



Company : Petro Tech Pty. Ltd

Well : Hazelwood-1

Interval : 266.00 - 2090.50 meters

Created : 27/Apr/2007 11:42:30 PM



INTEQ

FORMATION EVALUATION LOG

| RATE OF PENETRATION | | MD meters :500 | LITHOLOGY | CORE | OIL SHOWS | TOTAL GAS | | CHROMATOGRAPH | | | | REMARKS | | | | | | | | | | | | | | | |
|--|--------------------------|----------------|-----------|------|-----------|--|-------------|---------------|---|------------|-------|---------|---|-------------|-------|---|----------------|-------|---|--------------|-------|---|-----------------|-------|----|-----|------|
| ROP (0-100m/hr) | Backup ROP (100-200m/hr) | | | | | 1 | Methane ppm | 10000 | 1 | Ethane ppm | 10000 | | 1 | Propane ppm | 10000 | 1 | iso-Butane ppm | 10000 | 1 | n-Butane ppm | 10000 | 1 | iso-Pentane ppm | 10000 | 10 | 100 | 1000 |
| <p>ROP (0-100m/hr)</p> <p>Backup ROP (100-200m/hr)</p> <p>WOB (klb)</p> <p>TORQUE AVG</p> | | | | | | <p>TOTAL GAS</p> <p>unit</p> <p>BACKUP TOTAL GAS</p> <p>unit</p> | | | | | | | | | | | | | | | | | | | | | |
| | | 270 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 280 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Bit #1 SMITH GX-1CV 16"</p> <p>Jets 18x22x22</p> <p>in 293m/out 556m</p> <p>263m/30hrs</p> <p>T2B2 in gauge</p> | | 290 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>WOB: 4-15klbs</p> <p>RPM: 97-106</p> <p>GPM: 325-616</p> <p>PP: 319-740psi</p> | | 300 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 310 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 320 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 330 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 340 | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>WOB: 3-23klbs</p> <p>RPM: 92-130</p> <p>GPM: 616-617</p> <p>PP: 650-717psi</p> | | 350 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 360 | | | | | | | | | | | | | | | | | | | | | | | | | |

Hazelwood-1: 16" Hole start drilling from 286m, on 25th March 2007 @ 03:00 hrs
18" Casing Shoe Set At : 286m

Sandstone: ltbrn, vf-grit, dom v c-grit, ang-sbang, mod-w srtd, v wk sil cmnt, tr-med-dkbrn arg mtx, clr-opaq qtz gr, tr blk coal det, rr pyr, unconsol, v g infer por, n oil fluor.

Survey @ 300m, 13.5 Deg AZI 71

Coal: v dk brn-blk, irreg fract, ethy lstr, frm - hd.

Basalt: (weathered), lt-med grngy-ltbrn, speckled, mic, weathered i/p-kaol, hd-v hd.

