

Great Western

Well Name: **Spaur Brothers EH 31-339HC**

Surface Location: Spaur Brothers South Pad Sec.31-T7N-R63W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

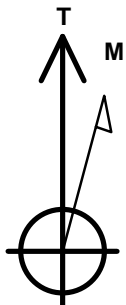
Ground Elevation: 4736.0

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|-------|-------|------------|------------|-----------|-------------|------|
| 0.0 | 0.0 | 1435290.39 | 3286048.56 | 40.523717 | -104.471033 | |

RKB - 16.5' WELL @ 4752.5ft (RKB - 16.5')

WELLBORE TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|-----------------------------|--------|-------|---------|-------|
| SHL 322'FSL & 210'FEL | 1.0 | 0.0 | 0.0 | Point |
| BHL 870'FSL & 470'FWL | 6897.0 | 505.4 | -4479.0 | Point |
| Entry Pt. 880'FSL & 460'FEL | 6897.0 | 555.6 | -251.9 | Point |



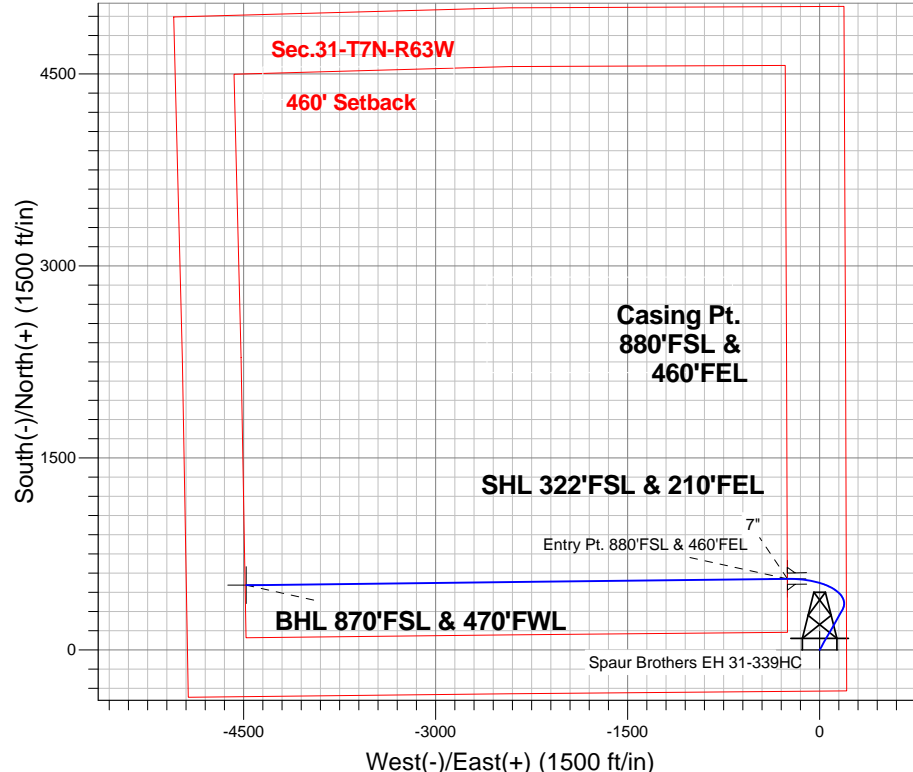
Azimuths to True North
Magnetic North: 8.39°

Magnetic Field
Strength: 52974.9snT
Dip Angle: 67.11°
Date: 11/6/2013
Model: IGRF2010

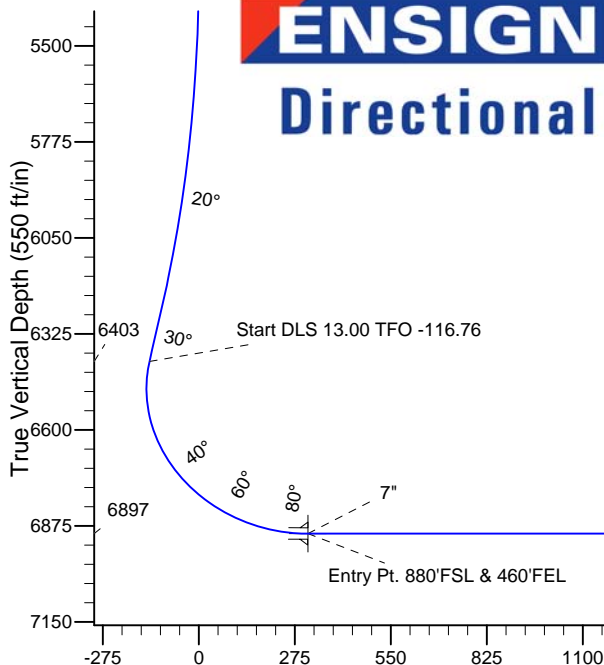
Spaur Brothers South Pad Sec.31-T7N-R63W
Spaur Brothers EH 31-339HC
Plan #1 (11-6-13)
7:55, November 07 2013

ANNOTATIONS

| TVD | MD | Annotation |
|--------|---------|-----------------------------|
| 5270.0 | 5270.0 | KOP - Start Build 3.00 |
| 6403.4 | 6476.4 | Start DLS 13.00 TFO -116.76 |
| 6897.0 | 11509.0 | TD at 11509.0 |



ENSIGN
Directional



SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|-----|---------|-------|--------|--------|-------|---------|-------|---------|--------|-----------------------------|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 5270.0 | 0.00 | 0.00 | 5270.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 6275.9 | 30.18 | 29.56 | 6230.1 | 225.1 | 127.7 | 3.00 | 29.56 | -101.7 | |
| 4 | 6476.4 | 30.18 | 29.56 | 6403.4 | 312.8 | 177.4 | 0.00 | 0.00 | -141.3 | |
| 5 | 7281.6 | 90.00 | 269.31 | 6897.0 | 555.6 | -251.9 | 13.00 | -116.76 | 312.6 | Entry Pt. 880'FSL & 460'FEL |
| 6 | 7282.5 | 90.00 | 269.32 | 6897.0 | 555.6 | -252.8 | 1.00 | 90.00 | 313.5 | |
| 7 | 11509.0 | 90.00 | 269.32 | 6897.0 | 505.4 | -4479.0 | 0.00 | 0.00 | 4507.4 | BHL 870'FSL & 470'FWL |

Vertical Section at 276.44° (550 ft/in)



Great Western

SEC.31-T7N-R63W

Spaur Brothers South Pad Sec.31-T7N-R63W

Spaur Brothers EH 31-339HC

Wellbore #1

Plan: Plan #1 (11-6-13)

Standard Planning Report

07 November, 2013

| | | | |
|------------------|--|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Company: | Great Western | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Project: | SEC.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | North Reference: | True |
| Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-6-13) | | |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | SEC.31-T7N-R63W, Weld County, Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | Using Well Reference Point |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| Site | | | | | | Spaur Brothers South Pad Sec.31-T7N-R63W | | | | | | | | | | | |
|-----------------------|--|--|----------|--|--|--|--|--|----------------|--|--|-------------------|--|--|-------------|--|--|
| Site Position: | | | | | | Northing: | | | 1,435,290.40ft | | | Latitude: | | | 40.523717 | | |
| From: | | | Lat/Long | | | Easting: | | | 3,286,048.56ft | | | Longitude: | | | -104.471033 | | |
| Position Uncertainty: | | | 0.0 ft | | | Slot Radius: | | | " | | | Grid Convergence: | | | 0.66 ° | | |

| | | | | | | |
|----------------------|----------------------------|--------|---------------------|-----------------|---------------|-------------|
| Well | Spaur Brothers EH 31-339HC | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,435,290.39 ft | Latitude: | 40.523717 |
| | +E/-W | 0.0 ft | Easting: | 3,286,048.56 ft | Longitude: | -104.471033 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,736.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 11/6/2013 | 8.39 | 67.11 | 52,975 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | Plan #1 (11-6-13) | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 276.44 |

| 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 | |
| 5,270.0 | 0.00 | 0.00 | 5,270.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,275.9 | 30.18 | 29.56 | 6,230.1 | 225.1 | 127.7 | 3.00 | 3.00 | 0.00 | 29.56 | |
| 6,476.4 | 30.18 | 29.56 | 6,403.4 | 312.8 | 177.4 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,281.6 | 90.00 | 269.31 | 6,897.0 | 555.6 | -251.9 | 13.00 | 7.43 | -14.94 | -116.76 | Entry Pt. 880'FSL & |
| 7,282.5 | 90.00 | 269.32 | 6,897.0 | 555.6 | -252.8 | 1.00 | 0.00 | 1.00 | 90.00 | |
| 11,509.0 | 90.00 | 269.32 | 6,897.0 | 505.4 | -4,479.0 | 0.00 | 0.00 | 0.00 | 0.00 | BHL 870'FSL & 47C |

| | | | |
|------------------|--|-------------------------------------|---------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Company: | Great Western | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Project: | SEC.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | North Reference: | True |
| Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-6-13) | | |

| 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 |
| 1.0 | 0.00 | 0.00 | 1.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| SHL 322°FSL & 210°FEL | | | | | | | | | |
| 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 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 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 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.00 | 0.00 | 2,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 0.00 | 0.00 | 2,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 0.00 | 0.00 | 2,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 0.00 | 0.00 | 2,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 0.00 | 0.00 | 2,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 0.00 | 0.00 | 3,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 0.00 | 0.00 | 3,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 0.00 | 0.00 | 3,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 0.00 | 0.00 | 3,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 0.00 | 0.00 | 3,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 0.00 | 0.00 | 3,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 0.00 | 0.00 | 3,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 0.00 | 0.00 | 3,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 0.00 | 0.00 | 3,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 0.00 | 0.00 | 3,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 0.00 | 0.00 | 4,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 0.00 | 0.00 | 4,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 0.00 | 0.00 | 4,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 0.00 | 0.00 | 4,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 0.00 | 0.00 | 4,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 0.00 | 0.00 | 4,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 0.00 | 0.00 | 4,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 0.00 | 0.00 | 4,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 0.00 | 0.00 | 4,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 0.00 | 0.00 | 4,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 0.00 | 0.00 | 5,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 0.00 | 0.00 | 5,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |

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|------------------|--|-------------------------------------|---------------------------------|
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| Company: | Great Western | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Project: | SEC.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | North Reference: | True |
| Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (11-6-13) | | |

