EnCana Oil Gas (USA) Inc.
Gap Drilling Plan Prognosis

| | | | |
|---|---|---|---|
| **GAP Name:** | Parachute GAP | **State:** | Colorado |
| **Well Name:** | Federal 20-14BB | **County:** | Garfield |
| **Pad Name:** | PN-20 | **Location (SL)** | SE SW 20-7S-95W 1034 FSL 2151 FWL |
| **Rig Name** | | **Location (BHL)** | SE SW 20-7S-95W 250 FSL 1980 FWL |
| **Elevation** | | | |
| **KB** | 13 | | |

| Geological Markers | MD | TVD | Comments |
|---|---|---|---|
| | | | |
| WASATCH FM | SURF | SURF | |
| WASATCH MARKER | 2284 | 2245 | |
| OHIO CREEK (Top Kmv) | 3566 | 3500 | |
| WILLIAMS FORK FM | 3970 | 3895 | |
| TOP GAS | 4600 | 4520 | |
| COAL RIDGE (Paludal) | 6080 | 6000 | |
| Rollins | 6455 | 6375 | |
| | | | |
| | | | |
| Anticipated TD | 6655 | 6575 | |
| Permit TD | 6875 | 6795 | |

**Casing and Cementing Program**

| DEPTH | HOLE SIZE | SIZE | WEIGHT | GRADE | CEMENT VOLUME |
|---|---|---|---|---|---|
| **CONDUCTOR** | | | | | |
| 0-40' | ± 24" | 16" | 0.25" Wall PE | X42 | ± 5 yds ready mix (to surface) |
| **SURFACE CASING** | | | | | |
| 0' – 800' | 12-1/4" | 8-5/8" | 24# | J-55, STC, New | 512 sx, 15.8#, Class G Neat, 1.16 ft³/sk |
| | | | | | (80% excess) |
| | | | | | |
| **PRODUCTION CASING** | | | | | |
| 0' to 6875' | 7-7/8" | 4-1/2" | 11.6# | I80, LTC, New | Lead: 313 sx, 12, TXI, 1.79 cuft/sk, Tail: 439 sx, 13 TXI, 1.43 ft³/sk, (30% excess each) |

**MUD PROGRAM**

| DEPTH | MUD TYPE | DENSITY lbs/gal | VISCOSTIY (sec/qt) | LOSS (cc) |
|---|---|---|---|---|
| 0' – 800' | Fresh Water Gel | 8.8 - 8.9 | 28 – 35 | NC |
| 800' – TD | LSND | 8.9 – 10.5 | 35 – 55 | 10 – 5 |

**ABNORMAL PRESSURES / TEMPERATURES / POTENTIAL HAZARDS**

| | | | | | | |
|---|---|---|---|---|---|---|
| Anticipated BHP | 3330 | psig | 9.4 | Anticipated MASP | 1835 | psig |

**LOGGING PROGRAM**

| | |
|---|---|
| Mud Logger | None Anticipated |
| Coring | None Anticipated |
| DST | None Anticipated |
| Cased Hole Logs | CBL/CCL/GR/VDL/ RST(in lieu of PEX) to be run in accordance with State Regulations |
| Open Hole Logs | PEX Optional- At Operator's Discretion |
| Directional Surveys | Once every 200' with MWD in hole. Once every 1000' while vertical. |

**EnCana Contacts**

| | | | |
|---|---|---|---|
| Geologist (Primary) | Stacy Tincher | Office / Cell | 720.876.5581 / 785.393.2447 |
| Geologist (Secondary) | TJ Dewane | | 720.876.5495 / 303.518.3630 |
| Engineer (Drilling) | Frank Fernandez | | 720.876.3442 / 303.250.7849 |
| Engineer (Completions) | Ryan McGilvery | | 720.876.3631 / 303.358.8684 |

**ADDITIONAL OPERATOR COMMENTS**

EnCana requests permission to drill the discussed well in a "S" shaped well design.