

| | | | |
|-----------|------------------|-----------|--|
| Location: | COLORADO | Slot: | SLOT#02 LONGHORN V41-3-4XRLNB (88'FSL & 398'FEL, SEC.34) |
| Field: | WELD COUNTY | Well: | LONGHORN V41-3-4XRLNB |
| Facility: | SEC.34-T04N-R63W | Wellbore: | LONGHORN V41-3-4XRLNB PWB |

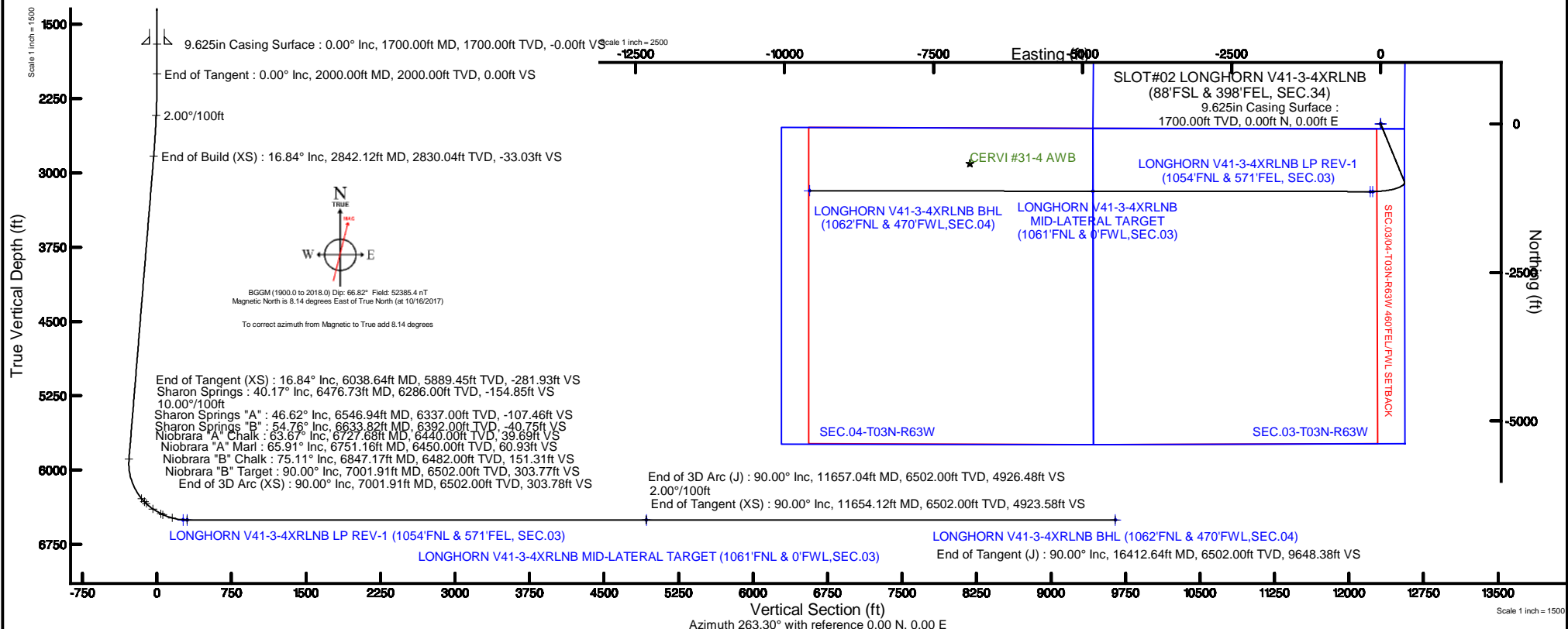
| | |
|--|--|
| Plot reference wellpath is LONGHORN V41-3-4XRLNB PWP (REV-A.0) | Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet |
| True vertical depths are referenced to RIG (17KB) (RKB) | * = Wellpath was transformed from a different geodetic datum |
| Measured depths are referenced to RIG (17KB) (RKB) | North Reference: True north |
| RIG (17KB) (RKB) to Mean Sea Level: 4818 feet | Scale: True distance |
| Mean Sea Level to Ground level (At Slot: SLOTH02 LONGHORN V41-3-4XRLNB (88FSL & 398FEL, SEC.34)): 0 feet | Depths are in feet |
| Coordinates are in feet referenced to Slot | Created by: ingmjmr on 2017-10-24 |
| | Database: Denver |

| Facility Name | | | Grid East (US R) | Grid North (US R) | Latitude | Longitude |
|---|-------------|-------------|------------------|-------------------|----------------|-----------------|
| SEC.34-TDAN-R63W | | | 3302365.621 | 1343617.624 | 40°16'17.610"N | 104°24'58.940"W |
| Slot | Local N (R) | Local E (R) | Grid East (US R) | Grid North (US R) | Latitude | Longitude |
| SLOTW02 LONGHORN V41-3-4XRLNB (88FSL & 368FEL, SEC.34) | -3459.67 | 66.67 | 3302474.762 | 1340158.980 | 40°15'43.420"N | 104°24'58.080"W |
| RG (17KB) (RK8) to Ground level (At Slot: SLOTW02 LONGHORN V41-3-4XRLNB (88FSL & 368FEL, SEC.34)) | | | | | 4818ft | |
| Mean Sea Level to Ground level (At Slot: SLOTW02 LONGHORN V41-3-4XRLNB (88FSL & 368FEL, SEC.34)) | | | | | 0ft | |
| RG (17KB) (RK8) to Mean Sea Level | | | | | 4818ft | |

| Start MD (ft) | End MD (ft) | Tool | Model | Log Name/Comment | Wellbore |
|---------------|-------------|--------------|-------------------------|------------------|---------------------------|
| 17.00 | 16413.00 | BHI NaviTrak | BHI NaviTrak (Standard) | | LONGHORN V41-3-4XRLNB PWB |

| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|---------------------|----------|---------|---------|----------|--------------|--------------|---------------|---------|
| Tie On | 17.00 | 0.000 | 157.711 | 17.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Tangent | 2000.00 | 0.000 | 157.711 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Build (XS) | 2842.12 | 16.842 | 157.711 | 2830.04 | -113.70 | 46.61 | 2.00 | -33.03 |
| End of Tangent (XS) | 6038.64 | 16.842 | 157.711 | 5889.45 | -970.66 | 397.87 | 0.00 | -281.93 |
| End of 3D Arc (XS) | 7001.91 | 90.000 | 270.068 | 6502.00 | -1141.48 | -171.80 | 10.00 | 303.78 |
| End of Tangent (XS) | 11654.12 | 90.000 | 270.068 | 6502.00 | -1135.96 | -4824.00 | 0.00 | 4923.58 |
| End of 3D Arc (J) | 11657.04 | 90.000 | 270.126 | 6502.00 | -1135.95 | -4826.92 | 2.00 | 4926.48 |
| End of Tangent (J) | 16412.64 | 90.000 | 270.126 | 6502.00 | -1125.46 | -9582.51 | 0.00 | 9648.38 |