| 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) |
| 5,200.0 | 0.00 | 0.00 | 5,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 5,270.0 | 0.00 | 0.00 | 5,270.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP - Start Build 3.00 | | | | | | | | | |
| 5,300.0 | 0.90 | 29.56 | 5,300.0 | 0.2 | 0.1 | -0.1 | 3.00 | 3.00 | 0.00 |
| 5,400.0 | 3.90 | 29.56 | 5,399.9 | 3.8 | 2.2 | -1.7 | 3.00 | 3.00 | 0.00 |
| 5,500.0 | 6.90 | 29.56 | 5,499.4 | 12.0 | 6.8 | -5.4 | 3.00 | 3.00 | 0.00 |
| 5,600.0 | 9.90 | 29.56 | 5,598.4 | 24.7 | 14.0 | -11.2 | 3.00 | 3.00 | 0.00 |
| 5,700.0 | 12.90 | 29.56 | 5,696.4 | 41.9 | 23.8 | -18.9 | 3.00 | 3.00 | 0.00 |
| 5,800.0 | 15.90 | 29.56 | 5,793.2 | 63.6 | 36.1 | -28.7 | 3.00 | 3.00 | 0.00 |
| 5,900.0 | 18.90 | 29.56 | 5,888.6 | 89.6 | 50.8 | -40.4 | 3.00 | 3.00 | 0.00 |
| 6,000.0 | 21.90 | 29.56 | 5,982.4 | 119.9 | 68.0 | -54.1 | 3.00 | 3.00 | 0.00 |
| 6,100.0 | 24.90 | 29.56 | 6,074.1 | 154.4 | 87.6 | -69.7 | 3.00 | 3.00 | 0.00 |
| 6,200.0 | 27.90 | 29.56 | 6,163.7 | 193.1 | 109.5 | -87.2 | 3.00 | 3.00 | 0.00 |
| 6,275.9 | 30.18 | 29.56 | 6,230.1 | 225.1 | 127.7 | -101.7 | 3.00 | 3.00 | 0.00 |
| 6,300.0 | 30.18 | 29.56 | 6,250.9 | 235.7 | 133.7 | -106.4 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 30.18 | 29.56 | 6,337.3 | 279.4 | 158.5 | -126.2 | 0.00 | 0.00 | 0.00 |
| 6,476.4 | 30.18 | 29.56 | 6,403.4 | 312.8 | 177.4 | -141.3 | 0.00 | 0.00 | 0.00 |
| Start DLS 13.00 TFO -116.76 | | | | | | | | | |
| 6,500.0 | 28.92 | 23.90 | 6,423.9 | 323.2 | 182.7 | -145.3 | 12.97 | -5.34 | -23.98 |
| 6,600.0 | 26.70 | 356.22 | 6,512.7 | 367.9 | 191.0 | -148.6 | 13.00 | -2.21 | -27.69 |
| 6,700.0 | 30.05 | 329.56 | 6,601.0 | 412.1 | 176.8 | -129.5 | 13.00 | 3.35 | -26.66 |
| 6,800.0 | 37.49 | 310.21 | 6,684.3 | 453.5 | 140.7 | -89.0 | 13.00 | 7.44 | -19.34 |
| 6,900.0 | 47.11 | 297.13 | 6,758.4 | 490.0 | 84.6 | -29.2 | 13.00 | 9.62 | -13.09 |
| 7,000.0 | 57.80 | 287.75 | 6,819.3 | 519.7 | 11.4 | 46.9 | 13.00 | 10.69 | -9.37 |
| 7,100.0 | 69.03 | 280.41 | 6,864.0 | 541.2 | -75.2 | 135.4 | 13.00 | 11.23 | -7.34 |
| 7,200.0 | 80.53 | 274.12 | 6,890.3 | 553.2 | -170.7 | 231.6 | 13.00 | 11.50 | -6.29 |
| 7,281.6 | 90.00 | 269.31 | 6,897.0 | 555.6 | -251.9 | 312.6 | 13.00 | 11.60 | -5.89 |
| 7" - Entry Pt. 880'FSL & 460'FEL | | | | | | | | | |
| 7,282.5 | 90.00 | 269.32 | 6,897.0 | 555.6 | -252.8 | 313.5 | 0.92 | 0.20 | 0.90 |
| 7,300.0 | 90.00 | 269.32 | 6,897.0 | 555.4 | -270.3 | 330.8 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 90.00 | 269.32 | 6,897.0 | 554.2 | -370.2 | 430.0 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 90.00 | 269.32 | 6,897.0 | 553.0 | -470.2 | 529.3 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 90.00 | 269.32 | 6,897.0 | 551.8 | -570.2 | 628.5 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.00 | 269.32 | 6,897.0 | 550.6 | -670.2 | 727.7 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.00 | 269.32 | 6,897.0 | 549.4 | -770.2 | 827.0 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.00 | 269.32 | 6,897.0 | 548.2 | -870.2 | 926.2 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 90.00 | 269.32 | 6,897.0 | 547.1 | -970.2 | 1,025.4 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 90.00 | 269.32 | 6,897.0 | 545.9 | -1,070.2 | 1,124.6 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 90.00 | 269.32 | 6,897.0 | 544.7 | -1,170.2 | 1,223.9 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 90.00 | 269.32 | 6,897.0 | 543.5 | -1,270.2 | 1,323.1 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 90.00 | 269.32 | 6,897.0 | 542.3 | -1,370.2 | 1,422.3 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 90.00 | 269.32 | 6,897.0 | 541.1 | -1,470.2 | 1,521.6 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 90.00 | 269.32 | 6,897.0 | 539.9 | -1,570.2 | 1,620.8 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 90.00 | 269.32 | 6,897.0 | 538.7 | -1,670.2 | 1,720.0 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 90.00 | 269.32 | 6,897.0 | 537.6 | -1,770.1 | 1,819.3 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 90.00 | 269.32 | 6,897.0 | 536.4 | -1,870.1 | 1,918.5 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 90.00 | 269.32 | 6,897.0 | 535.2 | -1,970.1 | 2,017.7 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 90.00 | 269.32 | 6,897.0 | 534.0 | -2,070.1 | 2,116.9 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 90.00 | 269.32 | 6,897.0 | 532.8 | -2,170.1 | 2,216.2 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 90.00 | 269.32 | 6,897.0 | 531.6 | -2,270.1 | 2,315.4 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 90.00 | 269.32 | 6,897.0 | 530.4 | -2,370.1 | 2,414.6 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 90.00 | 269.32 | 6,897.0 | 529.2 | -2,470.1 | 2,513.9 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 90.00 | 269.32 | 6,897.0 | 528.0 | -2,570.1 | 2,613.1 | 0.00 | 0.00 | 0.00 |

| Plan Annotations | | | | | |
|------------------|---------------------------|---------------------------|-------------------|----------|-----------------------------|
| | Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | | +N/-S | +E/-W | |
| | | | (ft) | (ft) | |
| | 5,270.0 | 5,270.0 | 0.0 | 0.0 | KOP - Start Build 3.00 |
| | 6,476.4 | 6,403.4 | 312.8 | 177.4 | Start DLS 13.00 TFO -116.76 |
| | 11,509.0 | 6,897.0 | 505.4 | -4,479.0 | TD at 11509.0 |



Great Western

SEC.31-T7N-R63W

Spaur Brothers South Pad Sec.31-T7N-R63W

Spaur Brothers EH 31-339HC

Wellbore #1

Plan #1 (11-6-13)

Anticollision Report

07 November, 2013

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Plan #1 (11-6-13) | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | MD Interval 100.0ft | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 1,000.0ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| | | | | |
|----------------------------|-----------------------|---------------------------------|------------------|--------------------|
| Survey Tool Program | Date 11/6/2013 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 11,509.0 | Plan #1 (11-6-13) (Wellbore #1) | MWD | MWD - Standard |

| | | | | | | |
|--|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--------------------------|-----------------|
| Summary | | | | | | |
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Spaur Brothers South Pad Sec.31-T7N-R63W | | | | | | |
| Spaur Brothers EH 31-019HN - Wellbore #1 - Plan #1 (11-6-13) | 5,200.0 | 5,200.0 | 59.8 | 36.6 | 2.581 | CC |
| Spaur Brothers EH 31-019HN - Wellbore #1 - Plan #1 (11-6-13) | 5,300.0 | 5,300.0 | 60.0 | 36.4 | 2.541 | ES, SF |
| Spaur Brothers EH 31-339HN - Wellbore #1 - Plan #1 (11-6-13) | 4,900.0 | 4,900.0 | 30.2 | 8.4 | 1.387 | Level 3, CC, ES |
| Spaur Brothers EH 31-339HN - Wellbore #1 - Plan #1 (11-6-13) | 11,509.7 | 11,365.4 | 248.9 | 63.1 | 1.340 | Level 3, SF |
| Spaur Brothers EH 31-378HN - Wellbore #1 - Plan #1 (11-6-13) | 5,200.0 | 5,200.0 | 30.6 | 7.5 | 1.322 | Level 3, CC |
| Spaur Brothers EH 31-378HN - Wellbore #1 - Plan #1 (11-6-13) | 5,300.0 | 5,300.0 | 30.8 | 7.2 | 1.306 | Level 3, ES, SF |

