269.66 | 7,225.21 | -2,478.64 | -4,732.75 | 4,747.24 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 90.29 | 269.66 | 7,224.71 | -2,479.23 | -4,832.74 | 4,847.24 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 90.29 | 269.66 | 7,224.21 | -2,479.82 | -4,932.74 | 4,947.24 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 90.29 | 269.66 | 7,223.70 | -2,480.41 | -5,032.74 | 5,047.24 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 90.29 | 269.66 | 7,223.20 | -2,480.99 | -5,132.73 | 5,147.24 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 90.29 | 269.66 | 7,222.70 | -2,481.58 | -5,232.73 | 5,247.24 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 90.29 | 269.66 | 7,222.20 | -2,482.17 | -5,332.73 | 5,347.24 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 90.29 | 269.66 | 7,221.70 | -2,482.76 | -5,432.73 | 5,447.23 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 90.29 | 269.66 | 7,221.20 | -2,483.35 | -5,532.72 | 5,547.23 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 90.29 | 269.66 | 7,220.70 | -2,483.94 | -5,632.72 | 5,647.23 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 90.29 | 269.66 | 7,220.20 | -2,484.52 | -5,732.72 | 5,747.23 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 90.29 | 269.66 | 7,219.70 | -2,485.11 | -5,832.71 | 5,847.23 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 90.29 | 269.66 | 7,219.20 | -2,485.70 | -5,932.71 | 5,947.23 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 90.29 | 269.66 | 7,218.70 | -2,486.29 | -6,032.71 | 6,047.23 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 90.29 | 269.66 | 7,218.20 | -2,486.88 | -6,132.70 | 6,147.23 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 90.29 | 269.66 | 7,217.70 | -2,487.46 | -6,232.70 | 6,247.22 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 90.29 | 269.66 | 7,217.20 | -2,488.05 | -6,332.70 | 6,347.22 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 90.29 | 269.66 | 7,216.70 | -2,488.64 | -6,432.70 | 6,447.22 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 90.29 | 269.66 | 7,216.19 | -2,489.23 | -6,532.69 | 6,547.22 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 90.29 | 269.66 | 7,215.69 | -2,489.82 | -6,632.69 | 6,647.22 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 90.29 | 269.66 | 7,215.19 | -2,490.41 | -6,732.69 | 6,747.22 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 90.29 | 269.66 | 7,214.69 | -2,490.99 | -6,832.68 | 6,847.22 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 90.29 | 269.66 | 7,214.19 | -2,491.58 | -6,932.68 | 6,947.22 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 90.29 | 269.66 | 7,213.69 | -2,492.17 | -7,032.68 | 7,047.21 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 90.29 | 269.66 | 7,213.19 | -2,492.76 | -7,132.67 | 7,147.21 | 0.00 | 0.00 | 0.00 |
| 14,500.00 | 90.29 | 269.66 | 7,212.69 | -2,493.35 | -7,232.67 | 7,247.21 | 0.00 | 0.00 | 0.00 |
| 14,600.00 | 90.29 | 269.66 | 7,212.19 | -2,493.93 | -7,332.67 | 7,347.21 | 0.00 | 0.00 | 0.00 |
| 14,700.00 | 90.29 | 269.66 | 7,211.69 | -2,494.52 | -7,432.67 | 7,447.21 | 0.00 | 0.00 | 0.00 |
| 14,800.00 | 90.29 | 269.66 | 7,211.19 | -2,495.11 | -7,532.66 | 7,547.21 | 0.00 | 0.00 | 0.00 |
| 14,900.00 | 90.29 | 269.66 | 7,210.69 | -2,495.70 | -7,632.66 | 7,647.21 | 0.00 | 0.00 | 0.00 |
| 15,000.00 | 90.29 | 269.66 | 7,210.19 | -2,496.29 | -7,732.66 | 7,747.21 | 0.00 | 0.00 | 0.00 |
| 15,100.00 | 90.29 | 269.66 | 7,209.69 | -2,496.88 | -7,832.65 | 7,847.20 | 0.00 | 0.00 | 0.00 |



| | | | |
|------------------|----------------------------|-------------------------------------|-------------------------------|
| Database: | EDM 5000.14 Single User Db | Local Co-ordinate Reference: | Well HARVESTERS STATE 13C-16- |
| Company: | SRC ENERGY | TVD Reference: | M KB @ 4819.00ft |
| Project: | SECTION 15, T6N, R66W | MD Reference: | KB @ 4819.00ft |
| Site: | HARVESTERS STATE 7-15 PAD | North Reference: | True |
| Well: | HARVESTERS STATE 13C-16- | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | M OH | | |
| Design: | PLAN #1 | | |

| 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) |
| 15,200.00 | 90.29 | 269.66 | 7,209.18 | -2,497.46 | -7,932.65 | 7,947.20 | 0.00 | 0.00 | 0.00 |
| 15,300.00 | 90.29 | 269.66 | 7,208.68 | -2,498.05 | -8,032.65 | 8,047.20 | 0.00 | 0.00 | 0.00 |
| 15,400.00 | 90.29 | 269.66 | 7,208.18 | -2,498.64 | -8,132.64 | 8,147.20 | 0.00 | 0.00 | 0.00 |
| 15,436.64 | 90.29 | 269.66 | 7,208.00 | -2,498.86 | -8,169.28 | 8,183.84 | 0.00 | 0.00 | 0.00 |
| TD at 15436.64 - PBHL_HARVESTERS STATE 13C-16-M(799 FSL 150 FWL) | | | | | | | | | |

| Design Targets | | | | | | | | | |
|--|---------------|--------------|----------|------------|------------|-----------------|----------------|------------|--------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| PBHL_HARVESTERS S | 0.00 | 0.00 | 7,208.00 | -2,498.86 | -8,169.28 | 1,419,622.04 | 3,196,972.67 | 40.4831050 | -104.7918880 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| TOP_HARVESTERS ST | 0.00 | 0.00 | 7,245.00 | -2,455.39 | -779.99 | 1,419,726.96 | 3,204,361.34 | 40.4832280 | -104.7653240 |
| - plan misses target center by 0.01ft at 8047.12ft MD (7245.00 TVD, -2455.39 N, -779.99 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| Casing Points | | | | | |
|---------------------|---------------------|--------|--|----------------------|--------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name | | Casing Diameter (in) | Hole Diameter (in) |
| 1,809.17 | 1,750.00 | 9 5/8" | | 9.625 | 13.500 |

| Plan Annotations | | | | |
|---------------------|---------------------|-------------------|------------|----------------------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 200.00 | 200.00 | 0.00 | 0.00 | Start Build 2.00 |
| 1,231.31 | 1,209.17 | -183.27 | -11.65 | Start 5828.38 hold at 1231.30 MD |
| 7,059.69 | 6,663.95 | -2,232.28 | -141.88 | Start DLS 9.00 TFO 86.18 |
| 8,047.13 | 7,245.00 | -2,455.39 | -779.99 | Start 7389.51 hold at 8047.13 MD |
| 15,436.64 | 7,208.00 | -2,498.86 | -8,169.28 | TD at 15436.64 |