



Company : Beach Petroleum Ltd

Well : Fermat-1

Interval : 955.00 - 1534.93 meters

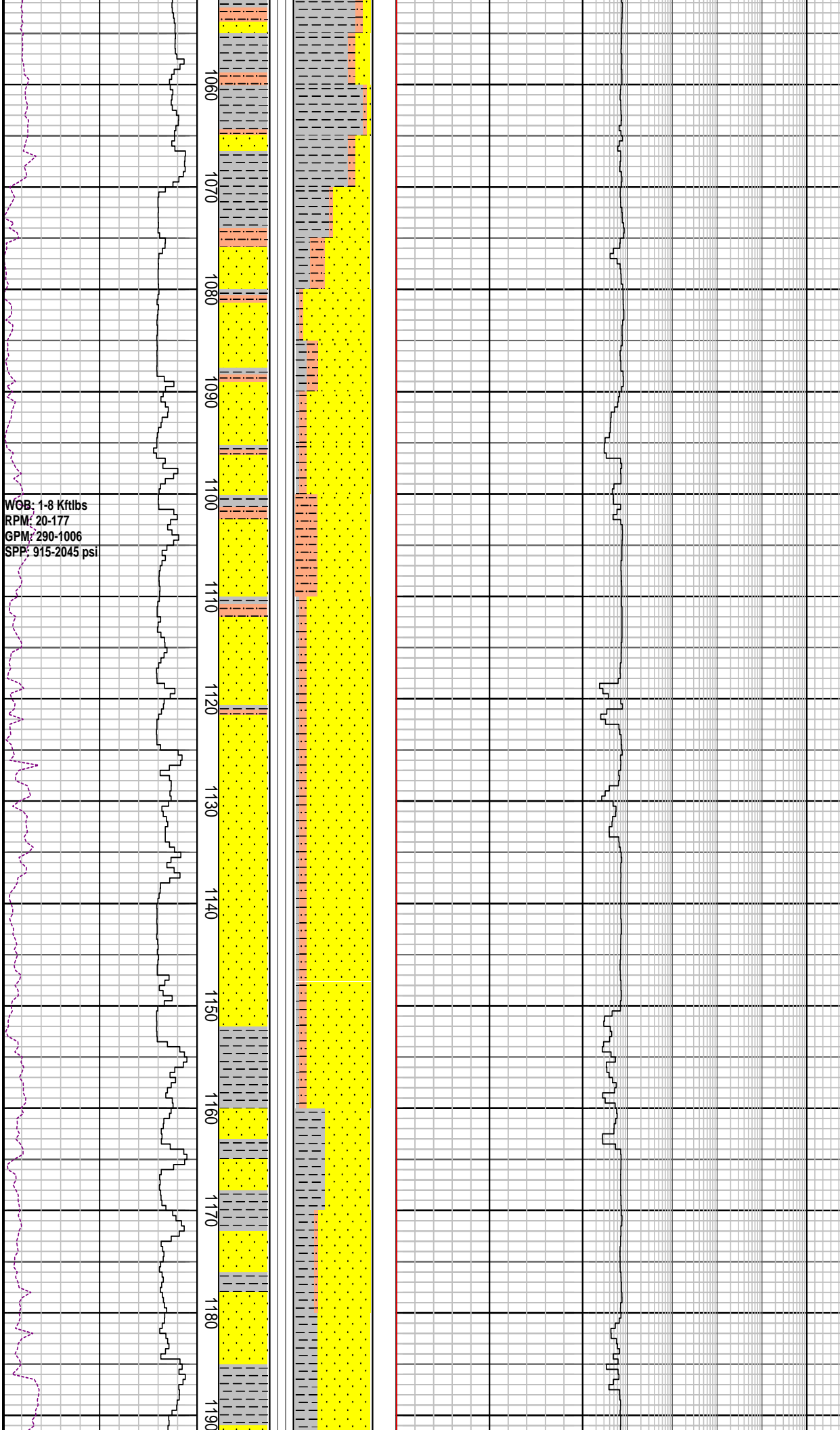
Created : 22/Dec/2008 5:30:26 AM



INTEQ

FORMATION EVALUATION LOG

| DRILLING PARAM | | MD meters | Oil Show | LITHOLOGY % | CORE | TOTAL GAS | CHROMATOGRAPH | Calcmetry | Lithology Description |
|-------------------------------|-----|-----------|----------|-------------|------|------------------------|-------------------|-----------|---|
| ROP (m/hr) | | | | | | Total Gas (unit) | Methane ppm | | |
| 200 | 160 | 1:500 | P F G | | | 10 20 30 40 50 | 1 100000 | | |
| WEIGHT ON BIT (klbf) | | | | | | 1 100000 | | | |
| 10 | 20 | | | | | | 1 Ethane ppm | | |
| | | | | | | | 1 Propane ppm | | |
| | | | | | | | 1 iso-Butane ppm | | |
| | | | | | | | 1 n-Butane ppm | | |
| | | | | | | | 1 iso-Pentane ppm | | |
| | | | | | | | 1 n-Pentane ppm | | |
| WOB: 4-25 Kftlbs | | 960 | | | | | | | MD: 966.55m Inc: 2.74° |
| RPM: 105-155 | | 970 | | | | | | | TVD: 966.44m Azi: 216.55° |
| GPM: 1200-1210 | | 980 | | | | | | | Drill with KCL-Polymer Mud from 999.0m |
| SPP: 2300-2800 psi | | 990 | | | | | | | MW: 9.3 ppg FV: 180 |
| Set 13-3/8" Casing at 987.0 m | | 1000 | | | | | | | PV: 17 Gel: 11/14/16 |
| NB3: 311mm(12-1/4") | | 1010 | | | | | | | YP: 26 pH: 10.5 |
| Make: Hughes | | 1020 | | | | | | | MD: 990.90m Inc: 2.28° |
| Type: GT-1 | | 1030 | | | | | | | TVD: 990.8m Azi: 226.38° |
| Jets: 3 x 16 | | 1040 | | | | | | | 444 mm (17-1/2") Section TD @ 999.0m |
| Depth In: 999.0 m | | 1050 | | | | | | | FIT @ 987.0 m with 9.3 ppg |