| | | | | | | | | | | | | |
|---|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|--|--------------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|
| Offset Design | | | | | | | | | | | | |
| Spaur Brothers South Pad Sec.31-T7N-R63W - Spaur Brothers EH 31-019HN - Wellbore #1 - Plan #1 (11-6-13) | | | | | | | | | | | | |
| Survey Program: 0-MWD | | | | | | | | | | | | |
| Reference | Offset | Semi Major Axis | | Distance | | Minimum Separation | | Separation Factor | | Warning | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -180.00 | -59.8 | 0.0 | 59.8 | 59.5 | 0.22 | 265.843 |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -180.00 | -59.8 | 0.0 | 59.8 | 59.1 | 0.67 | 88.614 |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -180.00 | -59.8 | 0.0 | 59.8 | 58.6 | 1.12 | 53.169 |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.6 | 0.6 | -180.00 | -59.8 | 0.0 | 59.8 | 58.2 | 1.57 | 37.978 |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.8 | 0.8 | -180.00 | -59.8 | 0.0 | 59.8 | 57.7 | 2.02 | 29.538 |
| 500.0 | 500.0 | 500.0 | 500.0 | 1.0 | 1.0 | -180.00 | -59.8 | 0.0 | 59.8 | 57.3 | 2.47 | 24.168 |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.2 | 1.2 | -180.00 | -59.8 | 0.0 | 59.8 | 56.8 | 2.92 | 20.449 |
| 700.0 | 700.0 | 700.0 | 700.0 | 1.5 | 1.5 | -180.00 | -59.8 | 0.0 | 59.8 | 56.4 | 3.37 | 17.723 |
| 800.0 | 800.0 | 800.0 | 800.0 | 1.7 | 1.7 | -180.00 | -59.8 | 0.0 | 59.8 | 55.9 | 3.82 | 15.638 |
| 900.0 | 900.0 | 900.0 | 900.0 | 1.9 | 1.9 | -180.00 | -59.8 | 0.0 | 59.8 | 55.5 | 4.27 | 13.992 |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 2.1 | 2.1 | -180.00 | -59.8 | 0.0 | 59.8 | 55.0 | 4.72 | 12.659 |
| 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 2.4 | 2.4 | -180.00 | -59.8 | 0.0 | 59.8 | 54.6 | 5.17 | 11.558 |
| 1,200.0 | 1,200.0 | 1,200.0 | 1,200.0 | 2.6 | 2.6 | -180.00 | -59.8 | 0.0 | 59.8 | 54.1 | 5.62 | 10.634 |
| 1,300.0 | 1,300.0 | 1,300.0 | 1,300.0 | 2.8 | 2.8 | -180.00 | -59.8 | 0.0 | 59.8 | 53.7 | 6.07 | 9.846 |
| 1,400.0 | 1,400.0 | 1,400.0 | 1,400.0 | 3.0 | 3.0 | -180.00 | -59.8 | 0.0 | 59.8 | 53.2 | 6.52 | 9.167 |
| 1,500.0 | 1,500.0 | 1,500.0 | 1,500.0 | 3.3 | 3.3 | -180.00 | -59.8 | 0.0 | 59.8 | 52.8 | 6.97 | 8.576 |
| 1,600.0 | 1,600.0 | 1,600.0 | 1,600.0 | 3.5 | 3.5 | -180.00 | -59.8 | 0.0 | 59.8 | 52.3 | 7.42 | 8.056 |
| 1,700.0 | 1,700.0 | 1,700.0 | 1,700.0 | 3.7 | 3.7 | -180.00 | -59.8 | 0.0 | 59.8 | 51.9 | 7.87 | 7.596 |
| 1,800.0 | 1,800.0 | 1,800.0 | 1,800.0 | 3.9 | 3.9 | -180.00 | -59.8 | 0.0 | 59.8 | 51.4 | 8.32 | 7.185 |
| 1,900.0 | 1,900.0 | 1,900.0 | 1,900.0 | 4.2 | 4.2 | -180.00 | -59.8 | 0.0 | 59.8 | 51.0 | 8.77 | 6.816 |
| 2,000.0 | 2,000.0 | 2,000.0 | 2,000.0 | 4.4 | 4.4 | -180.00 | -59.8 | 0.0 | 59.8 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 2,100.0 | 2,100.0 | 2,100.0 | 2,100.0 | 4.6 | 4.6 | -180.00 | -59.8 | 0.0 | 59.8 | 50.5 | 9.22 | 6.484 | | |
| 2,200.0 | 2,200.0 | 2,200.0 | 2,200.0 | 4.8 | 4.8 | -180.00 | -59.8 | 0.0 | 59.8 | 50.1 | 9.66 | 6.182 | | |
| 2,300.0 | 2,300.0 | 2,300.0 | 2,300.0 | 5.1 | 5.1 | -180.00 | -59.8 | 0.0 | 59.8 | 49.6 | 10.11 | 5.908 | | |
| 2,400.0 | 2,400.0 | 2,400.0 | 2,400.0 | 5.3 | 5.3 | -180.00 | -59.8 | 0.0 | 59.8 | 49.2 | 10.56 | 5.656 | | |
| 2,500.0 | 2,500.0 | 2,500.0 | 2,500.0 | 5.5 | 5.5 | -180.00 | -59.8 | 0.0 | 59.8 | 48.7 | 11.01 | 5.425 | | |
| 2,600.0 | 2,600.0 | 2,600.0 | 2,600.0 | 5.7 | 5.7 | -180.00 | -59.8 | 0.0 | 59.8 | 48.3 | 11.46 | 5.213 | | |
| 2,700.0 | 2,700.0 | 2,700.0 | 2,700.0 | 6.0 | 6.0 | -180.00 | -59.8 | 0.0 | 59.8 | 47.8 | 11.91 | 5.016 | | |
| 2,800.0 | 2,800.0 | 2,800.0 | 2,800.0 | 6.2 | 6.2 | -180.00 | -59.8 | 0.0 | 59.8 | 47.4 | 12.36 | 4.834 | | |
| 2,900.0 | 2,900.0 | 2,900.0 | 2,900.0 | 6.4 | 6.4 | -180.00 | -59.8 | 0.0 | 59.8 | 46.9 | 12.81 | 4.664 | | |
| 3,000.0 | 3,000.0 | 3,000.0 | 3,000.0 | 6.6 | 6.6 | -180.00 | -59.8 | 0.0 | 59.8 | 46.5 | 13.26 | 4.506 | | |
| 3,100.0 | 3,100.0 | 3,100.0 | 3,100.0 | 6.9 | 6.9 | -180.00 | -59.8 | 0.0 | 59.8 | 46.0 | 13.71 | 4.358 | | |
| 3,200.0 | 3,200.0 | 3,200.0 | 3,200.0 | 7.1 | 7.1 | -180.00 | -59.8 | 0.0 | 59.8 | 45.6 | 14.16 | 4.220 | | |
| 3,300.0 | 3,300.0 | 3,300.0 | 3,300.0 | 7.3 | 7.3 | -180.00 | -59.8 | 0.0 | 59.8 | 45.1 | 14.61 | 4.090 | | |
| 3,400.0 | 3,400.0 | 3,400.0 | 3,400.0 | 7.5 | 7.5 | -180.00 | -59.8 | 0.0 | 59.8 | 44.7 | 15.06 | 3.968 | | |
| 3,500.0 | 3,500.0 | 3,500.0 | 3,500.0 | 7.8 | 7.8 | -180.00 | -59.8 | 0.0 | 59.8 | 44.2 | 15.51 | 3.853 | | |
| 3,600.0 | 3,600.0 | 3,600.0 | 3,600.0 | 8.0 | 8.0 | -180.00 | -59.8 | 0.0 | 59.8 | 43.8 | 15.96 | 3.744 | | |
| 3,700.0 | 3,700.0 | 3,700.0 | 3,700.0 | 8.2 | 8.2 | -180.00 | -59.8 | 0.0 | 59.8 | 43.3 | 16.41 | 3.642 | | |
| 3,800.0 | 3,800.0 | 3,800.0 | 3,800.0 | 8.4 | 8.4 | -180.00 | -59.8 | 0.0 | 59.8 | 42.9 | 16.86 | 3.545 | | |
| 3,900.0 | 3,900.0 | 3,900.0 | 3,900.0 | 8.7 | 8.7 | -180.00 | -59.8 | 0.0 | 59.8 | 42.4 | 17.31 | 3.453 | | |
| 4,000.0 | 4,000.0 | 4,000.0 | 4,000.0 | 8.9 | 8.9 | -180.00 | -59.8 | 0.0 | 59.8 | 42.0 | 17.76 | 3.365 | | |
| 4,100.0 | 4,100.0 | 4,100.0 | 4,100.0 | 9.1 | 9.1 | -180.00 | -59.8 | 0.0 | 59.8 | 41.5 | 18.21 | 3.282 | | |
| 4,200.0 | 4,200.0 | 4,200.0 | 4,200.0 | 9.3 | 9.3 | -180.00 | -59.8 | 0.0 | 59.8 | 41.1 | 18.66 | 3.203 | | |
| 4,300.0 | 4,300.0 | 4,300.0 | 4,300.0 | 9.6 | 9.6 | -180.00 | -59.8 | 0.0 | 59.8 | 40.6 | 19.11 | 3.128 | | |
| 4,400.0 | 4,400.0 | 4,400.0 | 4,400.0 | 9.8 | 9.8 | -180.00 | -59.8 | 0.0 | 59.8 | 40.2 | 19.55 | 3.056 | | |
| 4,500.0 | 4,500.0 | 4,500.0 | 4,500.0 | 10.0 | 10.0 | -180.00 | -59.8 | 0.0 | 59.8 | 39.7 | 20.00 | 2.987 | | |
| 4,600.0 | 4,600.0 | 4,600.0 | 4,600.0 | 10.2 | 10.2 | -180.00 | -59.8 | 0.0 | 59.8 | 39.3 | 20.45 | 2.921 | | |
| 4,700.0 | 4,700.0 | 4,700.0 | 4,700.0 | 10.5 | 10.5 | -180.00 | -59.8 | 0.0 | 59.8 | 38.8 | 20.90 | 2.859 | | |
| 4,800.0 | 4,800.0 | 4,800.0 | 4,800.0 | 10.7 | 10.7 | -180.00 | -59.8 | 0.0 | 59.8 | 38.4 | 21.35 | 2.798 | | |
| 4,900.0 | 4,900.0 | 4,900.0 | 4,900.0 | 10.9 | 10.9 | -180.00 | -59.8 | 0.0 | 59.8 | 38.0 | 21.80 | 2.741 | | |
| 5,000.0 | 5,000.0 | 5,000.0 | 5,000.0 | 11.1 | 11.1 | -180.00 | -59.8 | 0.0 | 59.8 | 37.5 | 22.25 | 2.685 | | |
| 5,100.0 | 5,100.0 | 5,100.0 | 5,100.0 | 11.4 | 11.4 | -180.00 | -59.8 | 0.0 | 59.8 | 37.1 | 22.70 | 2.632 | | |
| 5,200.0 | 5,200.0 | 5,200.0 | 5,200.0 | 11.6 | 11.6 | -180.00 | -59.8 | 0.0 | 59.8 | 36.6 | 23.15 | 2.581 CC | | |
| 5,246.8 | 5,246.8 | 5,246.8 | 5,246.8 | 11.7 | 11.7 | 150.52 | -59.8 | 0.0 | 59.9 | 36.5 | 23.36 | 2.564 | | |
| 5,300.0 | 5,300.0 | 5,300.0 | 5,300.0 | 11.8 | 11.8 | 150.54 | -59.8 | 0.0 | 60.0 | 36.4 | 23.60 | 2.541 ES, SF | | |
| 5,400.0 | 5,399.9 | 5,399.9 | 5,399.9 | 12.0 | 12.0 | 152.35 | -59.8 | 0.0 | 63.6 | 39.6 | 24.01 | 2.650 | | |
| 5,500.0 | 5,499.4 | 5,499.4 | 5,499.4 | 12.2 | 12.2 | 155.71 | -59.8 | 0.0 | 72.1 | 47.7 | 24.37 | 2.959 | | |
| 5,600.0 | 5,598.4 | 5,596.0 | 5,595.9 | 12.5 | 12.4 | 157.45 | -61.3 | 2.8 | 86.8 | 62.2 | 24.66 | 3.521 | | |
| 5,700.0 | 5,696.4 | 5,690.2 | 5,689.5 | 12.7 | 12.6 | 155.58 | -66.7 | 12.3 | 109.4 | 84.5 | 24.90 | 4.395 | | |
| 5,800.0 | 5,793.2 | 5,781.0 | 5,778.5 | 12.9 | 12.8 | 152.14 | -75.4 | 27.8 | 140.0 | 114.8 | 25.14 | 5.569 | | |
| 5,900.0 | 5,888.6 | 5,867.2 | 5,861.5 | 13.2 | 13.0 | 148.39 | -86.9 | 48.1 | 178.5 | 153.1 | 25.38 | 7.033 | | |