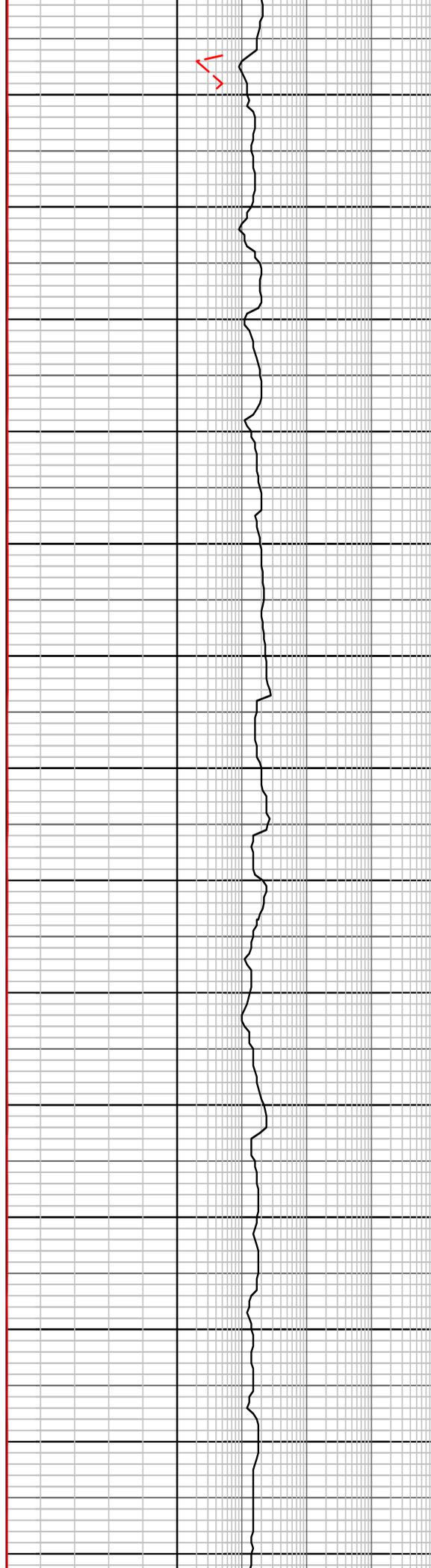
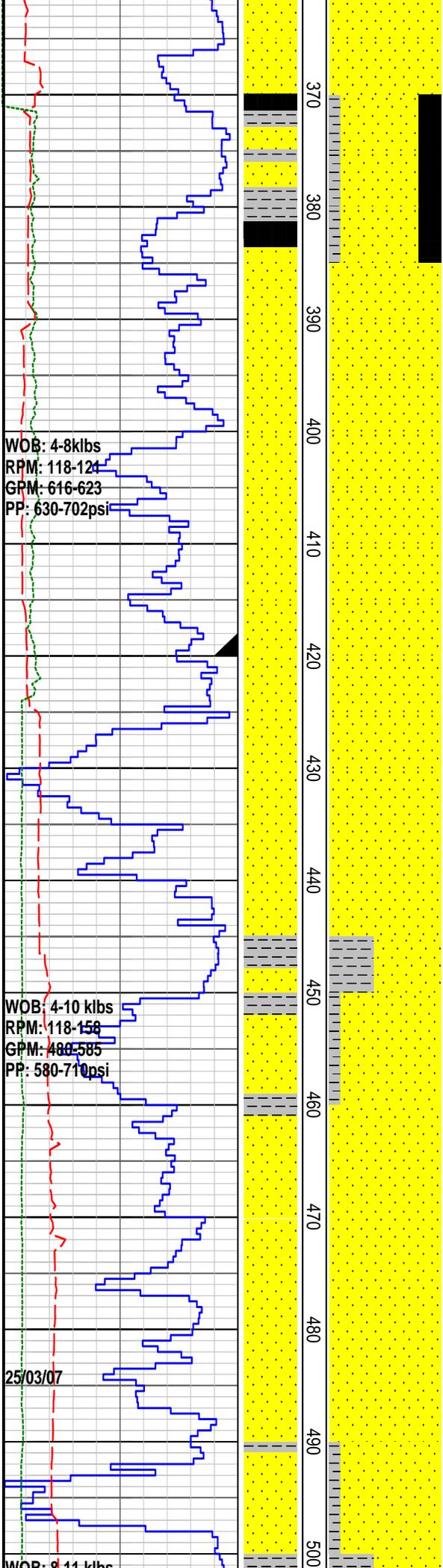
Sandstone: lt brn, vf-vc, dom c, ang-sbrnd, mod srtd, v wk sil cmt, tr med-dkbrn argill mtx, clr-opaq qtz gr, tr blk coal det, unconsol, v g infer por, no oil fluor.

Sandstone : lt brn, vf-grit, dom v c, ang-sbang, mod srtd, v wk sil cmt, tr med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, unconsol, v gd infer por, no oil fluor.

Claystone: lt-med gry-med brn, v carb i/p, occ v fine aren, v sft, v disp, non fiss.

Coal: v dk brn-blk, sli-mod argill, irregular fract, ea lust, frm-hd.

Sandstone: vlt gry-v lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk sil cmt, tr med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, tr crs mica flks, uncons, v gd infe



Survey @ 357m, 11 Deg.
 Claystone: lt-med gry to med brn, v carb i/p, occ v fine aren, v sft, v disp, non fiss.
 Sandstone: lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk silca cmt, tr med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, uncons, v gd infer por, no oil fluor.

Sandstone: lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk silca cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, uncons, v gd infer por, no oil fluor.