| MD (ft) | Inch (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|----------|----------|---------|----------|--------------|--------------|-------------------|--------------------|----------------|-----------------|
| 16412.64 | 90.000 | 270.126 | 6502.00 | -1125.46 | -9582.51 | 3292907.15 | 1338916.54 | 40°15'32.280"N | 104°27'01.680"W |



| REFERENCE WELLPATH IDENTIFICATION | | | | | | | | | | | | |
|-----------------------------------|--|--|--|--|---|----------|------------------|---|-----------------|---|-------------------|----------------|
| Operator | | | | | BONANZA CREEK OIL COMPANY | Slot | | SLOT#02 LONGHORN V41-3-4XRLNB (88FSL & 398FEL, SEC.34) | | | | |
| Area | | | | | COLORADO | Well | | LONGHORN V41-3-4XRLNB | | | | |
| Field | | | | | WELD COUNTY | Wellbore | | LONGHORN V41-3-4XRLNB PWB | | | | |
| Facility | | | | | SEC.34-T04N-R63W | | | | | | | |
| REPORT SETUP INFORMATION | | | | | | | | | | | | |
| Projection System | | | | | NAD83 / Lambert Colorado SP, Northern Zone (501), US feet | | | Software System | | WellArchitect® 5.0 | | |
| North Reference | | | | | True | | | User | | Ingmjamm | | |
| Scale | | | | | 0.9999957 | | | Report Generated | | 10/24/2017 at 10:43:34 AM | | |
| Convergence at slot | | | | | 0.71" East | | | Database/Source file | | Denver/LONGHORN_V41-3-4XRLNB_PWP_REV-A.0_.xml | | |
| WELLPATH LOCATION | | | | | | | | | | | | |
| | | | | | Local coordinates | | Grid coordinates | | | Geographic coordinates | | |
| | | | | | North[ft] | East[ft] | Easting[US ft] | | Northing[US ft] | Latitude | Longitude | |
| Slot Location | | | | | -3459.87 | 66.67 | 3302474.76 | | 1340158.98 | 40°15'43.420"N | 104°24'58.080"W | |
| Facility Reference Pt | | | | | | | | | | 3302365.82 | 1343617.62 | 40°16'17.610"N |
| Field Reference Pt | | | | | | | | | | 3224425.77 | 1254425.87 | 40°01'44.400"N |
| WELLPATH DATUM | | | | | | | | | | | | |
| Calculation method | | | | | Minimum curvature | | | RIG (17KB) (RKB) to Facility Vertical Datum | | | 4818.00ft | |
| Horizontal Reference Pt | | | | | Slot | | | RIG (17KB) (RKB) to Mean Sea Level | | | 4818.00ft | |
| Vertical Reference Pt | | | | | RIG (17KB) (RKB) | | | RIG (17KB) (RKB) to Ground Level at Slot (SLOT#02 LONGHORN V41-3-4XRLNB (88FSL & 398FEL, SEC.34)) | | | 4818.00ft | |
| MD Reference Pt | | | | | RIG (17KB) (RKB) | | | Section Origin | | | N 0.00, E 0.00 ft | |
| Field Vertical Reference | | | | | Mean Sea Level | | | Section Azimuth | | | 263.30° | |

| REFERENCE WELLPATH IDENTIFICATION | | | | | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|--|-----------------|----------|--|----------------|--|
| Operator | | | | | | | | | | Slot | SLOT#02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) | | |
| Area | | | | | | | | | | Well | LONGHORN V41-3-4XRLNB | | |
| Field | | | | | | | | | | Wellbore | LONGHORN V41-3-4XRLNB PWB | | |
| Facility | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | | | | | |
| MD [ft] | Inclination [°] | Azimuth [°] | YVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | | Longitude | | DLB [°/100ft] | Comments | |
| 0.00† | 0.000 | 157.711 | 0.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 17.00 | 0.000 | 157.711 | 17.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | Is On | |
| 117.00† | 0.000 | 157.711 | 117.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 217.00† | 0.000 | 157.711 | 217.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 317.00† | 0.000 | 157.711 | 317.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 417.00† | 0.000 | 157.711 | 417.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 517.00† | 0.000 | 157.711 | 517.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 617.00† | 0.000 | 157.711 | 617.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 717.00† | 0.000 | 157.711 | 717.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 817.00† | 0.000 | 157.711 | 817.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 917.00† | 0.000 | 157.711 | 917.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1017.00† | 0.000 | 157.711 | 1017.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1117.00† | 0.000 | 157.711 | 1117.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1217.00† | 0.000 | 157.711 | 1217.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1238.00† | 0.000 | 157.711 | 1238.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | Parkman | |
| 1317.00† | 0.000 | 157.711 | 1317.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1417.00† | 0.000 | 157.711 | 1417.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1517.00† | 0.000 | 157.711 | 1517.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1617.00† | 0.000 | 157.711 | 1617.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1717.00† | 0.000 | 157.711 | 1717.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1817.00† | 0.000 | 157.711 | 1817.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 1917.00† | 0.000 | 157.711 | 1917.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | | |
| 2000.00 | 0.000 | 157.711 | 2000.00 | 0.00 | 0.00 | 0.00 | 40°15'43.420°N | | 104°24'58.080°W | | 0.00 | End of Tangent | |
| 2017.00† | 0.344 | 157.711 | 2017.00 | -0.91 | -0.95 | 0.12 | 40°15'43.420°N | | 104°24'58.080°W | | 2.00 | | |
| 2117.00† | 2.340 | 157.711 | 2116.97 | -0.64 | -2.21 | 0.91 | 40°15'43.398°N | | 104°24'58.668°W | | 2.00 | | |
| 2217.00† | 4.340 | 157.711 | 2216.79 | -2.21 | -7.60 | 3.12 | 40°15'43.345°N | | 104°24'58.040°W | | 2.00 | | |
| 2317.00† | 6.340 | 157.711 | 2316.35 | -4.71 | -16.21 | 6.65 | 40°15'43.260°N | | 104°24'57.994°W | | 2.00 | | |
| 2417.00† | 8.340 | 157.711 | 2416.53 | -8.14 | -28.03 | 11.49 | 40°15'43.143°N | | 104°24'57.832°W | | 2.00 | | |
| 2517.00† | 10.340 | 157.711 | 2516.20 | -12.50 | -43.05 | 17.65 | 40°15'42.995°N | | 104°24'57.652°W | | 2.00 | | |
| 2617.00† | 12.340 | 157.711 | 2612.24 | -17.78 | -61.24 | 26.10 | 40°15'42.815°N | | 104°24'57.756°W | | 2.00 | | |