| 6,000.0 | 5,982.4 | 5,948.1 | 5,937.5 | 13.5 | 13.2 | 144.81 | -100.3 | 72.1 | 224.8 | 199.1 | 25.65 | 8.763 | | |
| 6,100.0 | 6,074.1 | 6,023.0 | 6,006.1 | 13.9 | 13.5 | 141.53 | -115.2 | 98.4 | 278.3 | 252.3 | 25.95 | 10.721 | | |
| 6,200.0 | 6,163.7 | 6,091.9 | 6,067.2 | 14.3 | 13.7 | 138.48 | -130.7 | 126.0 | 338.3 | 312.0 | 26.30 | 12.861 | | |
| 6,300.0 | 6,250.9 | 6,164.6 | 6,130.5 | 14.7 | 14.0 | 136.15 | -148.7 | 157.0 | 403.5 | 376.7 | 26.76 | 15.077 | | |
| 6,400.0 | 6,337.3 | 6,243.4 | 6,202.6 | 15.3 | 14.3 | 137.25 | -169.5 | 180.6 | 469.2 | 441.9 | 27.26 | 17.213 | | |
| 6,500.0 | 6,423.9 | 6,318.8 | 6,274.3 | 15.8 | 14.5 | 147.37 | -190.3 | 190.3 | 534.8 | 507.4 | 27.40 | 19.520 | | |
| 6,600.0 | 6,512.7 | 6,390.7 | 6,343.2 | 16.3 | 14.6 | -174.59 | -210.4 | 187.6 | 602.6 | 575.3 | 27.23 | 22.125 | | |
| 6,700.0 | 6,601.0 | 6,462.9 | 6,411.1 | 16.7 | 14.8 | -139.35 | -230.2 | 173.2 | 669.8 | 641.7 | 28.13 | 23.809 | | |
| 6,800.0 | 6,684.3 | 6,538.6 | 6,478.7 | 17.0 | 14.9 | -114.06 | -250.2 | 145.9 | 733.1 | 703.7 | 29.39 | 24.942 | | |
| 6,900.0 | 6,758.4 | 6,620.8 | 6,545.8 | 17.3 | 15.0 | -97.79 | -270.1 | 103.2 | 789.5 | 759.2 | 30.37 | 25.997 | | |
| 7,000.0 | 6,819.3 | 6,712.1 | 6,610.1 | 17.6 | 15.1 | -87.72 | -289.4 | 41.4 | 836.3 | 805.3 | 31.06 | 26.927 | | |
| 7,100.0 | 6,864.0 | 6,814.3 | 6,665.6 | 18.1 | 15.6 | -81.82 | -306.4 | -42.4 | 871.1 | 839.2 | 31.94 | 27.275 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design Spaur Brothers South Pad Sec.31-T7N-R63W - Spaur Brothers EH 31-019HN - Wellbore #1 - Plan #1 (| | | | | | | | | | | | | Offset Site Error: | 0.0ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 7,200.0 | 6,890.3 | 6,926.6 | 6,703.5 | 18.9 | 16.8 | -78.92 | -318.5 | -147.0 | 891.7 | 858.2 | 33.58 | 26.554 | | |
| 7,300.0 | 6,897.0 | 7,042.2 | 6,715.0 | 20.0 | 18.4 | -78.29 | -322.9 | -261.7 | 897.0 | 860.8 | 36.21 | 24.770 | | |
| 7,400.0 | 6,897.0 | 7,142.2 | 6,715.0 | 21.5 | 20.1 | -78.29 | -323.9 | -361.7 | 896.8 | 857.3 | 39.44 | 22.738 | | |
| 7,500.0 | 6,897.0 | 7,242.2 | 6,715.0 | 23.3 | 22.0 | -78.29 | -324.9 | -461.7 | 896.6 | 853.5 | 43.12 | 20.795 | | |
| 7,600.0 | 6,897.0 | 7,342.2 | 6,715.0 | 25.2 | 24.1 | -78.28 | -325.8 | -561.7 | 896.4 | 849.2 | 47.15 | 19.011 | | |
| 7,700.0 | 6,897.0 | 7,442.2 | 6,715.0 | 27.4 | 26.3 | -78.28 | -326.8 | -661.7 | 896.1 | 844.7 | 51.46 | 17.416 | | |
| 7,800.0 | 6,897.0 | 7,542.2 | 6,715.0 | 29.6 | 28.6 | -78.28 | -327.8 | -761.7 | 895.9 | 840.0 | 55.97 | 16.006 | | |
| 7,900.0 | 6,897.0 | 7,642.2 | 6,715.0 | 31.9 | 31.0 | -78.28 | -328.8 | -861.7 | 895.7 | 835.1 | 60.66 | 14.767 | | |
| 8,000.0 | 6,897.0 | 7,742.2 | 6,715.0 | 34.3 | 33.4 | -78.27 | -329.7 | -961.7 | 895.5 | 830.1 | 65.47 | 13.679 | | |
| 8,100.0 | 6,897.0 | 7,842.2 | 6,715.0 | 36.7 | 35.9 | -78.27 | -330.7 | -1,061.6 | 895.3 | 824.9 | 70.38 | 12.722 | | |
| 8,200.0 | 6,897.0 | 7,942.2 | 6,715.0 | 39.2 | 38.5 | -78.27 | -331.7 | -1,161.6 | 895.1 | 819.7 | 75.37 | 11.876 | | |
| 8,300.0 | 6,897.0 | 8,042.2 | 6,715.0 | 41.8 | 41.1 | -78.27 | -332.7 | -1,261.6 | 894.9 | 814.5 | 80.43 | 11.126 | | |
| 8,400.0 | 6,897.0 | 8,142.2 | 6,715.0 | 44.3 | 43.7 | -78.26 | -333.6 | -1,361.6 | 894.7 | 809.1 | 85.55 | 10.459 | | |
| 8,500.0 | 6,897.0 | 8,242.2 | 6,715.0 | 46.9 | 46.3 | -78.26 | -334.6 | -1,461.6 | 894.5 | 803.8 | 90.71 | 9.861 | | |
| 8,600.0 | 6,897.0 | 8,342.2 | 6,715.0 | 49.6 | 49.0 | -78.26 | -335.6 | -1,561.6 | 894.3 | 798.4 | 95.91 | 9.325 | | |
| 8,700.0 | 6,897.0 | 8,442.2 | 6,715.0 | 52.2 | 51.6 | -78.25 | -336.6 | -1,661.6 | 894.1 | 792.9 | 101.14 | 8.840 | | |
| 8,800.0 | 6,897.0 | 8,542.2 | 6,715.0 | 54.9 | 54.3 | -78.25 | -337.5 | -1,761.6 | 893.9 | 787.5 | 106.39 | 8.401 | | |
| 8,900.0 | 6,897.0 | 8,642.2 | 6,715.0 | 57.5 | 57.0 | -78.25 | -338.5 | -1,861.6 | 893.7 | 782.0 | 111.68 | 8.002 | | |
| 9,000.0 | 6,897.0 | 8,742.2 | 6,715.0 | 60.2 | 59.7 | -78.25 | -339.5 | -1,961.6 | 893.4 | 776.5 | 116.98 | 7.638 | | |
| 9,100.0 | 6,897.0 | 8,842.2 | 6,715.0 | 62.9 | 62.4 | -78.24 | -340.5 | -2,061.6 | 893.2 | 770.9 | 122.30 | 7.304 | | |
| 9,200.0 | 6,897.0 | 8,942.2 | 6,715.0 | 65.6 | 65.2 | -78.24 | -341.4 | -2,161.6 | 893.0 | 765.4 | 127.63 | 6.997 | | |
| 9,300.0 | 6,897.0 | 9,042.2 | 6,715.0 | 68.3 | 67.9 | -78.24 | -342.4 | -2,261.6 | 892.8 | 759.8 | 132.98 | 6.714 | | |
| 9,400.0 | 6,897.0 | 9,142.2 | 6,715.0 | 71.0 | 70.6 | -78.24 | -343.4 | -2,361.6 | 892.6 | 754.3 | 138.34 | 6.452 | | |
| 9,500.0 | 6,897.0 | 9,242.2 | 6,715.0 | 73.8 | 73.4 | -78.23 | -344.4 | -2,461.6 | 892.4 | 748.7 | 143.72 | 6.210 | | |
| 9,600.0 | 6,897.0 | 9,342.2 | 6,715.0 | 76.5 | 76.1 | -78.23 | -345.3 | -2,561.6 | 892.2 | 743.1 | 149.10 | 5.984 | | |
| 9,700.0 | 6,897.0 | 9,442.2 | 6,715.0 | 79.2 | 78.9 | -78.23 | -346.3 | -2,661.6 | 892.0 | 737.5 | 154.49 | 5.774 | | |
| 9,800.0 | 6,897.0 | 9,542.2 | 6,715.0 | 82.0 | 81.6 | -78.22 | -347.3 | -2,761.6 | 891.8 | 731.9 | 159.88 | 5.578 | | |
| 9,900.0 | 6,897.0 | 9,642.2 | 6,715.0 | 84.7 | 84.4 | -78.22 | -348.3 | -2,861.6 | 891.6 | 726.3 | 165.29 | 5.394 | | |
| 10,000.0 | 6,897.0 | 9,742.2 | 6,715.0 | 87.5 | 87.1 | -78.22 | -349.2 | -2,961.6 | 891.4 | 720.7 | 170.70 | 5.222 | | |
| 10,100.0 | 6,897.0 | 9,842.2 | 6,715.0 | 90.2 | 89.9 | -78.22 | -350.2 | -3,061.5 | 891.2 | 715.0 | 176.11 | 5.060 | | |
| 10,200.0 | 6,897.0 | 9,942.2 | 6,715.0 | 93.0 | 92.7 | -78.21 | -351.2 | -3,161.5 | 890.9 | 709.4 | 181.53 | 4.908 | | |
| 10,300.0 | 6,897.0 | 10,042.2 | 6,715.0 | 95.7 | 95.4 | -78.21 | -352.2 | -3,261.5 | 890.7 | 703.8 | 186.96 | 4.764 | | |
| 10,400.0 | 6,897.0 | 10,142.2 | 6,715.0 | 98.5 | 98.2 | -78.21 | -353.2 | -3,361.5 | 890.5 | 698.1 | 192.39 | 4.629 | | |
| 10,500.0 | 6,897.0 | 10,242.2 | 6,715.0 | 101.3 | 101.0 | -78.20 | -354.1 | -3,461.5 | 890.3 | 692.5 | 197.82 | 4.501 | | |
| 10,600.0 | 6,897.0 | 10,342.2 | 6,715.0 | 104.0 | 103.8 | -78.20 | -355.1 | -3,561.5 | 890.1 | 686.9 | 203.26 | 4.379 | | |
| 10,700.0 | 6,897.0 | 10,442.2 | 6,715.0 | 106.8 | 106.5 | -78.20 | -356.1 | -3,661.5 | 889.9 | 681.2 | 208.70 | 4.264 | | |
| 10,800.0 | 6,897.0 | 10,542.2 | 6,715.0 | 109.6 | 109.3 | -78.20 | -357.1 | -3,761.5 | 889.7 | 675.6 | 214.14 | 4.155 | | |
| 10,900.0 | 6,897.0 | 10,642.2 | 6,715.0 | 112.3 | 112.1 | -78.19 | -358.0 | -3,861.5 | 889.5 | 669.9 | 219.59 | 4.051 | | |
| 11,000.0 | 6,897.0 | 10,742.2 | 6,715.0 | 115.1 | 114.9 | -78.19 | -359.0 | -3,961.5 | 889.3 | 664.2 | 225.04 | 3.952 | | |
| 11,100.0 | 6,897.0 | 10,842.2 | 6,715.0 | 117.9 | 117.7 | -78.19 | -360.0 | -4,061.5 | 889.1 | 658.6 | 230.49 | 3.857 | | |
| 11,200.0 | 6,897.0 | 10,942.2 | 6,715.0 | 120.7 | 120.4 | -78.18 | -361.0 | -4,161.5 | 888.9 | 652.9 | 235.94 | 3.767 | | |
| 11,300.0 | 6,897.0 | 11,042.2 | 6,715.0 | 123.4 | 123.2 | -78.18 | -361.9 | -4,261.5 | 888.7 | 647.3 | 241.40 | 3.681 | | |
| 11,400.0 | 6,897.0 | 11,142.2 | 6,715.0 | 126.2 | 126.0 | -78.18 | -362.9 | -4,361.5 | 888.4 | 641.6 | 246.85 | 3.599 | | |
| 11,500.0 | 6,897.0 | 11,242.2 | 6,715.0 | 129.0 | 128.8 | -78.18 | -363.9 | -4,461.5 | 888.2 | 635.9 | 252.31 | 3.520 | | |
| 11,504.2 | 6,897.0 | 11,244.6 | 6,715.0 | 129.1 | 128.9 | -78.18 | -363.9 | -4,463.8 | 888.2 | 635.7 | 252.49 | 3.518 | | |
| 11,509.7 | 6,897.0 | 11,244.6 | 6,715.0 | 129.3 | 128.9 | -78.18 | -363.9 | -4,463.8 | 888.3 | 635.6 | 252.63 | 3.516 | | |