| Depth Out: 1027.0 m | | | | | | | | | EMW: 15.0 ppg @ 960 psi |
| Drilled 28.0m in 1.1 hrs | | | | | | | | | SILTSTONE: olv gry, brn-grysh brn, mod calc, com pyr, com lit frag, frm-hd, blk-sbfis |
| Grade: O-O-NO-A-E-I-NO-BHA | | | | | | | | | SANDSTONE: clr-trnsl, lt smky gry, fros, w/ mnr yel-wh mky qtz & mnr musc, f-gran, sbang-sbrndd, p srt (bimodal), nod & dissem pyr, disagg, n fluor |
| 19/12/2008 | | | | | | | | | MW: 9.5 ppg FV: 153 |
| | | | | | | | | | PV: 30 Gel: 10/15/17 |
| | | | | | | | | | YP: 42 pH: 9.5 |
| | | | | | | | | | MD: 1023.76m Inc: 2.63° |
| | | | | | | | | | TVD: 1023.6m Azi: 224.84° |
| 20/12/2008 | | | | | | | | | SILTSTONE: olv gry-brn-lt gy, mod calc, com pyr, com lit frag, sft-v hd, blk-sbfis |
| | | | | | | | | | CLAYSTONE: olv gy-mod olv brn, mod calc, sli slty, tr wh calc spar incl, tr carb mat, sft, mass-amor |



MD: 1053.62m Inc: 2.63°
 TVD: 1053.4m Azi: 224.67°

SANDSTONE: cir-transl, lt smky gry, fros, w/ mod abd fspr, f-v crs, sbang-sbrnnd, p srt (binodal), nod & dissem pyr, tr musc, disagg w/ mnr pyr cmt f-m sd agg, n fluor

MD: 1083.09m Inc: 2.60°
 TVD: 1082.9m Azi: 225.86°

SANDSTONE: cir-transl, lt smky gry, fros, w/ mod abd fspr, f-v crs, sbang-sbrnnd, p srt (binodal), nod & dissem pyr, tr musc, disagg w/ mnr pyr cmt f-m sd agg, n fluor

SILTSTONE: dk gry-olv gry, sli calc I.P, loc v arg grd slty Clst I.P, sli aren, micr mic, tr carb spks, tr lit frag

MD: 1112.27m Inc: 2.75°
 TVD: 1112.0m Azi: 224.69°

MD: 1141.27m Inc: 2.61°
 TVD: 1141.4m Azi: 223.95°

CLAYSTONE: dk gry-brn blk, mod slty, sli calc I.P. com carb/c frag, micr mic, tr musc, sft-plas, mass-blky I.P.