| REFERENCE WELLPATH IDENTIFICATION | | | | | | | | | | | | | |
|--|--------------------|----------------|---------|-------------|---------|-------------------|----------|---------------|--|----------------|-----------|-----------------|----------|
| Operator | | | | | | | Slot | | SLOTW02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) | | | | |
| Area | | | | | | | Well | | LONGHORN V41-3-4XRLNB | | | | |
| Field | | | | | | | Wellbore | | LONGHORN V41-3-4XRLNB PWB | | | | |
| Facility | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | | | | | |
| MD [ft] | Inclination [°] | Azimuth [°] | | TVD [ft] | | Vert Sect [ft] | | North [ft] | East [ft] | Latitude | Longitude | DLS [°100m] | Comments |
| 2717.00† | 14.340 | 157.711 | 157.711 | 2709.54 | -23.99 | | | -82.59 | 33.85 | 40°15'42.604°N | | 104°24'57.643°W | 2.00 |
| 2817.00† | 16.340 | 157.711 | 157.711 | 2805.97 | -31.10 | | | -107.07 | 43.89 | 40°15'42.362°N | | 104°24'57.514°W | 2.00 |
| 2942.12 | 16.842 | 157.711 | 157.711 | 2933.04 | -33.03 | | | -133.70 | 46.81 | 40°15'42.286°N | | 104°24'57.479°W | 2.00 |
| 2917.00† | 16.842 | 157.711 | 157.711 | 2901.71 | -38.86 | | | -133.78 | 54.84 | 40°15'42.088°N | | 104°24'57.373°W | 0.00 |
| 3017.00† | 16.842 | 157.711 | 157.711 | 2997.42 | -46.84 | | | -189.99 | 65.82 | 40°15'41.853°N | | 104°24'57.231°W | 0.00 |
| 3117.00† | 16.842 | 157.711 | 157.711 | 3093.13 | -54.43 | | | -187.40 | 76.81 | 40°15'41.568°N | | 104°24'57.089°W | 0.00 |
| 3217.00† | 16.842 | 157.711 | 157.711 | 3188.84 | -62.22 | | | -214.21 | 87.80 | 40°15'41.303°N | | 104°24'56.947°W | 0.00 |
| 3317.00† | 16.842 | 157.711 | 157.711 | 3284.55 | -70.00 | | | -241.01 | 98.79 | 40°15'41.038°N | | 104°24'56.805°W | 0.00 |
| 3417.00† | 16.842 | 157.711 | 157.711 | 3380.27 | -77.79 | | | -267.82 | 109.78 | 40°15'40.773°N | | 104°24'56.664°W | 0.00 |
| 3517.00† | 16.842 | 157.711 | 157.711 | 3475.98 | -85.58 | | | -294.63 | 120.77 | 40°15'40.508°N | | 104°24'56.522°W | 0.00 |
| 3617.00† | 16.842 | 157.711 | 157.711 | 3571.69 | -93.36 | | | -321.44 | 131.76 | 40°15'40.244°N | | 104°24'56.380°W | 0.00 |
| 3717.00† | 16.842 | 157.711 | 157.711 | 3667.40 | -101.15 | | | -348.25 | 142.75 | 40°15'39.979°N | | 104°24'56.239°W | 0.00 |
| 3817.00† | 16.842 | 157.711 | 157.711 | 3763.11 | -108.94 | | | -375.06 | 153.74 | 40°15'39.714°N | | 104°24'56.097°W | 0.00 |
| 3917.00† | 16.842 | 157.711 | 157.711 | 3858.82 | -116.72 | | | -401.87 | 164.73 | 40°15'39.449°N | | 104°24'55.955°W | 0.00 |
| 4017.00† | 16.842 | 157.711 | 157.711 | 3954.53 | -124.51 | | | -428.68 | 175.71 | 40°15'39.184°N | | 104°24'55.813°W | 0.00 |
| 4117.00† | 16.842 | 157.711 | 157.711 | 4050.24 | -132.30 | | | -455.49 | 186.70 | 40°15'38.919°N | | 104°24'55.672°W | 0.00 |
| 4217.00† | 16.842 | 157.711 | 157.711 | 4145.95 | -140.08 | | | -482.30 | 197.69 | 40°15'38.654°N | | 104°24'55.530°W | 0.00 |
| 4317.00† | 16.842 | 157.711 | 157.711 | 4241.66 | -147.87 | | | -509.11 | 208.68 | 40°15'38.389°N | | 104°24'55.389°W | 0.00 |
| 4417.00† | 16.842 | 157.711 | 157.711 | 4337.37 | -155.66 | | | -535.92 | 219.67 | 40°15'38.124°N | | 104°24'55.247°W | 0.00 |
| 4517.00† | 16.842 | 157.711 | 157.711 | 4433.08 | -163.44 | | | -562.72 | 230.66 | 40°15'37.859°N | | 104°24'55.105°W | 0.00 |
| 4617.00† | 16.842 | 157.711 | 157.711 | 4528.79 | -171.23 | | | -589.53 | 241.65 | 40°15'37.594°N | | 104°24'54.963°W | 0.00 |
| 4717.00† | 16.842 | 157.711 | 157.711 | 4624.50 | -179.02 | | | -616.34 | 252.64 | 40°15'37.329°N | | 104°24'54.821°W | 0.00 |
| 4817.00† | 16.842 | 157.711 | 157.711 | 4720.21 | -186.80 | | | -643.15 | 263.63 | 40°15'37.064°N | | 104°24'54.680°W | 0.00 |
| 4917.00† | 16.842 | 157.711 | 157.711 | 4815.92 | -194.59 | | | -669.96 | 274.62 | 40°15'36.800°N | | 104°24'54.539°W | 0.00 |
| 5017.00† | 16.842 | 157.711 | 157.711 | 4911.63 | -202.38 | | | -696.77 | 285.60 | 40°15'36.535°N | | 104°24'54.398°W | 0.00 |
| 5117.00† | 16.842 | 157.711 | 157.711 | 5007.34 | -210.16 | | | -723.58 | 296.59 | 40°15'36.270°N | | 104°24'54.254°W | 0.00 |
| 5217.00† | 16.842 | 157.711 | 157.711 | 5103.05 | -217.95 | | | -750.39 | 307.58 | 40°15'36.005°N | | 104°24'54.113°W | 0.00 |
| 5317.00† | 16.842 | 157.711 | 157.711 | 5198.77 | -225.74 | | | -777.20 | 318.57 | 40°15'35.740°N | | 104°24'53.971°W | 0.00 |
| 5417.00† | 16.842 | 157.711 | 157.711 | 5294.48 | -233.53 | | | -804.01 | 329.56 | 40°15'35.475°N | | 104°24'53.829°W | 0.00 |
| 5517.00† | 16.842 | 157.711 | 157.711 | 5390.19 | -241.31 | | | -830.82 | 340.55 | 40°15'35.210°N | | 104°24'53.687°W | 0.00 |