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-----------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 30.2 | 0.0 | 30.2 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 0.00 | 30.2 | 0.0 | 30.2 | 30.0 | 0.22 | 134.533 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 0.00 | 30.2 | 0.0 | 30.2 | 29.6 | 0.67 | 44.844 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.6 | 0.6 | 0.00 | 30.2 | 0.0 | 30.2 | 29.1 | 1.12 | 26.907 | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.8 | 0.8 | 0.00 | 30.2 | 0.0 | 30.2 | 28.7 | 1.57 | 19.219 | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 1.0 | 1.0 | 0.00 | 30.2 | 0.0 | 30.2 | 28.2 | 2.02 | 14.948 | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.2 | 1.2 | 0.00 | 30.2 | 0.0 | 30.2 | 27.8 | 2.47 | 12.230 | | |
| 700.0 | 700.0 | 700.0 | 700.0 | 1.5 | 1.5 | 0.00 | 30.2 | 0.0 | 30.2 | 27.3 | 2.92 | 10.349 | | |
| 800.0 | 800.0 | 800.0 | 800.0 | 1.7 | 1.7 | 0.00 | 30.2 | 0.0 | 30.2 | 26.9 | 3.37 | 8.969 | | |
| 900.0 | 900.0 | 900.0 | 900.0 | 1.9 | 1.9 | 0.00 | 30.2 | 0.0 | 30.2 | 26.4 | 3.82 | 7.914 | | |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 2.1 | 2.1 | 0.00 | 30.2 | 0.0 | 30.2 | 26.0 | 4.27 | 7.081 | | |
| 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 2.4 | 2.4 | 0.00 | 30.2 | 0.0 | 30.2 | 25.5 | 4.72 | 6.406 | | |
| 1,200.0 | 1,200.0 | 1,200.0 | 1,200.0 | 2.6 | 2.6 | 0.00 | 30.2 | 0.0 | 30.2 | 25.1 | 5.17 | 5.849 | | |
| 1,300.0 | 1,300.0 | 1,300.0 | 1,300.0 | 2.8 | 2.8 | 0.00 | 30.2 | 0.0 | 30.2 | 24.6 | 5.62 | 5.381 | | |
| 1,400.0 | 1,400.0 | 1,400.0 | 1,400.0 | 3.0 | 3.0 | 0.00 | 30.2 | 0.0 | 30.2 | 24.2 | 6.07 | 4.983 | | |
| 1,500.0 | 1,500.0 | 1,500.0 | 1,500.0 | 3.3 | 3.3 | 0.00 | 30.2 | 0.0 | 30.2 | 23.7 | 6.52 | 4.639 | | |
| 1,600.0 | 1,600.0 | 1,600.0 | 1,600.0 | 3.5 | 3.5 | 0.00 | 30.2 | 0.0 | 30.2 | 23.3 | 6.97 | 4.340 | | |
| 1,700.0 | 1,700.0 | 1,700.0 | 1,700.0 | 3.7 | 3.7 | 0.00 | 30.2 | 0.0 | 30.2 | 22.8 | 7.42 | 4.077 | | |
| 1,800.0 | 1,800.0 | 1,800.0 | 1,800.0 | 3.9 | 3.9 | 0.00 | 30.2 | 0.0 | 30.2 | 22.4 | 7.87 | 3.844 | | |
| 1,900.0 | 1,900.0 | 1,900.0 | 1,900.0 | 4.2 | 4.2 | 0.00 | 30.2 | 0.0 | 30.2 | 21.9 | 8.32 | 3.636 | | |
| 2,000.0 | 2,000.0 | 2,000.0 | 2,000.0 | 4.4 | 4.4 | 0.00 | 30.2 | 0.0 | 30.2 | 21.5 | 8.77 | 3.450 | | |
| 2,100.0 | 2,100.0 | 2,100.0 | 2,100.0 | 4.6 | 4.6 | 0.00 | 30.2 | 0.0 | 30.2 | 21.0 | 9.22 | 3.281 | | |
| 2,200.0 | 2,200.0 | 2,200.0 | 2,200.0 | 4.8 | 4.8 | 0.00 | 30.2 | 0.0 | 30.2 | 20.6 | 9.66 | 3.129 | | |
| 2,300.0 | 2,300.0 | 2,300.0 | 2,300.0 | 5.1 | 5.1 | 0.00 | 30.2 | 0.0 | 30.2 | 20.1 | 10.11 | 2.990 | | |
| 2,400.0 | 2,400.0 | 2,400.0 | 2,400.0 | 5.3 | 5.3 | 0.00 | 30.2 | 0.0 | 30.2 | 19.7 | 10.56 | 2.862 | | |
| 2,500.0 | 2,500.0 | 2,500.0 | 2,500.0 | 5.5 | 5.5 | 0.00 | 30.2 | 0.0 | 30.2 | 19.2 | 11.01 | 2.746 | | |
| 2,600.0 | 2,600.0 | 2,600.0 | 2,600.0 | 5.7 | 5.7 | 0.00 | 30.2 | 0.0 | 30.2 | 18.8 | 11.46 | 2.638 | | |
| 2,700.0 | 2,700.0 | 2,700.0 | 2,700.0 | 6.0 | 6.0 | 0.00 | 30.2 | 0.0 | 30.2 | 18.3 | 11.91 | 2.538 | | |
| 2,800.0 | 2,800.0 | 2,800.0 | 2,800.0 | 6.2 | 6.2 | 0.00 | 30.2 | 0.0 | 30.2 | 17.9 | 12.36 | 2.446 | | |
| 2,900.0 | 2,900.0 | 2,900.0 | 2,900.0 | 6.4 | 6.4 | 0.00 | 30.2 | 0.0 | 30.2 | 17.4 | 12.81 | 2.360 | | |
| 3,000.0 | 3,000.0 | 3,000.0 | 3,000.0 | 6.6 | 6.6 | 0.00 | 30.2 | 0.0 | 30.2 | 17.0 | 13.26 | 2.280 | | |
| 3,100.0 | 3,100.0 | 3,100.0 | 3,100.0 | 6.9 | 6.9 | 0.00 | 30.2 | 0.0 | 30.2 | 16.5 | 13.71 | 2.205 | | |
| 3,200.0 | 3,200.0 | 3,200.0 | 3,200.0 | 7.1 | 7.1 | 0.00 | 30.2 | 0.0 | 30.2 | 16.1 | 14.16 | 2.135 | | |
| 3,300.0 | 3,300.0 | 3,300.0 | 3,300.0 | 7.3 | 7.3 | 0.00 | 30.2 | 0.0 | 30.2 | 15.6 | 14.61 | 2.070 | | |
| 3,400.0 | 3,400.0 | 3,400.0 | 3,400.0 | 7.5 | 7.5 | 0.00 | 30.2 | 0.0 | 30.2 | 15.2 | 15.06 | 2.008 | | |
| 3,500.0 | 3,500.0 | 3,500.0 | 3,500.0 | 7.8 | 7.8 | 0.00 | 30.2 | 0.0 | 30.2 | 14.7 | 15.51 | 1.950 | | |
| 3,600.0 | 3,600.0 | 3,600.0 | 3,600.0 | 8.0 | 8.0 | 0.00 | 30.2 | 0.0 | 30.2 | 14.3 | 15.96 | 1.895 | | |
| 3,700.0 | 3,700.0 | 3,700.0 | 3,700.0 | 8.2 | 8.2 | 0.00 | 30.2 | 0.0 | 30.2 | 13.8 | 16.41 | 1.843 | | |
| 3,800.0 | 3,800.0 | 3,800.0 | 3,800.0 | 8.4 | 8.4 | 0.00 | 30.2 | 0.0 | 30.2 | 13.4 | 16.86 | 1.794 | | |
| 3,900.0 | 3,900.0 | 3,900.0 | 3,900.0 | 8.7 | 8.7 | 0.00 | 30.2 | 0.0 | 30.2 | 12.9 | 17.31 | 1.747 | | |
| 4,000.0 | 4,000.0 | 4,000.0 | 4,000.0 | 8.9 | 8.9 | 0.00 | 30.2 | 0.0 | 30.2 | 12.5 | 17.76 | 1.703 | | |
| 4,100.0 | 4,100.0 | 4,100.0 | 4,100.0 | 9.1 | 9.1 | 0.00 | 30.2 | 0.0 | 30.2 | 12.0 | 18.21 | 1.661 | | |
| 4,200.0 | 4,200.0 | 4,200.0 | 4,200.0 | 9.3 | 9.3 | 0.00 | 30.2 | 0.0 | 30.2 | 11.6 | 18.66 | 1.621 | | |
| 4,300.0 | 4,300.0 | 4,300.0 | 4,300.0 | 9.6 | 9.6 | 0.00 | 30.2 | 0.0 | 30.2 | 11.1 | 19.11 | 1.583 | | |
| 4,400.0 | 4,400.0 | 4,400.0 | 4,400.0 | 9.8 | 9.8 | 0.00 | 30.2 | 0.0 | 30.2 | 10.7 | 19.55 | 1.546 | | |
| 4,500.0 | 4,500.0 | 4,500.0 | 4,500.0 | 10.0 | 10.0 | 0.00 | 30.2 | 0.0 | 30.2 | 10.2 | 20.00 | 1.512 | | |
| 4,600.0 | 4,600.0 | 4,600.0 | 4,600.0 | 10.2 | 10.2 | 0.00 | 30.2 | 0.0 | 30.2 | 9.8 | 20.45 | 1.478 Level 3 | | |
| 4,700.0 | 4,700.0 | 4,700.0 | 4,700.0 | 10.5 | 10.5 | 0.00 | 30.2 | 0.0 | 30.2 | 9.3 | 20.90 | 1.447 Level 3 | | |
| 4,800.0 | 4,800.0 | 4,800.0 | 4,800.0 | 10.7 | 10.7 | 0.00 | 30.2 | 0.0 | 30.2 | 8.9 | 21.35 | 1.416 Level 3 | | |
| 4,900.0 | 4,900.0 | 4,900.0 | 4,900.0 | 10.9 | 10.9 | 0.00 | 30.2 | 0.0 | 30.2 | 8.4 | 21.80 | 1.387 Level 3, CC, ES | | |
| 5,000.0 | 5,000.0 | 4,998.5 | 4,998.4 | 11.1 | 11.1 | 1.68 | 32.6 | 1.0 | 32.6 | 10.4 | 22.25 | 1.467 Level 3 | | |
| 5,100.0 | 5,100.0 | 5,096.4 | 5,096.1 | 11.4 | 11.3 | 5.47 | 39.6 | 3.8 | 40.0 | 17.3 | 22.69 | 1.761 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | Offset Well Error: | 0.0ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning |
| 5,200.0 | 5,200.0 | 5,193.3 | 5,192.2 | 11.6 | 11.6 | 9.39 | 51.1 | 8.4 | 52.4 | 29.2 | 23.13 | 2.263 | |
| 5,300.0 | 5,300.0 | 5,288.8 | 5,286.1 | 11.8 | 11.8 | -17.06 | 66.8 | 14.8 | 69.6 | 46.0 | 23.57 | 2.952 | |
| 5,400.0 | 5,399.9 | 5,383.2 | 5,378.1 | 12.0 | 12.0 | -15.31 | 86.6 | 22.8 | 88.0 | 64.1 | 23.96 | 3.674 | |
| 5,500.0 | 5,499.4 | 5,476.8 | 5,468.1 | 12.2 | 12.2 | -14.51 | 110.3 | 32.5 | 106.3 | 82.0 | 24.30 | 4.376 | |
| 5,600.0 | 5,598.4 | 5,569.6 | 5,555.9 | 12.5 | 12.5 | -14.22 | 137.9 | 43.7 | 124.4 | 99.8 | 24.59 | 5.060 | |
| 5,700.0 | 5,696.4 | 5,661.6 | 5,641.6 | 12.7 | 12.8 | -14.25 | 169.1 | 56.3 | 142.3 | 117.4 | 24.83 | 5.728 | |
| 5,800.0 | 5,793.2 | 5,752.9 | 5,724.8 | 12.9 | 13.1 | -14.48 | 203.8 | 70.4 | 159.8 | 134.7 | 25.03 | 6.383 | |
| 5,900.0 | 5,888.6 | 5,843.5 | 5,805.6 | 13.2 | 13.5 | -14.85 | 241.8 | 85.8 | 177.0 | 151.8 | 25.19 | 7.024 | |
| 6,000.0 | 5,982.4 | 5,936.4 | 5,886.4 | 13.5 | 14.0 | -15.36 | 284.3 | 103.0 | 193.5 | 168.2 | 25.33 | 7.640 | |
| 6,100.0 | 6,074.1 | 6,035.5 | 5,972.1 | 13.9 | 14.5 | -16.18 | 330.4 | 121.7 | 206.2 | 180.7 | 25.47 | 8.095 | |
| 6,200.0 | 6,163.7 | 6,135.1 | 6,058.3 | 14.3 | 15.1 | -17.34 | 376.7 | 140.5 | 213.9 | 188.3 | 25.62 | 8.349 | |
| 6,300.0 | 6,250.9 | 6,234.8 | 6,144.6 | 14.7 | 15.7 | -18.89 | 423.0 | 159.3 | 216.9 | 191.0 | 25.92 | 8.369 | |
| 6,400.0 | 6,337.3 | 6,334.6 | 6,230.9 | 15.3 | 16.3 | -20.55 | 469.4 | 178.1 | 218.7 | 192.1 | 26.62 | 8.216 | |
| 6,500.0 | 6,423.9 | 6,436.6 | 6,320.0 | 15.8 | 16.9 | -18.98 | 517.2 | 190.3 | 220.3 | 192.8 | 27.49 | 8.013 | |
| 6,600.0 | 6,512.7 | 6,535.0 | 6,406.2 | 16.3 | 17.4 | 0.61 | 563.2 | 180.5 | 222.8 | 194.5 | 28.30 | 7.872 | |
| 6,700.0 | 6,601.0 | 6,629.7 | 6,485.4 | 16.7 | 17.9 | 19.47 | 605.3 | 150.8 | 226.7 | 198.0 | 28.69 | 7.901 | |
| 6,800.0 | 6,684.3 | 6,721.3 | 6,555.1 | 17.0 | 18.2 | 31.46 | 642.1 | 104.5 | 231.4 | 202.8 | 28.62 | 8.088 | |
| 6,900.0 | 6,758.4 | 6,810.4 | 6,613.5 | 17.3 | 18.6 | 37.70 | 672.6 | 44.9 | 236.5 | 208.3 | 28.17 | 8.392 | |
| 7,000.0 | 6,819.3 | 6,897.5 | 6,659.4 | 17.6 | 18.9 | 40.70 | 696.4 | -25.2 | 241.1 | 213.4 | 27.66 | 8.716 | |
| 7,100.0 | 6,864.0 | 6,983.3 | 6,691.8 | 18.1 | 19.3 | 42.07 | 712.9 | -102.7 | 244.7 | 217.2 | 27.54 | 8.887 | |
| 7,200.0 | 6,890.3 | 7,068.2 | 6,710.4 | 18.9 | 19.9 | 42.61 | 721.8 | -184.9 | 247.0 | 218.7 | 28.31 | 8.725 | |
| 7,300.0 | 6,897.0 | 7,155.7 | 6,715.0 | 20.0 | 20.7 | 42.70 | 723.3 | -272.2 | 247.7 | 217.5 | 30.20 | 8.200 | |
| 7,400.0 | 6,897.0 | 7,255.7 | 6,715.0 | 21.5 | 22.1 | 42.71 | 722.2 | -372.2 | 247.7 | 215.2 | 32.51 | 7.619 | |
| 7,500.0 | 6,897.0 | 7,355.7 | 6,715.0 | 23.3 | 23.7 | 42.72 | 721.0 | -472.2 | 247.7 | 212.6 | 35.10 | 7.057 | |
| 7,600.0 | 6,897.0 | 7,455.7 | 6,715.0 | 25.2 | 25.6 | 42.72 | 719.9 | -572.2 | 247.7 | 209.8 | 37.94 | 6.530 | |
| 7,700.0 | 6,897.0 | 7,555.7 | 6,715.0 | 27.4 | 27.6 | 42.73 | 718.7 | -672.2 | 247.8 | 206.8 | 40.96 | 6.049 | |
| 7,800.0 | 6,897.0 | 7,655.7 | 6,715.0 | 29.6 | 29.8 | 42.74 | 717.6 | -772.1 | 247.8 | 203.7 | 44.14 | 5.614 | |
| 7,900.0 | 6,897.0 | 7,755.7 | 6,715.0 | 31.9 | 32.1 | 42.75 | 716.5 | -872.1 | 247.8 | 200.4 | 47.44 | 5.224 | |
| 8,000.0 | 6,897.0 | 7,855.7 | 6,715.0 | 34.3 | 34.5 | 42.75 | 715.3 | -972.1 | 247.9 | 197.0 | 50.83 | 4.876 | |
| 8,100.0 | 6,897.0 | 7,955.7 | 6,715.0 | 36.7 | 36.9 | 42.76 | 714.2 | -1,072.1 | 247.9 | 193.6 | 54.31 | 4.565 | |
| 8,200.0 | 6,897.0 | 8,055.7 | 6,715.0 | 39.2 | 39.4 | 42.77 | 713.0 | -1,172.1 | 247.9 | 190.1 | 57.85 | 4.286 | |
| 8,300.0 | 6,897.0 | 8,155.7 | 6,715.0 | 41.8 | 41.9 | 42.78 | 711.9 | -1,272.1 | 248.0 | 186.5 | 61.44 | 4.036 | |
| 8,400.0 | 6,897.0 | 8,255.7 | 6,715.0 | 44.3 | 44.5 | 42.78 | 710.7 | -1,372.1 | 248.0 | 182.9 | 65.08 | 3.810 | |
| 8,500.0 | 6,897.0 | 8,355.7 | 6,715.0 | 46.9 | 47.0 | 42.79 | 709.6 | -1,472.1 | 248.0 | 179.3 | 68.76 | 3.607 | |
| 8,600.0 | 6,897.0 | 8,455.7 | 6,715.0 | 49.6 | 49.6 | 42.80 | 708.4 | -1,572.1 | 248.0 | 175.6 | 72.47 | 3.423 | |
| 8,700.0 | 6,897.0 | 8,555.7 | 6,715.0 | 52.2 | 52.3 | 42.81 | 707.3 | -1,672.1 | 248.1 | 171.9 | 76.21 | 3.255 | |
| 8,800.0 | 6,897.0 | 8,655.7 | 6,715.0 | 54.9 | 54.9 | 42.81 | 706.2 | -1,772.1 | 248.1 | 168.1 | 79.97 | 3.102 | |
| 8,900.0 | 6,897.0 | 8,755.7 | 6,715.0 | 57.5 | 57.6 | 42.82 | 705.0 | -1,872.1 | 248.1 | 164.4 | 83.76 | 2.963 | |
| 9,000.0 | 6,897.0 | 8,855.7 | 6,715.0 | 60.2 | 60.3 | 42.83 | 703.9 | -1,972.1 | 248.2 | 160.6 | 87.56 | 2.834 | |
| 9,100.0 | 6,897.0 | 8,955.7 | 6,715.0 | 62.9 | 62.9 | 42.84 | 702.7 | -2,072.1 | 248.2 | 156.8 | 91.38 | 2.716 | |
| 9,200.0 | 6,897.0 | 9,055.7 | 6,715.0 | 65.6 | 65.6 | 42.84 | 701.6 | -2,172.1 | 248.2 | 153.0 | 95.21 | 2.607 | |
| 9,300.0 | 6,897.0 | 9,155.7 | 6,715.0 | 68.3 | 68.4 | 42.85 | 700.4 | -2,272.0 | 248.3 | 149.2 | 99.06 | 2.506 | |
| 9,400.0 | 6,897.0 | 9,255.7 | 6,715.0 | 71.0 | 71.1 | 42.86 | 699.3 | -2,372.0 | 248.3 | 145.4 | 102.91 | 2.413 | |
| 9,500.0 | 6,897.0 | 9,355.7 | 6,715.0 | 73.8 | 73.8 | 42.87 | 698.1 | -2,472.0 | 248.3 | 141.5 | 106.78 | 2.325 | |
| 9,600.0 | 6,897.0 | 9,455.7 | 6,715.0 | 76.5 | 76.5 | 42.87 | 697.0 | -2,572.0 | 248.3 | 137.7 | 110.66 | 2.244 | |
| 9,700.0 | 6,897.0 | 9,555.7 | 6,715.0 | 79.2 | 79.2 | 42.88 | 695.9 | -2,672.0 | 248.4 | 133.8 | 114.54 | 2.168 | |
| 9,800.0 | 6,897.0 | 9,655.7 | 6,715.0 | 82.0 | 82.0 | 42.89 | 694.7 | -2,772.0 | 248.4 | 130.0 | 118.44 | 2.097 | |
| 9,900.0 | 6,897.0 | 9,755.7 | 6,715.0 | 84.7 | 84.7 | 42.90 | 693.6 | -2,872.0 | 248.4 | 126.1 | 122.34 | 2.031 | |
| 10,000.0 | 6,897.0 | 9,855.7 | 6,715.0 | 87.5 | 87.5 | 42.90 | 692.4 | -2,972.0 | 248.5 | 122.2 | 126.25 | 1.968 | |
| 10,100.0 | 6,897.0 | 9,955.7 | 6,715.0 | 90.2 | 90.2 | 42.91 | 691.3 | -3,072.0 | 248.5 | 118.3 | 130.16 | 1.909 | |
| 10,200.0 | 6,897.0 | 10,055.7 | 6,715.0 | 93.0 | 93.0 | 42.92 | 690.1 | -3,172.0 | 248.5 | 114.4 | 134.08 | 1.854 | |
| 10,300.0 | 6,897.0 | 10,155.7 | 6,715.0 | 95.7 | 95.7 | 42.92 | 689.0 | -3,272.0 | 248.5 | 110.5 | 138.00 | 1.801 | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | Spaur Brothers South Pad Sec.31-T7N-R63W - Spaur Brothers EH 31-339HN - Wellbore #1 - Plan #1 (| | | | | | | | | | Offset Site Error: | | 0.0 ft | |
|-----------------------|----------------|---|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|--------------------|--------------------|-------------|--------|--|
| Survey Program: 0-MWD | | | | | | | | | | | | Offset Well Error: | | 0.0 ft | |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre | | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | (ft) | | | | |
| 10,400.0 | 6,897.0 | 10,255.7 | 6,715.0 | 98.5 | 98.5 | 42.93 | 687.8 | -3,372.0 | 248.6 | 106.6 | 141.93 | 1.751 | | | |
| 10,500.0 | 6,897.0 | 10,355.7 | 6,715.0 | 101.3 | 101.3 | 42.94 | 686.7 | -3,472.0 | 248.6 | 102.7 | 145.87 | 1.704 | | | |
| 10,600.0 | 6,897.0 | 10,455.7 | 6,715.0 | 104.0 | 104.0 | 42.95 | 685.6 | -3,572.0 | 248.6 | 98.8 | 149.81 | 1.660 | | | |
| 10,700.0 | 6,897.0 | 10,555.7 | 6,715.0 | 106.8 | 106.8 | 42.95 | 684.4 | -3,672.0 | 248.7 | 94.9 | 153.75 | 1.617 | | | |
| 10,800.0 | 6,897.0 | 10,655.7 | 6,715.0 | 109.6 | 109.6 | 42.96 | 683.3 | -3,771.9 | 248.7 | 91.0 | 157.69 | 1.577 | | | |
| 10,900.0 | 6,897.0 | 10,755.7 | 6,715.0 | 112.3 | 112.3 | 42.97 | 682.1 | -3,871.9 | 248.7 | 87.1 | 161.64 | 1.539 | | | |
| 11,000.0 | 6,897.0 | 10,855.7 | 6,715.0 | 115.1 | 115.1 | 42.98 | 681.0 | -3,971.9 | 248.8 | 83.2 | 165.60 | 1.502 | | | |
| 11,100.0 | 6,897.0 | 10,955.7 | 6,715.0 | 117.9 | 117.9 | 42.98 | 679.8 | -4,071.9 | 248.8 | 79.2 | 169.55 | 1.467 | Level 3 | | |
| 11,200.0 | 6,897.0 | 11,055.7 | 6,715.0 | 120.7 | 120.7 | 42.99 | 678.7 | -4,171.9 | 248.8 | 75.3 | 173.51 | 1.434 | Level 3 | | |
| 11,300.0 | 6,897.0 | 11,155.7 | 6,715.0 | 123.4 | 123.4 | 43.00 | 677.5 | -4,271.9 | 248.8 | 71.4 | 177.48 | 1.402 | Level 3 | | |
| 11,400.0 | 6,897.0 | 11,255.7 | 6,715.0 | 126.2 | 126.2 | 43.01 | 676.4 | -4,371.9 | 248.9 | 67.4 | 181.44 | 1.372 | Level 3 | | |
| 11,500.0 | 6,897.0 | 11,355.7 | 6,715.0 | 129.0 | 129.0 | 43.01 | 675.3 | -4,471.9 | 248.9 | 63.5 | 185.41 | 1.342 | Level 3 | | |
| 11,509.7 | 6,897.0 | 11,365.4 | 6,715.0 | 129.3 | 129.3 | 43.01 | 675.1 | -4,481.6 | 248.9 | 63.1 | 185.79 | 1.340 | Level 3, SF | | |