MD: 1171.39m Inc: 2.66°
 TVD: 1171.1m Azi: 223.80°

SANDSTONE: cir-trnsl, fros, smky gy, f-m gr, mnr crs, tr v crs, sbang-sbrnnd, p-mod srt, arg mtrx I.P. dissem & nod pyr, mnr carb mat, tr Fe stn qtz, fri-pred disagg, p-fr por, n f

WOB: 1-14 Kftlbs
RPM: 94-177
GPM: 801-961
SPP: 1249-1877 psi

WOB: 2-17 Kftlbs
RPM: 80-130
GPM: 801-903
SPP: 1358-1724 psi

1200
1210
1220
1230
1240
1250
1260
1270
1280
1290
1300
1310
1320
1330

MD: 1200.78m Inc: 2.64°
TVD: 1200.4m Azi: 223.80°

CLAYSTONE: m-dk gy, mod slty, sli calc I.P. com pyr, mnr carb spks, sft-plas, mass-blky I.P.

MD: 1230.79m Inc: 2.72°
TVD: 1230.4m Azi: 225.15°

SANDSTONE: clr-trnsl, fros, smky gy, f-m gr, mnr crs, tr v crs, sbang-sbrndd, p-mod srt, arg mtrx I.P. dissem & nod pyr, mnr carb mat, tr Fe stn qtz, fri-pred disagg, fr por, n flu

MW: 9.65 ppg FV: 74
PV: 23 Gel: 9/14/15
YP: 27 pH: 8.5

COAL: blk, sbbit, dll-sbvit lstr, plty fract, brit, blk-pty I.P.

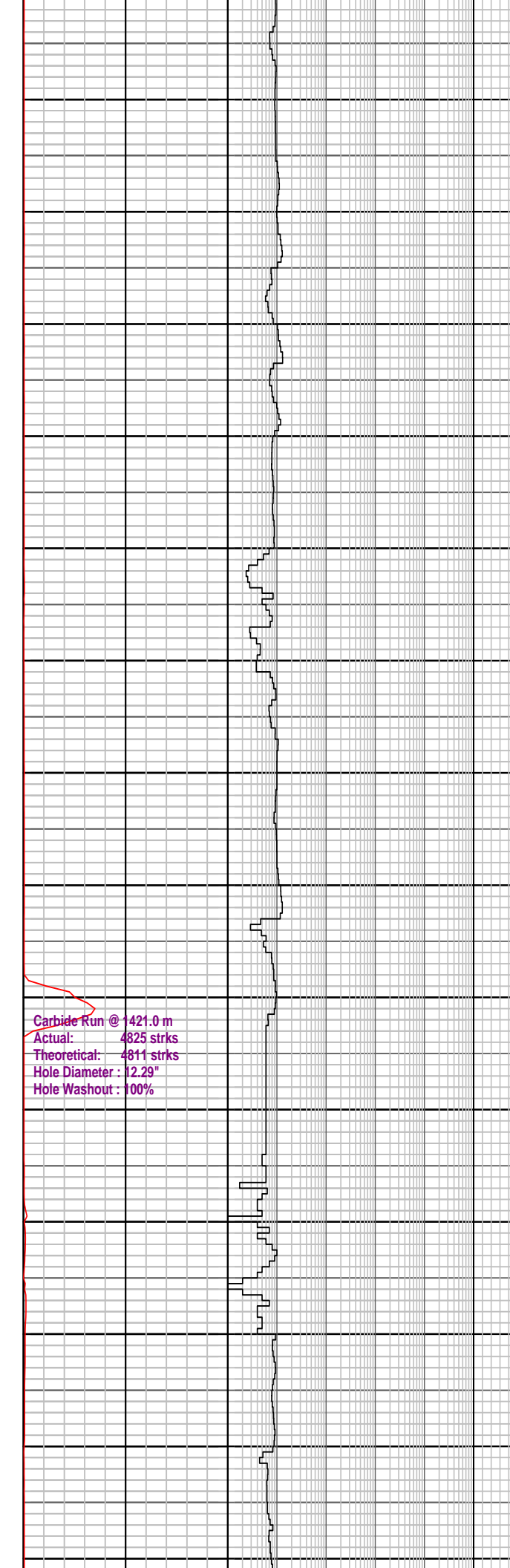
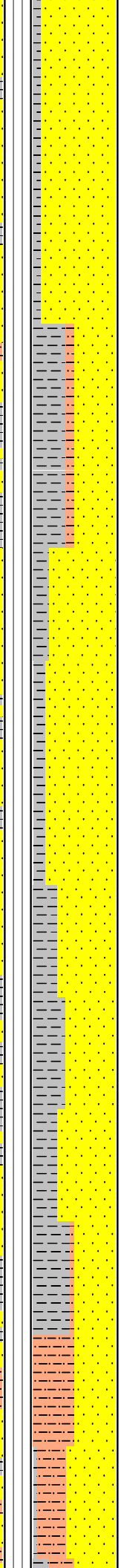
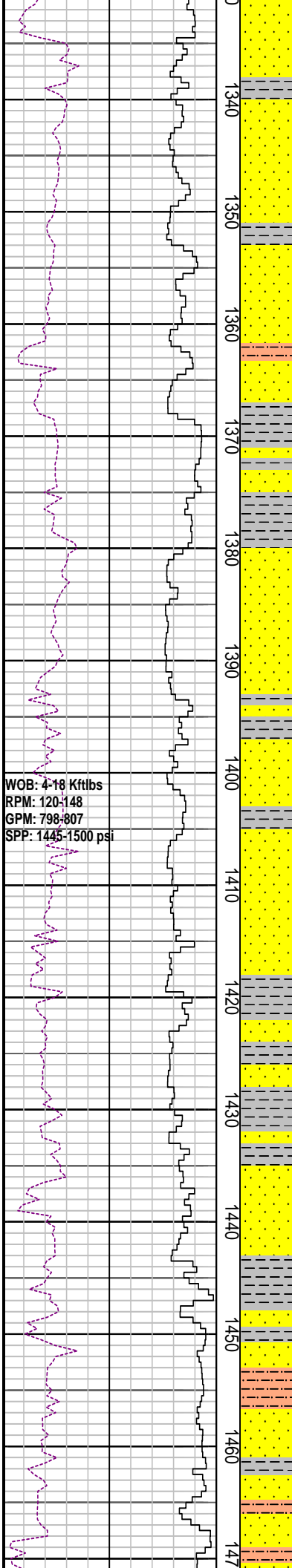
CLAYSTONE: m-dk gy, mod slty, sli calc I.P. com pyr, mnr carb spks, sft-plas, mass-blky I.P.