| REFERENCE WELLPATH IDENTIFICATION | | | | | |
|-----------------------------------|---------------------------|--|--|----------|--|
| Operator | BONANZA CREEK OIL COMPANY | | | Slot | SLOTW02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) |
| Area | COLORADO | | | Well | LONGHORN V41-3-4XRLNB |
| Field | WELD COUNTY | | | Wellbore | LONGHORN V41-3-4XRLNB PWB |
| Facility | SEC.34-T04N-R63W | | | | |

| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|----------|---------------------|--|
| MD (ft) | Inclination (°) | Azimuth (°) | TVD (ft) | Vert Sect (ft) | North (ft) | East (ft) | Latitude | Longitude | DLS (°/100ft) | Comments | | |
| 5617.00ft | | 16.845 | 157.711 | 5485.90 | -249.10 | -857.83 | 40°15'34.945°N | 104°24'53.546°W | | | 0.00 | |
| 5717.00ft | | 16.842 | 157.713 | 5581.61 | -256.89 | -864.44 | 40°15'34.680°N | 104°24'53.404°W | | | 0.00 | |
| 5817.00ft | | 16.842 | 157.713 | 5677.32 | -264.67 | -871.24 | 40°15'34.415°N | 104°24'53.262°W | | | 0.00 | |
| 5917.00ft | | 16.842 | 157.713 | 5773.03 | -272.46 | -878.05 | 40°15'34.150°N | 104°24'53.120°W | | | 0.00 | |
| 6017.00ft | | 16.842 | 157.713 | 5868.74 | -280.25 | -884.86 | 40°15'33.885°N | 104°24'52.978°W | | | 0.00 | |
| 6038.64 | | 16.842 | 157.713 | 5889.45 | -281.93 | -887.47 | 40°15'33.820°N | 104°24'52.946°W | | 0.00 | End of Tangent (XS) | |
| 6117.00ft | | 15.711 | 185.647 | 5984.78 | -282.71 | -891.76 | 40°15'33.620°N | 104°24'52.906°W | | 10.00 | | |
| 6317.00ft | | 19.338 | 217.138 | 6060.34 | -288.32 | -898.79 | 40°15'33.355°N | 104°24'53.050°W | | 10.00 | | |
| 6317.00ft | | 26.374 | 235.691 | 6152.55 | -297.10 | -904.29 | 40°15'33.101°N | 104°24'53.419°W | | 10.00 | | |
| 6417.00ft | | 34.818 | 246.328 | 6248.61 | -189.98 | -1068.32 | 40°15'32.863°N | 104°24'53.984°W | | 10.00 | | |
| 6476.71ft | | 40.168 | 250.097 | 6296.00 | -154.45 | -1081.55 | 40°15'32.732°N | 104°24'54.430°W | | 10.00 | Shaaron Springs | |
| 6517.00ft | | 43.852 | 253.125 | 6315.52 | -128.44 | -1089.89 | 40°15'32.650°N | 104°24'54.781°W | | 10.00 | | |
| 6546.94ft | | 46.822 | 254.128 | 6337.00 | -107.46 | -1095.77 | 40°15'32.592°N | 104°24'55.024°W | | 10.00 | Shaaron Springs 'A' | |
| 6617.00ft | | 53.177 | 257.068 | 6382.11 | -54.30 | -1108.34 | 40°15'32.468°N | 104°24'55.696°W | | 10.00 | | |
| 6633.82ft | | 54.762 | 258.961 | 6392.00 | -40.78 | -1111.09 | 40°15'32.440°N | 104°24'55.968°W | | 10.00 | Shaaron Springs 'B' | |
| 6717.00ft | | 62.854 | 261.143 | 6435.18 | 30.16 | -1123.10 | 40°15'32.327°N | 104°24'56.770°W | | 10.00 | | |
| 6727.68ft | | 63.672 | 262.105 | 6440.00 | 39.69 | -1124.44 | 40°15'32.308°N | 104°24'56.892°W | | 10.00 | Niobrara 'A' Chalk | |
| 6751.16ft | | 65.914 | 262.678 | 6450.00 | 60.93 | -1127.21 | 40°15'32.281°N | 104°24'57.184°W | | 10.00 | Niobrara 'A' Marl | |
| 6817.00ft | | 72.217 | 264.516 | 6473.51 | 122.38 | -1133.72 | 40°15'32.217°N | 104°24'57.852°W | | 10.00 | | |
| 6847.17ft | | 75.112 | 265.804 | 6482.00 | 181.31 | -1136.07 | 40°15'32.194°N | 104°24'58.324°W | | 10.00 | Niobrara 'B' Chalk | |
| 6917.00ft | | 81.822 | 267.783 | 6485.95 | 219.56 | -1138.89 | 40°15'32.156°N | 104°24'58.295°W | | 10.00 | | |
| 7001.91ft | | 90.000 | 270.068 | 6502.00 | 303.77 | -1141.48 | 40°15'32.140°N | 104°25'00.296°W | | 10.00 | Niobrara 'B' Target | |
| 7001.91ft | | 90.000 | 270.068 | 6502.00 | 303.78 | -1141.48 | 40°15'32.140°N | 104°25'00.296°W | | 10.00 | End of 3D Arc (XS) | |
| 7017.00ft | | 90.000 | 270.068 | 6502.00 | 318.76 | -1141.47 | 40°15'32.140°N | 104°25'01.461°W | | 0.00 | | |
| 7117.00ft | | 90.000 | 270.068 | 6502.00 | 418.06 | -1141.35 | 40°15'32.141°N | 104°25'01.780°W | | 0.00 | | |
| 7217.00ft | | 90.000 | 270.068 | 6502.00 | 517.36 | -1141.23 | 40°15'32.142°N | 104°25'03.070°W | | 0.00 | | |
| 7317.00ft | | 90.000 | 270.068 | 6502.00 | 616.67 | -1141.11 | 40°15'32.144°N | 104°25'04.360°W | | 0.00 | | |
| 7417.00ft | | 90.000 | 270.068 | 6502.00 | 715.97 | -1140.99 | 40°15'32.145°N | 104°25'05.650°W | | 0.00 | | |
| 7517.00ft | | 90.000 | 270.068 | 6502.00 | 815.27 | -1140.87 | 40°15'32.145°N | 104°25'06.940°W | | 0.00 | | |
| 7617.00ft | | 90.000 | 270.068 | 6502.00 | 914.58 | -1140.75 | 40°15'32.147°N | 104°25'08.230°W | | 0.00 | | |



| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|---------------------------|--|----------|--|
| Operator | BONANZA CREEK OIL COMPANY | | Slot | SLOT#02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) |
| Area | COLORADO | | Well | LONGHORN V41-3-4XRLNB |
| Field | WELD COUNTY | | Wellbore | LONGHORN V41-3-4XRLNB PWB |
| Facility | SEC.34-T04N-R63W | | | |

| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|-------------------|----------|
| MD (ft) | Inclination [°] | Azimuth [°] | YVD (ft) | Vert Sect (ft) | North (ft) | East (ft) | Latitude | Longitude | DLS [ft/100ft] | Comments |
| 7717.00† | 90.000 | 270.068 | 6502.00 | 1013.88 | -1140.63 | -886.88 | 40°15'32.148"N | 104°25'09.519"W | 0.00 | |
| 7817.00† | 90.000 | 270.068 | 6502.00 | 1113.19 | -1140.52 | -886.88 | 40°15'32.149"N | 104°25'10.409"W | 0.00 | |
| 7917.00† | 90.000 | 270.068 | 6502.00 | 1212.49 | -1140.40 | -1086.88 | 40°15'32.151"N | 104°25'12.099"W | 0.00 | |
| 8017.00† | 90.000 | 270.068 | 6502.00 | 1311.79 | -1140.28 | -1186.88 | 40°15'32.152"N | 104°25'13.389"W | 0.00 | |
| 8117.00† | 90.000 | 270.068 | 6502.00 | 1411.10 | -1140.16 | -1286.88 | 40°15'32.153"N | 104°25'14.679"W | 0.00 | |
| 8217.00† | 90.000 | 270.068 | 6502.00 | 1510.40 | -1140.04 | -1386.88 | 40°15'32.154"N | 104°25'15.969"W | 0.00 | |
| 8317.00† | 90.000 | 270.068 | 6502.00 | 1609.70 | -1139.92 | -1486.88 | 40°15'32.155"N | 104°25'17.259"W | 0.00 | |
| 8417.00† | 90.000 | 270.068 | 6502.00 | 1709.01 | -1139.80 | -1586.88 | 40°15'32.156"N | 104°25'18.549"W | 0.00 | |
| 8517.00† | 90.000 | 270.068 | 6502.00 | 1808.31 | -1139.68 | -1686.88 | 40°15'32.157"N | 104°25'19.839"W | 0.00 | |
| 8617.00† | 90.000 | 270.068 | 6502.00 | 1907.61 | -1139.57 | -1786.88 | 40°15'32.158"N | 104°25'21.129"W | 0.00 | |
| 8717.00† | 90.000 | 270.068 | 6502.00 | 2006.92 | -1139.45 | -1886.88 | 40°15'32.159"N | 104°25'22.419"W | 0.00 | |
| 8817.00† | 90.000 | 270.068 | 6502.00 | 2106.22 | -1139.33 | -1986.88 | 40°15'32.161"N | 104°25'23.709"W | 0.00 | |
| 8917.00† | 90.000 | 270.068 | 6502.00 | 2205.52 | -1139.21 | -2086.88 | 40°15'32.162"N | 104°25'24.999"W | 0.00 | |
| 9017.00† | 90.000 | 270.068 | 6502.00 | 2304.83 | -1139.09 | -2186.88 | 40°15'32.163"N | 104°25'26.289"W | 0.00 | |
| 9117.00† | 90.000 | 270.068 | 6502.00 | 2404.13 | -1138.97 | -2286.88 | 40°15'32.164"N | 104°25'27.579"W | 0.00 | |
| 9217.00† | 90.000 | 270.068 | 6502.00 | 2503.43 | -1138.85 | -2386.88 | 40°15'32.165"N | 104°25'28.869"W | 0.00 | |
| 9317.00† | 90.000 | 270.068 | 6502.00 | 2602.74 | -1138.73 | -2486.88 | 40°15'32.166"N | 104°25'30.159"W | 0.00 | |
| 9417.00† | 90.000 | 270.068 | 6502.00 | 2702.04 | -1138.62 | -2586.88 | 40°15'32.167"N | 104°25'31.449"W | 0.00 | |
| 9517.00† | 90.000 | 270.068 | 6502.00 | 2801.34 | -1138.50 | -2686.88 | 40°15'32.168"N | 104°25'32.739"W | 0.00 | |
| 9617.00† | 90.000 | 270.068 | 6502.00 | 2900.65 | -1138.38 | -2786.88 | 40°15'32.169"N | 104°25'34.029"W | 0.00 | |
| 9717.00† | 90.000 | 270.068 | 6502.00 | 2999.95 | -1138.26 | -2886.88 | 40°15'32.170"N | 104°25'35.319"W | 0.00 | |
| 9817.00† | 90.000 | 270.068 | 6502.00 | 3099.25 | -1138.14 | -2986.88 | 40°15'32.171"N | 104°25'36.609"W | 0.00 | |
| 9917.00† | 90.000 | 270.068 | 6502.00 | 3198.56 | -1138.02 | -3086.88 | 40°15'32.172"N | 104°25'37.899"W | 0.00 | |
| 10017.00† | 90.000 | 270.068 | 6502.00 | 3297.86 | -1137.90 | -3186.88 | 40°15'32.173"N | 104°25'39.189"W | 0.00 | |
| 10117.00† | 90.000 | 270.068 | 6502.00 | 3397.16 | -1137.78 | -3286.88 | 40°15'32.174"N | 104°25'40.479"W | 0.00 | |
| 10217.00† | 90.000 | 270.068 | 6502.00 | 3496.47 | -1137.66 | -3386.88 | 40°15'32.175"N | 104°25'41.769"W | 0.00 | |
| 10317.00† | 90.000 | 270.068 | 6502.00 | 3595.77 | -1137.55 | -3486.88 | 40°15'32.176"N | 104°25'43.059"W | 0.00 | |
| 10417.00† | 90.000 | 270.068 | 6502.00 | 3695.07 | -1137.43 | -3586.88 | 40°15'32.178"N | 104°25'44.349"W | 0.00 | |
| 10517.00† | 90.000 | 270.068 | 6502.00 | 3794.38 | -1137.31 | -3686.88 | 40°15'32.179"N | 104°25'45.639"W | 0.00 | |
| 10617.00† | 90.000 | 270.068 | 6502.00 | 3893.68 | -1137.19 | -3786.88 | 40°15'32.180"N | 104°25'46.929"W | 0.00 | |



| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|---------------------------|--|----------|--|
| Operator | BONANZA CREEK OIL COMPANY | | Slot | SLOT#02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) |
| Area | COLORADO | | Well | LONGHORN V41-3-4XRLNB |
| Field | WELD COUNTY | | Wellbore | LONGHORN V41-3-4XRLNB PWB |
| Facility | SEC.34-T04N-R63W | | | |

| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|------------------|---------------------|--|--|--|--|--|--|
| MD (ft) | Inclination [°] | Azimuth [°] | TVD (ft) | Vert Sect (ft) | North (ft) | East (ft) | Latitude | Longitude | DLS (1/100ft) | Comments | | | | | | |
| 10717.00† | 90.000 | 270.000 | 6502.00 | 3992.98 | -1137.07 | -3886.88 | 40°15'32.181°N | 104°26'48.215°W | 0.00 | | | | | | | |
| 10817.00† | 90.000 | 270.000 | 6502.00 | 4002.29 | -1136.95 | -3886.88 | 40°15'32.182°N | 104°26'48.505°W | 0.00 | | | | | | | |
| 10917.00† | 90.000 | 270.000 | 6502.00 | 4191.59 | -1136.83 | -4086.88 | 40°15'32.183°N | 104°26'50.795°W | 0.00 | | | | | | | |
| 11017.00† | 90.000 | 270.000 | 6502.00 | 4290.89 | -1136.71 | -4186.88 | 40°15'32.184°N | 104°26'52.084°W | 0.00 | | | | | | | |
| 11117.00† | 90.000 | 270.000 | 6502.00 | 4390.20 | -1136.60 | -4286.88 | 40°15'32.185°N | 104°26'53.374°W | 0.00 | | | | | | | |
| 11217.00† | 90.000 | 270.000 | 6502.00 | 4489.50 | -1136.48 | -4386.88 | 40°15'32.186°N | 104°26'54.664°W | 0.00 | | | | | | | |
| 11317.00† | 90.000 | 270.000 | 6502.00 | 4588.80 | -1136.36 | -4486.88 | 40°15'32.187°N | 104°26'55.954°W | 0.00 | | | | | | | |
| 11417.00† | 90.000 | 270.000 | 6502.00 | 4688.11 | -1136.24 | -4586.88 | 40°15'32.188°N | 104°26'57.244°W | 0.00 | | | | | | | |
| 11517.00† | 90.000 | 270.000 | 6502.00 | 4787.41 | -1136.12 | -4686.88 | 40°15'32.189°N | 104°26'58.534°W | 0.00 | | | | | | | |
| 11617.00† | 90.000 | 270.000 | 6502.00 | 4886.71 | -1136.00 | -4786.88 | 40°15'32.190°N | 104°26'59.824°W | 0.00 | | | | | | | |
| 11654.12 | 90.000 | 270.000 | 6502.00 | 4923.58 | -1135.96 | -4824.00 | 40°15'32.190°N | 104°26'59.302°W | 0.00 | End of Tangent (XS) | | | | | | |
| 11657.04 | 90.000 | 270.120 | 6502.00† | 4926.48 | -1135.95 | -4826.92 | 40°15'32.190°N | 104°26'59.340°W | 2.00 | End of 3D Arc (J) | | | | | | |
| 11717.00† | 90.000 | 270.120 | 6502.00 | 4989.01 | -1135.82 | -4886.88 | 40°15'32.191°N | 104°26'59.113°W | 0.00 | | | | | | | |
| 11817.00† | 90.000 | 270.120 | 6502.00 | 5085.30 | -1135.69 | -4986.88 | 40°15'32.193°N | 104°26'59.403°W | 0.00 | | | | | | | |
| 11917.00† | 90.000 | 270.120 | 6502.00 | 5184.59 | -1135.56 | -5086.88 | 40°15'32.195°N | 104°26'59.693°W | 0.00 | | | | | | | |
| 12017.00† | 90.000 | 270.120 | 6502.00 | 5283.88 | -1135.46 | -5186.88 | 40°15'32.197°N | 104°26'59.983°W | 0.00 | | | | | | | |
| 12117.00† | 90.000 | 270.120 | 6502.00 | 5383.18 | -1134.94 | -5286.88 | 40°15'32.199°N | 104°26'56.273°W | 0.00 | | | | | | | |
| 12217.00† | 90.000 | 270.120 | 6502.00 | 5482.47 | -1134.72 | -5386.88 | 40°15'32.201°N | 104°26'57.563°W | 0.00 | | | | | | | |
| 12317.00† | 90.000 | 270.120 | 6502.00 | 5581.76 | -1134.50 | -5486.88 | 40°15'32.203°N | 104°26'58.853°W | 0.00 | | | | | | | |
| 12417.00† | 90.000 | 270.120 | 6502.00 | 5681.05 | -1134.28 | -5586.88 | 40°15'32.205°N | 104°26'59.142°W | 0.00 | | | | | | | |
| 12517.00† | 90.000 | 270.120 | 6502.00 | 5780.34 | -1134.06 | -5686.88 | 40°15'32.207°N | 104°26'59.432°W | 0.00 | | | | | | | |
| 12617.00† | 90.000 | 270.120 | 6502.00 | 5879.63 | -1133.84 | -5786.88 | 40°15'32.209°N | 104°26'59.722°W | 0.00 | | | | | | | |
| 12717.00† | 90.000 | 270.120 | 6502.00 | 5978.92 | -1133.61 | -5886.88 | 40°15'32.211°N | 104°26'59.912°W | 0.00 | | | | | | | |
| 12817.00† | 90.000 | 270.120 | 6502.00 | 6078.22 | -1133.39 | -5986.88 | 40°15'32.213°N | 104°26'59.302°W | 0.00 | | | | | | | |
| 12917.00† | 90.000 | 270.120 | 6502.00 | 6177.51 | -1133.17 | -6086.88 | 40°15'32.215°N | 104°26'58.592°W | 0.00 | | | | | | | |
| 13017.00† | 90.000 | 270.120 | 6502.00 | 6276.80 | -1132.95 | -6186.88 | 40°15'32.217°N | 104°26'57.881°W | 0.00 | | | | | | | |
| 13117.00† | 90.000 | 270.120 | 6502.00 | 6376.09 | -1132.73 | -6286.88 | 40°15'32.219°N | 104°26'57.171°W | 0.00 | | | | | | | |
| 13217.00† | 90.000 | 270.120 | 6502.00 | 6475.38 | -1132.51 | -6386.88 | 40°15'32.221°N | 104°26'56.461°W | 0.00 | | | | | | | |
| 13317.00† | 90.000 | 270.120 | 6502.00 | 6574.67 | -1132.29 | -6486.88 | 40°15'32.223°N | 104°26'55.751°W | 0.00 | | | | | | | |
| 13417.00† | 90.000 | 270.120 | 6502.00 | 6673.96 | -1132.07 | -6586.88 | 40°15'32.224°N | 104°26'55.041°W | 0.00 | | | | | | | |