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -180.00 | -30.6 | 0.0 | 30.6 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -180.00 | -30.6 | 0.0 | 30.6 | 30.4 | 0.22 | 136.154 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -180.00 | -30.6 | 0.0 | 30.6 | 29.9 | 0.67 | 45.385 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.6 | 0.6 | -180.00 | -30.6 | 0.0 | 30.6 | 29.5 | 1.12 | 27.231 | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.8 | 0.8 | -180.00 | -30.6 | 0.0 | 30.6 | 29.0 | 1.57 | 19.451 | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 1.0 | 1.0 | -180.00 | -30.6 | 0.0 | 30.6 | 28.6 | 2.02 | 15.128 | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.2 | 1.2 | -180.00 | -30.6 | 0.0 | 30.6 | 28.1 | 2.47 | 12.378 | | |
| 700.0 | 700.0 | 700.0 | 700.0 | 1.5 | 1.5 | -180.00 | -30.6 | 0.0 | 30.6 | 27.7 | 2.92 | 10.473 | | |
| 800.0 | 800.0 | 800.0 | 800.0 | 1.7 | 1.7 | -180.00 | -30.6 | 0.0 | 30.6 | 27.2 | 3.37 | 9.077 | | |
| 900.0 | 900.0 | 900.0 | 900.0 | 1.9 | 1.9 | -180.00 | -30.6 | 0.0 | 30.6 | 26.8 | 3.82 | 8.009 | | |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 2.1 | 2.1 | -180.00 | -30.6 | 0.0 | 30.6 | 26.3 | 4.27 | 7.166 | | |
| 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 2.4 | 2.4 | -180.00 | -30.6 | 0.0 | 30.6 | 25.9 | 4.72 | 6.484 | | |
| 1,200.0 | 1,200.0 | 1,200.0 | 1,200.0 | 2.6 | 2.6 | -180.00 | -30.6 | 0.0 | 30.6 | 25.4 | 5.17 | 5.920 | | |
| 1,300.0 | 1,300.0 | 1,300.0 | 1,300.0 | 2.8 | 2.8 | -180.00 | -30.6 | 0.0 | 30.6 | 25.0 | 5.62 | 5.446 | | |
| 1,400.0 | 1,400.0 | 1,400.0 | 1,400.0 | 3.0 | 3.0 | -180.00 | -30.6 | 0.0 | 30.6 | 24.5 | 6.07 | 5.043 | | |
| 1,500.0 | 1,500.0 | 1,500.0 | 1,500.0 | 3.3 | 3.3 | -180.00 | -30.6 | 0.0 | 30.6 | 24.1 | 6.52 | 4.695 | | |
| 1,600.0 | 1,600.0 | 1,600.0 | 1,600.0 | 3.5 | 3.5 | -180.00 | -30.6 | 0.0 | 30.6 | 23.6 | 6.97 | 4.392 | | |
| 1,700.0 | 1,700.0 | 1,700.0 | 1,700.0 | 3.7 | 3.7 | -180.00 | -30.6 | 0.0 | 30.6 | 23.2 | 7.42 | 4.126 | | |
| 1,800.0 | 1,800.0 | 1,800.0 | 1,800.0 | 3.9 | 3.9 | -180.00 | -30.6 | 0.0 | 30.6 | 22.7 | 7.87 | 3.890 | | |
| 1,900.0 | 1,900.0 | 1,900.0 | 1,900.0 | 4.2 | 4.2 | -180.00 | -30.6 | 0.0 | 30.6 | 22.3 | 8.32 | 3.680 | | |
| 2,000.0 | 2,000.0 | 2,000.0 | 2,000.0 | 4.4 | 4.4 | -180.00 | -30.6 | 0.0 | 30.6 | 21.8 | 8.77 | 3.491 | | |
| 2,100.0 | 2,100.0 | 2,100.0 | 2,100.0 | 4.6 | 4.6 | -180.00 | -30.6 | 0.0 | 30.6 | 21.4 | 9.22 | 3.321 | | |
| 2,200.0 | 2,200.0 | 2,200.0 | 2,200.0 | 4.8 | 4.8 | -180.00 | -30.6 | 0.0 | 30.6 | 20.9 | 9.66 | 3.166 | | |
| 2,300.0 | 2,300.0 | 2,300.0 | 2,300.0 | 5.1 | 5.1 | -180.00 | -30.6 | 0.0 | 30.6 | 20.5 | 10.11 | 3.026 | | |
| 2,400.0 | 2,400.0 | 2,400.0 | 2,400.0 | 5.3 | 5.3 | -180.00 | -30.6 | 0.0 | 30.6 | 20.0 | 10.56 | 2.897 | | |
| 2,500.0 | 2,500.0 | 2,500.0 | 2,500.0 | 5.5 | 5.5 | -180.00 | -30.6 | 0.0 | 30.6 | 19.6 | 11.01 | 2.779 | | |
| 2,600.0 | 2,600.0 | 2,600.0 | 2,600.0 | 5.7 | 5.7 | -180.00 | -30.6 | 0.0 | 30.6 | 19.1 | 11.46 | 2.670 | | |
| 2,700.0 | 2,700.0 | 2,700.0 | 2,700.0 | 6.0 | 6.0 | -180.00 | -30.6 | 0.0 | 30.6 | 18.7 | 11.91 | 2.569 | | |
| 2,800.0 | 2,800.0 | 2,800.0 | 2,800.0 | 6.2 | 6.2 | -180.00 | -30.6 | 0.0 | 30.6 | 18.2 | 12.36 | 2.476 | | |
| 2,900.0 | 2,900.0 | 2,900.0 | 2,900.0 | 6.4 | 6.4 | -180.00 | -30.6 | 0.0 | 30.6 | 17.8 | 12.81 | 2.389 | | |
| 3,000.0 | 3,000.0 | 3,000.0 | 3,000.0 | 6.6 | 6.6 | -180.00 | -30.6 | 0.0 | 30.6 | 17.3 | 13.26 | 2.308 | | |
| 3,100.0 | 3,100.0 | 3,100.0 | 3,100.0 | 6.9 | 6.9 | -180.00 | -30.6 | 0.0 | 30.6 | 16.9 | 13.71 | 2.232 | | |
| 3,200.0 | 3,200.0 | 3,200.0 | 3,200.0 | 7.1 | 7.1 | -180.00 | -30.6 | 0.0 | 30.6 | 16.4 | 14.16 | 2.161 | | |
| 3,300.0 | 3,300.0 | 3,300.0 | 3,300.0 | 7.3 | 7.3 | -180.00 | -30.6 | 0.0 | 30.6 | 16.0 | 14.61 | 2.095 | | |
| 3,400.0 | 3,400.0 | 3,400.0 | 3,400.0 | 7.5 | 7.5 | -180.00 | -30.6 | 0.0 | 30.6 | 15.5 | 15.06 | 2.032 | | |
| 3,500.0 | 3,500.0 | 3,500.0 | 3,500.0 | 7.8 | 7.8 | -180.00 | -30.6 | 0.0 | 30.6 | 15.1 | 15.51 | 1.973 | | |
| 3,600.0 | 3,600.0 | 3,600.0 | 3,600.0 | 8.0 | 8.0 | -180.00 | -30.6 | 0.0 | 30.6 | 14.6 | 15.96 | 1.918 | | |
| 3,700.0 | 3,700.0 | 3,700.0 | 3,700.0 | 8.2 | 8.2 | -180.00 | -30.6 | 0.0 | 30.6 | 14.2 | 16.41 | 1.865 | | |
| 3,800.0 | 3,800.0 | 3,800.0 | 3,800.0 | 8.4 | 8.4 | -180.00 | -30.6 | 0.0 | 30.6 | 13.7 | 16.86 | 1.815 | | |
| 3,900.0 | 3,900.0 | 3,900.0 | 3,900.0 | 8.7 | 8.7 | -180.00 | -30.6 | 0.0 | 30.6 | 13.3 | 17.31 | 1.768 | | |
| 4,000.0 | 4,000.0 | 4,000.0 | 4,000.0 | 8.9 | 8.9 | -180.00 | -30.6 | 0.0 | 30.6 | 12.8 | 17.76 | 1.723 | | |
| 4,100.0 | 4,100.0 | 4,100.0 | 4,100.0 | 9.1 | 9.1 | -180.00 | -30.6 | 0.0 | 30.6 | 12.4 | 18.21 | 1.681 | | |
| 4,200.0 | 4,200.0 | 4,200.0 | 4,200.0 | 9.3 | 9.3 | -180.00 | -30.6 | 0.0 | 30.6 | 11.9 | 18.66 | 1.640 | | |
| 4,300.0 | 4,300.0 | 4,300.0 | 4,300.0 | 9.6 | 9.6 | -180.00 | -30.6 | 0.0 | 30.6 | 11.5 | 19.11 | 1.602 | | |
| 4,400.0 | 4,400.0 | 4,400.0 | 4,400.0 | 9.8 | 9.8 | -180.00 | -30.6 | 0.0 | 30.6 | 11.0 | 19.55 | 1.565 | | |
| 4,500.0 | 4,500.0 | 4,500.0 | 4,500.0 | 10.0 | 10.0 | -180.00 | -30.6 | 0.0 | 30.6 | 10.6 | 20.00 | 1.530 | | |
| 4,600.0 | 4,600.0 | 4,600.0 | 4,600.0 | 10.2 | 10.2 | -180.00 | -30.6 | 0.0 | 30.6 | 10.1 | 20.45 | 1.496 Level 3 | | |
| 4,700.0 | 4,700.0 | 4,700.0 | 4,700.0 | 10.5 | 10.5 | -180.00 | -30.6 | 0.0 | 30.6 | 9.7 | 20.90 | 1.464 Level 3 | | |
| 4,800.0 | 4,800.0 | 4,800.0 | 4,800.0 | 10.7 | 10.7 | -180.00 | -30.6 | 0.0 | 30.6 | 9.3 | 21.35 | 1.433 Level 3 | | |
| 4,900.0 | 4,900.0 | 4,900.0 | 4,900.0 | 10.9 | 10.9 | -180.00 | -30.6 | 0.0 | 30.6 | 8.8 | 21.80 | 1.404 Level 3 | | |
| 5,000.0 | 5,000.0 | 5,000.0 | 5,000.0 | 11.1 | 11.1 | -180.00 | -30.6 | 0.0 | 30.6 | 8.4 | 22.25 | 1.375 Level 3 | | |
| 5,100.0 | 5,100.0 | 5,100.0 | 5,100.0 | 11.4 | 11.4 | -180.00 | -30.6 | 0.0 | 30.6 | 7.9 | 22.70 | 1.348 Level 3 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| Spaur Brothers South Pad Sec.31-T7N-R63W - Spaur Brothers EH 31-378HN - Wellbore #1 - Plan #1 (| | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|--------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre | | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | (ft) | | | |
| 5,200.0 | 5,200.0 | 5,200.0 | 5,200.0 | 11.6 | 11.6 | -180.00 | -30.6 | 0.0 | 30.6 | 7.5 | 23.15 | 1.322 | Level 3, CC | |
| 5,246.9 | 5,246.9 | 5,246.9 | 5,246.9 | 11.7 | 11.7 | 150.59 | -30.6 | 0.0 | 30.8 | 7.4 | 23.36 | 1.316 | Level 3 | |
| 5,300.0 | 5,300.0 | 5,300.0 | 5,300.0 | 11.8 | 11.8 | 150.65 | -30.6 | 0.0 | 30.8 | 7.2 | 23.60 | 1.306 | Level 3, ES, SF | |
| 5,400.0 | 5,399.9 | 5,399.9 | 5,399.9 | 12.0 | 12.0 | 154.01 | -30.6 | 0.0 | 34.5 | 10.5 | 24.01 | 1.438 | Level 3 | |
| 5,500.0 | 5,499.4 | 5,499.4 | 5,499.4 | 12.2 | 12.2 | 159.39 | -30.6 | 0.0 | 43.2 | 18.8 | 24.37 | 1.772 | | |
| 5,600.0 | 5,598.4 | 5,598.4 | 5,598.4 | 12.5 | 12.5 | 164.44 | -30.6 | 0.0 | 57.1 | 32.4 | 24.66 | 2.315 | | |
| 5,700.0 | 5,696.4 | 5,700.9 | 5,700.8 | 12.7 | 12.7 | 166.33 | -29.4 | 3.3 | 74.3 | 49.4 | 24.89 | 2.985 | | |
| 5,800.0 | 5,793.2 | 5,806.4 | 5,804.6 | 12.9 | 12.9 | 160.78 | -23.0 | 20.2 | 88.7 | 63.6 | 25.14 | 3.530 | | |
| 5,900.0 | 5,888.6 | 5,910.4 | 5,903.3 | 13.2 | 13.2 | 150.47 | -11.5 | 50.7 | 102.2 | 76.7 | 25.50 | 4.006 | | |
| 6,000.0 | 5,982.4 | 6,010.4 | 5,992.8 | 13.5 | 13.5 | 137.73 | 4.1 | 92.4 | 118.8 | 92.7 | 26.13 | 4.547 | | |
| 6,100.0 | 6,074.1 | 6,105.1 | 6,074.5 | 13.9 | 13.9 | 127.42 | 20.9 | 137.1 | 142.4 | 115.5 | 26.93 | 5.288 | | |
| 6,200.0 | 6,163.7 | 6,217.5 | 6,176.8 | 14.3 | 14.2 | 124.59 | 41.8 | 178.0 | 166.6 | 139.0 | 27.59 | 6.039 | | |
| 6,300.0 | 6,250.9 | 6,329.8 | 6,285.8 | 14.7 | 14.5 | 132.18 | 63.8 | 191.3 | 184.6 | 156.9 | 27.72 | 6.660 | | |
| 6,400.0 | 6,337.3 | 6,428.2 | 6,381.4 | 15.3 | 14.7 | 144.39 | 82.8 | 179.5 | 202.5 | 175.1 | 27.49 | 7.369 | | |
| 6,500.0 | 6,423.9 | 6,508.0 | 6,455.5 | 15.8 | 14.8 | 162.36 | 97.5 | 154.3 | 229.7 | 202.6 | 27.12 | 8.470 | | |
| 6,600.0 | 6,512.7 | 6,578.8 | 6,516.7 | 16.3 | 14.9 | -159.08 | 109.4 | 120.8 | 267.9 | 240.3 | 27.63 | 9.695 | | |
| 6,700.0 | 6,601.0 | 6,646.4 | 6,569.5 | 16.7 | 15.0 | -124.62 | 119.6 | 79.9 | 309.7 | 280.7 | 29.02 | 10.671 | | |
| 6,800.0 | 6,684.3 | 6,712.0 | 6,614.3 | 17.0 | 15.2 | -100.44 | 128.2 | 32.8 | 349.9 | 319.6 | 30.26 | 11.561 | | |
| 6,900.0 | 6,758.4 | 6,775.0 | 6,650.4 | 17.3 | 15.6 | -85.08 | 134.9 | -18.3 | 385.1 | 354.2 | 30.96 | 12.440 | | |
| 7,000.0 | 6,819.3 | 6,840.0 | 6,679.8 | 17.6 | 16.1 | -75.45 | 140.3 | -76.0 | 413.6 | 382.3 | 31.33 | 13.199 | | |
| 7,100.0 | 6,864.0 | 6,900.0 | 6,699.3 | 18.1 | 16.8 | -69.72 | 143.7 | -132.5 | 434.1 | 402.4 | 31.70 | 13.693 | | |
| 7,200.0 | 6,890.3 | 6,966.4 | 6,711.9 | 18.9 | 17.6 | -66.75 | 145.6 | -197.6 | 445.7 | 413.2 | 32.50 | 13.713 | | |
| 7,300.0 | 6,897.0 | 7,035.3 | 6,715.0 | 20.0 | 18.6 | -66.05 | 145.6 | -266.4 | 448.4 | 414.4 | 34.00 | 13.189 | | |
| 7,400.0 | 6,897.0 | 7,135.3 | 6,715.0 | 21.5 | 20.3 | -66.04 | 144.6 | -366.4 | 448.2 | 411.2 | 37.02 | 12.107 | | |
| 7,500.0 | 6,897.0 | 7,235.3 | 6,715.0 | 23.3 | 22.3 | -66.03 | 143.7 | -466.4 | 448.0 | 407.5 | 40.46 | 11.071 | | |
| 7,600.0 | 6,897.0 | 7,335.3 | 6,715.0 | 25.2 | 24.3 | -66.02 | 142.7 | -566.4 | 447.8 | 403.5 | 44.25 | 10.120 | | |
| 7,700.0 | 6,897.0 | 7,435.3 | 6,715.0 | 27.4 | 26.6 | -66.00 | 141.8 | -666.4 | 447.5 | 399.2 | 48.28 | 9.269 | | |
| 7,800.0 | 6,897.0 | 7,535.3 | 6,715.0 | 29.6 | 28.9 | -65.99 | 140.8 | -766.3 | 447.3 | 394.8 | 52.51 | 8.518 | | |
| 7,900.0 | 6,897.0 | 7,635.3 | 6,715.0 | 31.9 | 31.3 | -65.98 | 139.9 | -866.3 | 447.1 | 390.2 | 56.90 | 7.858 | | |
| 8,000.0 | 6,897.0 | 7,735.3 | 6,715.0 | 34.3 | 33.8 | -65.97 | 138.9 | -966.3 | 446.9 | 385.5 | 61.40 | 7.278 | | |
| 8,100.0 | 6,897.0 | 7,835.3 | 6,715.0 | 36.7 | 36.3 | -65.95 | 138.0 | -1,066.3 | 446.7 | 380.7 | 66.00 | 6.767 | | |
| 8,200.0 | 6,897.0 | 7,935.3 | 6,715.0 | 39.2 | 38.8 | -65.94 | 137.1 | -1,166.3 | 446.4 | 375.8 | 70.68 | 6.317 | | |
| 8,300.0 | 6,897.0 | 8,035.3 | 6,715.0 | 41.8 | 41.4 | -65.93 | 136.1 | -1,266.3 | 446.2 | 370.8 | 75.41 | 5.917 | | |
| 8,400.0 | 6,897.0 | 8,135.3 | 6,715.0 | 44.3 | 44.0 | -65.92 | 135.2 | -1,366.3 | 446.0 | 365.8 | 80.20 | 5.561 | | |
| 8,500.0 | 6,897.0 | 8,235.3 | 6,715.0 | 46.9 | 46.7 | -65.90 | 134.2 | -1,466.3 | 445.8 | 360.7 | 85.03 | 5.243 | | |
| 8,600.0 | 6,897.0 | 8,335.3 | 6,715.0 | 49.6 | 49.3 | -65.89 | 133.3 | -1,566.3 | 445.6 | 355.7 | 89.89 | 4.957 | | |
| 8,700.0 | 6,897.0 | 8,435.3 | 6,715.0 | 52.2 | 52.0 | -65.88 | 132.3 | -1,666.3 | 445.3 | 350.6 | 94.78 | 4.698 | | |
| 8,800.0 | 6,897.0 | 8,535.3 | 6,715.0 | 54.9 | 54.7 | -65.87 | 131.4 | -1,766.3 | 445.1 | 345.4 | 99.70 | 4.465 | | |
| 8,900.0 | 6,897.0 | 8,635.3 | 6,715.0 | 57.5 | 57.4 | -65.85 | 130.4 | -1,866.3 | 444.9 | 340.3 | 104.64 | 4.252 | | |
| 9,000.0 | 6,897.0 | 8,735.3 | 6,715.0 | 60.2 | 60.1 | -65.84 | 129.5 | -1,966.3 | 444.7 | 335.1 | 109.60 | 4.057 | | |
| 9,100.0 | 6,897.0 | 8,835.3 | 6,715.0 | 62.9 | 62.8 | -65.83 | 128.5 | -2,066.3 | 444.5 | 329.9 | 114.57 | 3.879 | | |
| 9,200.0 | 6,897.0 | 8,935.3 | 6,715.0 | 65.6 | 65.5 | -65.81 | 127.6 | -2,166.3 | 444.2 | 324.7 | 119.56 | 3.716 | | |
| 9,300.0 | 6,897.0 | 9,035.3 | 6,715.0 | 68.3 | 68.3 | -65.80 | 126.6 | -2,266.3 | 444.0 | 319.5 | 124.55 | 3.565 | | |
| 9,400.0 | 6,897.0 | 9,135.3 | 6,715.0 | 71.0 | 71.0 | -65.79 | 125.7 | -2,366.3 | 443.8 | 314.2 | 129.56 | 3.425 | | |
| 9,500.0 | 6,897.0 | 9,235.3 | 6,715.0 | 73.8 | 73.7 | -65.78 | 124.7 | -2,466.3 | 443.6 | 309.0 | 134.58 | 3.296 | | |
| 9,600.0 | 6,897.0 | 9,335.3 | 6,715.0 | 76.5 | 76.5 | -65.76 | 123.8 | -2,566.3 | 443.4 | 303.8 | 139.61 | 3.176 | | |
| 9,700.0 | 6,897.0 | 9,435.3 | 6,715.0 | 79.2 | 79.2 | -65.75 | 122.8 | -2,666.3 | 443.1 | 298.5 | 144.64 | 3.064 | | |
| 9,800.0 | 6,897.0 | 9,535.3 | 6,715.0 | 82.0 | 82.0 | -65.74 | 121.9 | -2,766.3 | 442.9 | 293.3 | 149.68 | 2.959 | | |
| 9,900.0 | 6,897.0 | 9,635.3 | 6,715.0 | 84.7 | 84.8 | -65.73 | 120.9 | -2,866.2 | 442.7 | 288.0 | 154.72 | 2.861 | | |
| 10,000.0 | 6,897.0 | 9,735.3 | 6,715.0 | 87.5 | 87.5 | -65.71 | 120.0 | -2,966.2 | 442.5 | 282.7 | 159.77 | 2.770 | | |
| 10,100.0 | 6,897.0 | 9,835.3 | 6,715.0 | 90.2 | 90.3 | -65.70 | 119.0 | -3,066.2 | 442.3 | 277.4 | 164.82 | 2.683 | | |
| 10,200.0 | 6,897.0 | 9,935.3 | 6,715.0 | 93.0 | 93.1 | -65.69 | 118.1 | -3,166.2 | 442.1 | 272.2 | 169.88 | 2.602 | | |

