



CLIENT: EXTRACTION OIL & GAS
WELL: UNITED A S16-20-5N (014-20813)
COUNTY: BROOMFIELD ENSIGN 147
RIG:

M.W.D. OPERATORS: J.FROST / T.BACA
DIRECTIONAL DRILLER: EXTRACTION (JASON)
TOOL AZM TO TRUE NORTH: 8.24
JOB #: RM-200331

VERTICAL SECTION : 195.69

| Survey # | Survey Depth (FT.) | Inclination (Deg) | Azimuth (Deg) | T.V.D. (FT.) | Vertical Section (FT.) | N/-S (FT.) | E / -W (FT.) | Dog Leg (Deg.) |
|----------|--------------------|-------------------|---------------|--------------|------------------------|------------|--------------|----------------|
| Tie In | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| # 1 | 134 | 0.31 | 258.29 | 134.00 | 0.17 | -0.07 | -0.35 | 0.23 |
| # 2 | 226 | 0.62 | 264.00 | 226.00 | 0.47 | -0.18 | -1.09 | 0.34 |
| # 3 | 317 | 0.70 | 268.13 | 316.99 | 0.81 | -0.25 | -2.14 | 0.10 |
| # 4 | 406 | 0.92 | 250.99 | 405.98 | 1.39 | -0.50 | -3.36 | 0.37 |
| # 5 | 496 | 1.45 | 267.52 | 495.96 | 2.15 | -0.78 | -5.18 | 0.69 |
| # 6 | 585 | 1.80 | 267.69 | 584.93 | 2.94 | -0.89 | -7.70 | 0.39 |
| # 7 | 674 | 2.94 | 278.24 | 673.85 | 3.66 | -0.62 | -11.36 | 1.37 |
| # 8 | 764 | 4.70 | 281.93 | 763.65 | 4.20 | 0.48 | -17.25 | 1.97 |
| # 9 | 853 | 7.25 | 282.02 | 852.15 | 4.80 | 2.40 | -26.31 | 2.87 |
| # 10 | 942 | 10.06 | 282.19 | 940.13 | 5.64 | 5.21 | -39.40 | 3.16 |
| # 11 | 1,032 | 10.77 | 281.32 | 1,028.65 | 6.76 | 8.52 | -55.33 | 0.81 |
| # 12 | 1,121 | 13.58 | 279.47 | 1,115.64 | 8.52 | 11.88 | -73.80 | 3.19 |
| # 13 | 1,210 | 14.59 | 277.45 | 1,201.96 | 11.26 | 15.05 | -95.22 | 1.26 |
| # 14 | 1,299 | 15.47 | 276.57 | 1,287.92 | 14.75 | 17.86 | -118.13 | 1.02 |
| # 15 | 1,389 | 17.31 | 277.71 | 1,374.26 | 18.51 | 21.03 | -143.32 | 2.08 |
| # 16 | 1,479 | 19.69 | 279.91 | 1,459.60 | 21.90 | 25.44 | -171.53 | 2.76 |
| # 17 | 1,568 | 22.72 | 279.12 | 1,542.56 | 25.38 | 30.74 | -203.28 | 3.42 |
| PTB | 1,640 | 22.72 | 279.12 | 1,608.98 | 28.56 | 35.15 | -230.73 | 0.00 |



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