| REFERENCE WELLPATH IDENTIFICATION | | | | |
|-----------------------------------|---------------------------|--|----------|--|
| Operator | BONANZA CREEK OIL COMPANY | | Slot | SLOT#02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) |
| Area | COLORADO | | Well | LONGHORN V41-3-4XRLNB |
| Field | WELD COUNTY | | Wellbore | LONGHORN V41-3-4XRLNB PWB |
| Facility | SEC.34-T04N-R63W | | | |

| WELLPATH DATA (180 stations) † = interpolated/extrapolated station | | | | | | | | | |
|--|--------------------|----------------|-------------|-------------------|---------------|--------------|----------------|-----------------|-------------------------|
| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Vert Sect [ft] | North [ft] | East [ft] | Latitude | Longitude | DLB [1/100ft] |
| 13517.00† | 80.000 | 270.128 | 6502.00 | 6773.26 | -1131.85 | -6686.88 | 40°15'32.226°N | 104°26'24.331°W | 0.00 |
| 13617.00† | 80.000 | 270.128 | 6502.00 | 6872.55 | -1131.63 | -6786.88 | 40°15'32.228°N | 104°26'25.620°W | 0.00 |
| 13717.00† | 80.000 | 270.128 | 6502.00 | 6971.84 | -1131.41 | -6886.88 | 40°15'32.230°N | 104°26'26.910°W | 0.00 |
| 13817.00† | 80.000 | 270.128 | 6502.00 | 7071.13 | -1131.19 | -6986.88 | 40°15'32.232°N | 104°26'28.200°W | 0.00 |
| 13917.00† | 80.000 | 270.128 | 6502.00 | 7170.42 | -1130.97 | -7086.88 | 40°15'32.234°N | 104°26'29.490°W | 0.00 |
| 14017.00† | 80.000 | 270.128 | 6502.00 | 7269.71 | -1130.75 | -7186.88 | 40°15'32.236°N | 104°26'30.780°W | 0.00 |
| 14117.00† | 80.000 | 270.128 | 6502.00 | 7369.00 | -1130.53 | -7286.88 | 40°15'32.238°N | 104°26'32.070°W | 0.00 |
| 14217.00† | 80.000 | 270.128 | 6502.00 | 7468.29 | -1130.31 | -7386.87 | 40°15'32.240°N | 104°26'33.360°W | 0.00 |
| 14317.00† | 80.000 | 270.128 | 6502.00 | 7567.59 | -1130.08 | -7486.87 | 40°15'32.241°N | 104°26'34.649°W | 0.00 |
| 14417.00† | 80.000 | 270.128 | 6502.00 | 7666.88 | -1129.86 | -7586.87 | 40°15'32.243°N | 104°26'35.939°W | 0.00 |
| 14517.00† | 80.000 | 270.128 | 6502.00 | 7766.17 | -1129.64 | -7686.87 | 40°15'32.245°N | 104°26'37.229°W | 0.00 |
| 14617.00† | 80.000 | 270.128 | 6502.00 | 7865.46 | -1129.42 | -7786.87 | 40°15'32.247°N | 104°26'38.519°W | 0.00 |
| 14717.00† | 80.000 | 270.128 | 6502.00 | 7964.75 | -1129.20 | -7886.87 | 40°15'32.249°N | 104°26'39.809°W | 0.00 |
| 14817.00† | 80.000 | 270.128 | 6502.00 | 8064.04 | -1128.98 | -7986.87 | 40°15'32.251°N | 104°26'41.099°W | 0.00 |
| 14917.00† | 80.000 | 270.128 | 6502.00 | 8163.33 | -1128.76 | -8086.87 | 40°15'32.253°N | 104°26'42.389°W | 0.00 |
| 15017.00† | 80.000 | 270.128 | 6502.00 | 8262.63 | -1128.54 | -8186.87 | 40°15'32.255°N | 104°26'43.679°W | 0.00 |
| 15117.00† | 80.000 | 270.128 | 6502.00 | 8361.92 | -1128.32 | -8286.87 | 40°15'32.256°N | 104°26'44.969°W | 0.00 |
| 15217.00† | 80.000 | 270.128 | 6502.00 | 8461.21 | -1128.10 | -8386.87 | 40°15'32.258°N | 104°26'46.259°W | 0.00 |
| 15317.00† | 80.000 | 270.128 | 6502.00 | 8560.50 | -1127.88 | -8486.87 | 40°15'32.260°N | 104°26'47.549°W | 0.00 |
| 15417.00† | 80.000 | 270.128 | 6502.00 | 8659.79 | -1127.66 | -8586.87 | 40°15'32.262°N | 104°26'48.839°W | 0.00 |
| 15517.00† | 80.000 | 270.128 | 6502.00 | 8759.08 | -1127.44 | -8686.87 | 40°15'32.264°N | 104°26'50.129°W | 0.00 |
| 15617.00† | 80.000 | 270.128 | 6502.00 | 8858.37 | -1127.22 | -8786.87 | 40°15'32.266°N | 104°26'51.419°W | 0.00 |
| 15717.00† | 80.000 | 270.128 | 6502.00 | 8957.67 | -1127.00 | -8886.87 | 40°15'32.267°N | 104°26'52.709°W | 0.00 |
| 15817.00† | 80.000 | 270.128 | 6502.00 | 9056.96 | -1126.78 | -8986.87 | 40°15'32.269°N | 104°26'53.999°W | 0.00 |
| 15917.00† | 80.000 | 270.128 | 6502.00 | 9156.25 | -1126.55 | -9086.87 | 40°15'32.271°N | 104°26'55.289°W | 0.00 |
| 16017.00† | 80.000 | 270.128 | 6502.00 | 9255.54 | -1126.33 | -9186.87 | 40°15'32.273°N | 104°26'56.579°W | 0.00 |
| 16117.00† | 80.000 | 270.128 | 6502.00 | 9354.83 | -1126.11 | -9286.87 | 40°15'32.275°N | 104°26'57.869°W | 0.00 |
| 16217.00† | 80.000 | 270.128 | 6502.00 | 9454.12 | -1125.89 | -9386.87 | 40°15'32.276°N | 104°26'59.159°W | 0.00 |
| 16317.00† | 80.000 | 270.128 | 6502.00 | 9553.41 | -1125.67 | -9486.87 | 40°15'32.278°N | 104°27'00.449°W | 0.00 |
| 16412.64 | 80.000 | 270.128 | 6502.00† | 9648.38 | -1125.46 | -9582.51 | 40°15'32.280°N | 104°27'01.680°W | 0.00 End of Tangent (L) |