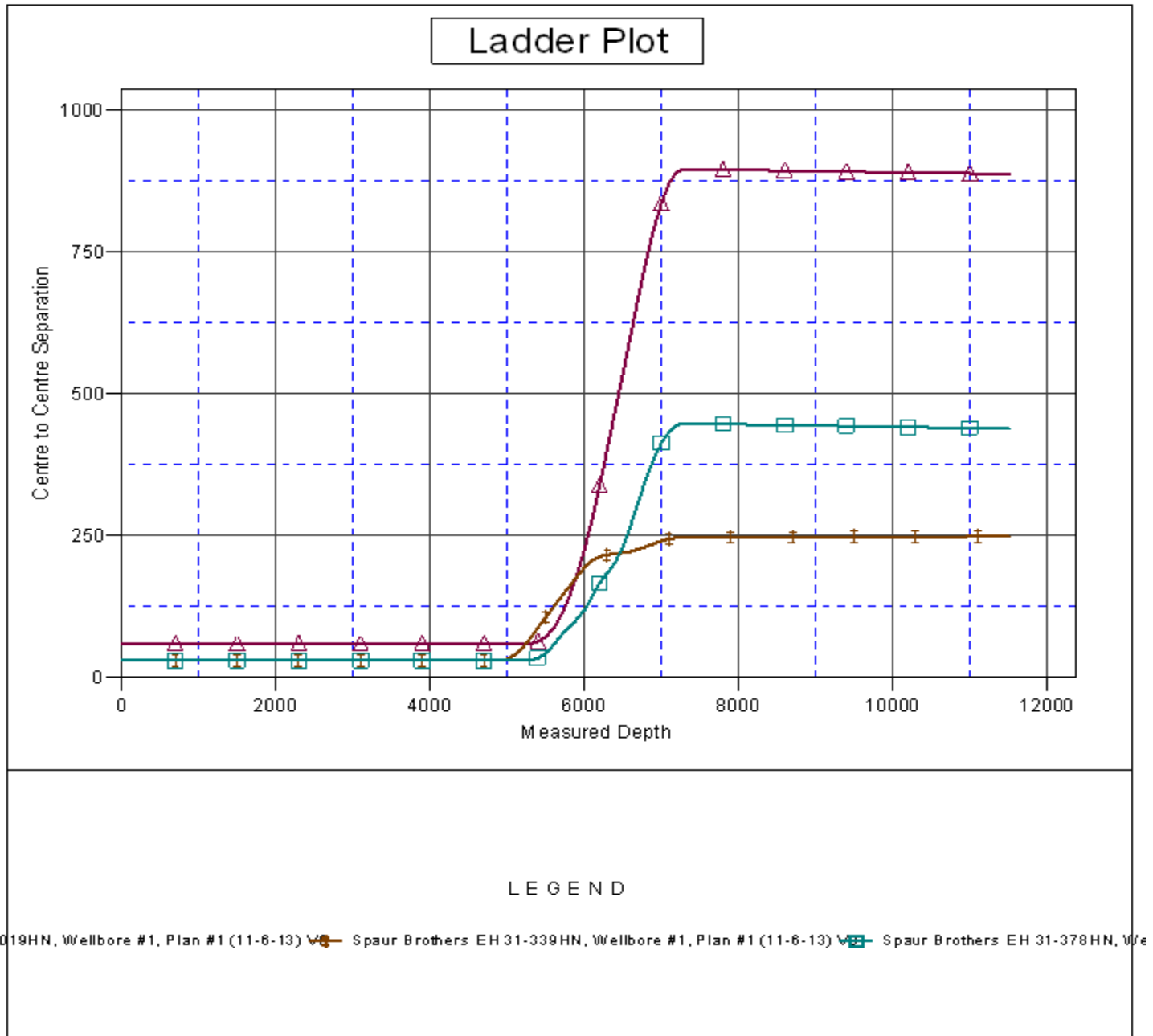
| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

