



# Interchange A S22-30-08N

## Directional Survey Report

Start date: 09/23/2019

End date:

**Company Name:** Extraction Oil & Gas  
**Well Name:** Interchange A S22-30-08N  
**Field:** Wattenberg  
**Rig ID:** Ensign #147  
**API/UWI:** 05-014-20766

**State/Prov:** Colorado  
**County:** Broomfield  
**Country:** US  
**Location:** Interchange A  
**Latitude/Longitude:** 39.980349 / -104.993099

**Survey Company:** Atlas Drilling Services  
**Job Number:** 00272EX-CO  
**Proposed Azimuth:** 175.12  
**Declination:** 8.05 **KB:** 28'  
**North Reference:** True

| Svy  | Depth    | Inc   | Azm    | TVD      | NS     | EW    | VS      | CD     | CA     | DLS  | CL     |
|------|----------|-------|--------|----------|--------|-------|---------|--------|--------|------|--------|
| TiIn | 0.00     | 0.00  | 0.00   | 0.00     | 0.00   | 0.00  | 0.00    | 0.00   | 90.00  | 0.00 |        |
| 1    | 123.00   | 0.93  | 167.94 | 122.99   | -0.98  | 0.21  | 0.99    | 1.00   | 167.94 | 0.76 | 123.00 |
| 2    | 215.00   | 0.93  | 163.21 | 214.98   | -2.42  | 0.58  | 2.46    | 2.49   | 166.52 | 0.08 | 92.00  |
| 3    | 307.00   | 0.40  | 162.72 | 306.98   | -3.44  | 0.89  | 3.51    | 3.56   | 165.48 | 0.58 | 92.00  |
| 4    | 395.00   | 0.27  | 155.19 | 394.97   | -3.92  | 1.07  | 4.00    | 4.07   | 164.75 | 0.16 | 88.00  |
| 5    | 486.00   | 0.40  | 192.43 | 485.97   | -4.43  | 1.09  | 4.51    | 4.56   | 166.16 | 0.27 | 91.00  |
| 6    | 575.00   | 0.71  | 18.41  | 574.97   | -4.21  | 1.20  | 4.30    | 4.38   | 164.11 | 1.25 | 89.00  |
| 7    | 665.00   | 1.46  | 29.91  | 664.95   | -2.69  | 1.95  | 2.84    | 3.32   | 144.07 | 0.86 | 90.00  |
| 8    | 754.00   | 1.15  | 2.97   | 753.93   | -0.81  | 2.56  | 1.03    | 2.68   | 107.60 | 0.76 | 89.00  |
| 9    | 844.00   | 1.68  | 0.94   | 843.90   | 1.41   | 2.63  | -1.18   | 2.98   | 61.78  | 0.59 | 90.00  |
| 10   | 933.00   | 3.09  | 23.39  | 932.83   | 4.92   | 3.60  | -4.59   | 6.09   | 36.22  | 1.87 | 89.00  |
| 11   | 1,023.00 | 4.95  | 27.18  | 1,022.60 | 10.60  | 6.34  | -10.02  | 12.35  | 30.88  | 2.09 | 90.00  |
| 12   | 1,112.00 | 6.76  | 21.58  | 1,111.13 | 18.88  | 10.02 | -17.96  | 21.38  | 27.95  | 2.13 | 89.00  |
| 13   | 1,202.00 | 9.24  | 18.85  | 1,200.25 | 30.65  | 14.30 | -29.32  | 33.82  | 25.01  | 2.79 | 90.00  |
| 14   | 1,291.00 | 12.37 | 20.96  | 1,287.66 | 46.32  | 20.02 | -44.45  | 50.46  | 23.38  | 3.54 | 89.00  |
| 15   | 1,380.00 | 15.38 | 21.36  | 1,374.06 | 66.22  | 27.73 | -63.62  | 71.79  | 22.72  | 3.38 | 89.00  |
| 16   | 1,469.00 | 17.59 | 19.55  | 1,459.39 | 89.88  | 36.53 | -86.45  | 97.02  | 22.12  | 2.55 | 89.00  |
| 17   | 1,559.00 | 20.02 | 19.02  | 1,544.58 | 117.27 | 46.10 | -112.92 | 126.01 | 21.46  | 2.71 | 90.00  |
| PTB  | 1,642.00 | 20.02 | 19.02  | 1,622.57 | 144.13 | 55.37 | -138.90 | 154.40 | 21.01  | 0.00 | 83.00  |