MD: 1288.88m Inc: 2.77°
TVD: 1288.4m Azi: 225.56°

SANDSTONE: clr-trnsl, fros, smky gy, m-crs gr, sbang-sbrndd, mod srt, arg mtrx I.P. dissem pyr cmt & nod pyr, com carb mat, micr mic, tr Fe stn qtz, p por, n fluor

MD: 1318.86m Inc: 2.69°
TVD: 1318.4m Azi: 226.89°

CLAYSTONE: dk gy-brn blk, mod slty grd to Arg Sltst I.P. mnr carb mat & carb micr lam, sft-plas, mass-amor



SANDSTONE: qtz, clr-trnsl, fros, smky gy, m-crs gr, ang-sbrnidd, rddd I.P. mod srt, slty arg mtrx I.P, dissep pyr cmt & nod pyr, tr carb mat, micr mic, tr fspr, p por, n fluor

CLAYSTONE: dk gy-brn blk, sli slty, mnr carb mat & carb micr lam, sft-plas, mass-amor

SILTSTONE: dk gy-brn gy, mod calc, loc v arg grd slty Clst I.P, micr mic, tr carb spks, tr lit frag, sft, blk

SANDSTONE: qtz, clr-trnsl, fros, smky gy, m-crs gr, sbang-sbrnidd, rddd I.P. mod srt, slty arg mtrx I.P, tr nod pyr, tr musc, tr carb mat, micr mic, tr fspr, p por, n fluor

CLAYSTONE: dk gy-brn gy, sli slty, gd to Slst, mnr carb mat & carb micr lam, sft-plas, mass-amor

| | |
|--------------|--------------|
| MD: 1407.48m | Inc: 2.91° |
| TVD: 1406.9m | Azi: 229.04° |

Carbide Run @ 1421.0 m
 Actual: 4825 strks
 Theoretical: 4811 strks
 Hole Diameter: 12.29"
 Hole Washout: 100%

CLAYSTONE: dk gy-dk brn gy, mod-v slty arg mtrx, gd to Slst I.P. mnr carb mat & carb micr lam, sft-plas, mass-amor

| | |
|--------------|--------------|
| MD: 1436.37m | Inc: 2.94° |
| TVD: 1435.7m | Azi: 228.54° |

| | |
|-------------|--------------|
| MW: 9.6 ppg | FV: 76 |
| PV: 12 | Gel: 9/14/17 |
| YP: 49 | pH: 9.5 |

SILTSTONE: dk gy-brn gy, mod calc, loc arg mtrx, grd slty Clst I.P, micr mic, tr carb spks, tr lit frag, sft, blk

| | |
|--------------|--------------|
| MD: 1465.90m | Inc: 3.02° |
| TVD: 1465.2m | Azi: 227.97° |