| HOLE & CASING SECTIONS - Ref Wellbore: LONGHORN V41-3-4XRLNB PWB Ref Wellpath: LONGHORN V41-3-4XRLNB PWP (REV-A.0) | | | | | | | | | |
|--|------------------|----------------|------------------|-------------------|-----------------|------------------|------------------|----------------|----------------|
| String/Diameter | Start MD [ft] | End MD [ft] | Interval [ft] | Start TVD [ft] | End TVD [ft] | Start NS [ft] | Start EW [ft] | End NS [ft] | End EW [ft] |
| 8.625in Casing Surface | 17.00 | 1700.00 | 1683.00 | 17.00 | 1700.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8.5in Open Hole | 1700.00 | 16474.26 | 14774.26 | 1700.00 | N/A | 0.00 | N/A | 0.00 | N/A |

| TARGETS | | | | | | | | | |
|--|------------|-------------|---------------|--------------|----------------------|-----------------------|----------------|-----------------|---------|
| Name | MD [ft] | TVD [ft] | North [ft] | East [ft] | Grid East [US ft] | Grid North [US ft] | Latitude | Longitude | Shape |
| SEC.03-T03N-R63W | | 0.00 | 0.00 | 0.00 | 3302474.76 | 1340158.98 | 40°15'43.420°N | 104°24'58.080°W | polygon |
| SEC.04-T03N-R63W | | 0.00 | | | 3302474.76 | 1340158.98 | 40°15'43.420°N | 104°24'58.080°W | polygon |
| SEC.34-T04N-R63W | | 0.00 | 3459.87 | -66.66 | 3302365.82 | 1343817.62 | 40°16'17.610°N | 104°24'58.840°W | polygon |
| 3) LONGHORN V41-3-4XRLNB BHL (1062°FNL & 470°FWL, SEC.04) | 16412.64 | 6502.00 | -1125.46 | -9582.51 | 3292907.15 | 1338916.54 | 40°15'32.280°N | 104°27'01.680°W | point |
| LONGHORN V41-3-4XRLNB LP (1054°FNL & 531°FEL, SEC.03) | | 6502.00 | -1141.48 | -131.80 | 3302366.93 | 1339016.02 | 40°15'32.140°N | 104°24'59.780°W | point |
| 1) LONGHORN V41-3-4XRLNB LP REV-1 (1054°FNL & 571°FEL, SEC.03) | 7201.91 | 6502.00 | -1141.48 | -171.89 | 3302316.94 | 1338015.53 | 40°15'32.140°N | 104°25'00.298°W | point |
| 2) LONGHORN V41-3-4XRLNB MID-LATERAL TARGET (1051°FNL & 0°FWL, SEC.03) | 11657.04 | 6502.00 | -1135.95 | -4826.92 | 3297662.30 | 1338964.17 | 40°15'32.190°N | 104°26'00.340°W | point |
| SEC.03/04-T03N-R63W 460°FEL/FWL SETBACK | | 6502.00 | 0.00 | 0.00 | 3302474.76 | 1340158.98 | 40°15'43.420°N | 104°24'58.080°W | polygon |



| REFERENCE WELLPATH IDENTIFICATION | | |
|-----------------------------------|---------------------------|---------------------------|
| Operator | BONANZA CREEK OIL COMPANY | Slot |
| Area | COLORADO | Well |
| Field | WELD COUNTY | Wellbore |
| Facility | SEC.34-T04N-R63W | LONGHORN V41-3-4XRLNB PWB |

| SURVEY PROGRAM - Ref Wellbore: LONGHORN V41-3-4XRLNB PWB Ref Wellpath: LONGHORN V41-3-4XRLNB PWP (REV-A.0) | | |
|---|----------------|------------------------------|
| Start MD [ft] | End MD [ft] | Positional Uncertainty Model |
| 17.00 | 16413.00 | BH NavTrak (Standard) |
| | | Log Name/Comment |
| | | Wellbore |
| | | LONGHORN V41-3-4XRLNB PWB |



| REFERENCE WELLPATH IDENTIFICATION | | |
|-----------------------------------|---------------------------|--|
| Operator | BONANZA CREEK OIL COMPANY | Slot |
| Area | COLORADO | Well |
| Field | WELD COUNTY | Wellbore |
| Facility | SEC.34-T04N-R63W | |
| | | SLOT#02 LONGHORN V41-3-4XRLNB (88°FSL & 398°FEL, SEC.34) |
| | | LONGHORN V41-3-4XRLNB |
| | | LONGHORN V41-3-4XRLNB PWB |

| WELLPATH COMMENTS | | | | | |
|-------------------|--------------------|----------------|-------------|---------------------|--|
| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment | |
| 1238.00 | 0.000 | 157.711 | 1238.00 | Parkman | |
| 6476.73 | 40.168 | 250.697 | 6286.00 | Sharon Springs | |
| 6546.94 | 46.622 | 254.728 | 6337.00 | Sharon Springs "A" | |
| 6633.82 | 54.762 | 258.661 | 6392.00 | Sharon Springs "B" | |
| 6727.68 | 63.672 | 262.105 | 6440.00 | Niobrara "A" Chalk | |
| 6751.16 | 65.914 | 262.876 | 6450.00 | Niobrara "A" Marl | |
| 6897.17 | 75.112 | 265.900 | 6482.00 | Niobrara "B" Chalk | |
| 7001.91 | 90.000 | 270.068 | 6502.00 | Niobrara "B" Target | |

| DESIGN COMMENTS | | | | | |
|-----------------|--------------------|----------------|-------------|---------------------|--|
| MD [ft] | Inclination [°] | Azimuth [°] | TVD [ft] | Comment | |
| 17.00 | 0.000 | 157.711 | 17.00 | Tie On | |
| 2000.00 | 0.000 | 157.711 | 2000.00 | End of Tangent | |
| 2842.12 | 16.842 | 157.711 | 2830.04 | End of Build (XS) | |
| 6038.64 | 16.842 | 157.711 | 5889.46 | End of Tangent (XS) | |
| 7001.91 | 90.000 | 270.068 | 6502.00 | End of 3D Arc (XS) | |
| 11654.12 | 90.000 | 270.068 | 6502.00 | End of Tangent (XS) | |
| 11657.04 | 90.000 | 270.126 | 6502.00 | End of 3D Arc (J) | |
| 16412.64 | 90.000 | 270.126 | 6502.00 | End of Tangent (J) | |