| Offset Design Spaur Brothers South Pad Sec.31-T7N-R63W - Spaur Brothers EH 31-378HN - Wellbore #1 - Plan #1 (| | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|---------------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning |
| 10,300.0 | 6,897.0 | 10,035.3 | 6,715.0 | 95.7 | 95.8 | -65.67 | 117.1 | -3,266.2 | 441.8 | 266.9 | 174.94 | 2.526 | |
| 10,400.0 | 6,897.0 | 10,135.3 | 6,715.0 | 98.5 | 98.6 | -65.66 | 116.2 | -3,366.2 | 441.6 | 261.6 | 180.01 | 2.453 | |
| 10,500.0 | 6,897.0 | 10,235.3 | 6,715.0 | 101.3 | 101.4 | -65.65 | 115.2 | -3,466.2 | 441.4 | 256.3 | 185.07 | 2.385 | |
| 10,600.0 | 6,897.0 | 10,335.3 | 6,715.0 | 104.0 | 104.1 | -65.64 | 114.3 | -3,566.2 | 441.2 | 251.0 | 190.14 | 2.320 | |
| 10,700.0 | 6,897.0 | 10,435.3 | 6,715.0 | 106.8 | 106.9 | -65.62 | 113.3 | -3,666.2 | 441.0 | 245.7 | 195.21 | 2.259 | |
| 10,800.0 | 6,897.0 | 10,535.3 | 6,715.0 | 109.6 | 109.7 | -65.61 | 112.4 | -3,766.2 | 440.7 | 240.5 | 200.29 | 2.201 | |
| 10,900.0 | 6,897.0 | 10,635.3 | 6,715.0 | 112.3 | 112.5 | -65.60 | 111.4 | -3,866.2 | 440.5 | 235.2 | 205.36 | 2.145 | |
| 11,000.0 | 6,897.0 | 10,735.3 | 6,715.0 | 115.1 | 115.3 | -65.58 | 110.5 | -3,966.2 | 440.3 | 229.9 | 210.44 | 2.092 | |
| 11,100.0 | 6,897.0 | 10,835.3 | 6,715.0 | 117.9 | 118.1 | -65.57 | 109.6 | -4,066.2 | 440.1 | 224.6 | 215.52 | 2.042 | |
| 11,200.0 | 6,897.0 | 10,935.3 | 6,715.0 | 120.7 | 120.8 | -65.56 | 108.6 | -4,166.2 | 439.9 | 219.3 | 220.60 | 1.994 | |
| 11,300.0 | 6,897.0 | 11,035.3 | 6,715.0 | 123.4 | 123.6 | -65.55 | 107.7 | -4,266.2 | 439.6 | 214.0 | 225.68 | 1.948 | |
| 11,400.0 | 6,897.0 | 11,135.3 | 6,715.0 | 126.2 | 126.4 | -65.53 | 106.7 | -4,366.2 | 439.4 | 208.7 | 230.76 | 1.904 | |
| 11,500.0 | 6,897.0 | 11,235.3 | 6,715.0 | 129.0 | 129.2 | -65.52 | 105.8 | -4,466.2 | 439.2 | 203.4 | 235.84 | 1.862 | |
| 11,506.8 | 6,897.0 | 11,241.2 | 6,715.0 | 129.2 | 129.4 | -65.52 | 105.7 | -4,472.1 | 439.2 | 203.0 | 236.16 | 1.860 | |
| 11,509.7 | 6,897.0 | 11,241.2 | 6,715.0 | 129.3 | 129.4 | -65.52 | 105.7 | -4,472.1 | 439.2 | 203.0 | 236.23 | 1.859 | |

| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4752.5ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Spaur Brothers EH 31-339HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.66°



| | | | |
|---------------------------|--|-------------------------------------|---------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Spaur Brothers EH 31-339HC |
| Project: | SEC.31-T7N-R63W | TVD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Reference Site: | Spaur Brothers South Pad Sec.31-T7N-R63W | MD Reference: | WELL @ 4752.5ft (RKB - 16.5') |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Spaur Brothers EH 31-339HC | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #1 (11-6-13) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4752.5ft (RKB - 16.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Spaur Brothers EH 31-339HC
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.66°