Sandstone: lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk silca cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, tr c mica flks, uncons,

Survey @ 414m, 9 Deg.
 13 3/8" Casing Shoe Set At : 420m

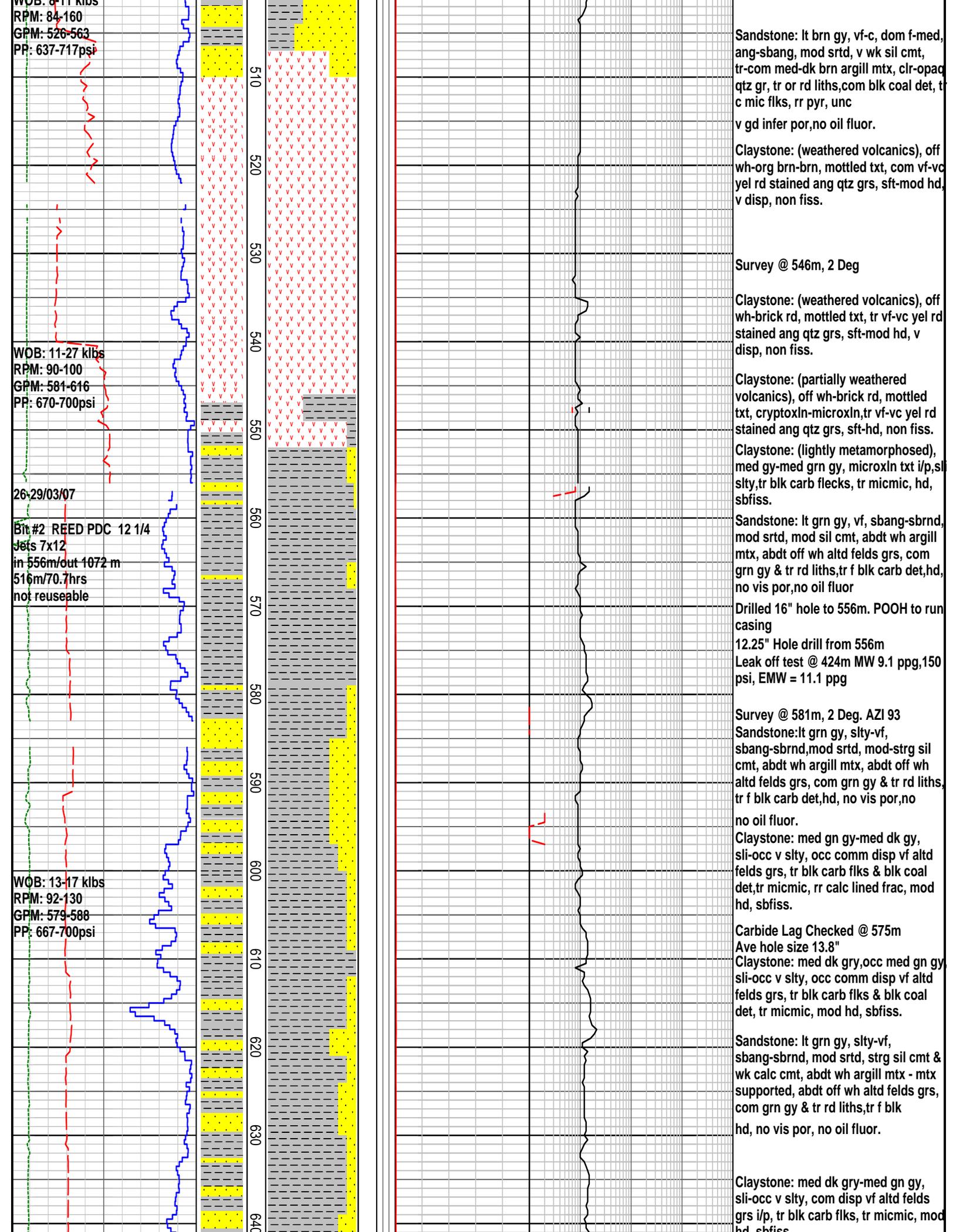
Sandstone: lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk silca cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr org rd liths, com blk coal det, tr c mica flks, uncons, v gd infer por, no oil fluor.

Survey @ 440m, 3 Deg plus

Sandstone: lt brn gry, vf-grit, dom v c, ang-sbang, mod srtd, v wk silca cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr blk coal det, tr c mica flks, uncons, v gd infer por, no oil fluor.

Survey @ 471m, 3 Deg

Sandstone: ltbrn gy, vf-vc, dom c, ang-sbang, mod srtd, v wk sil cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr or rd liths, com blk coal det, tr c mic flks, rr pyr, uncons, v gd infer por, no oil fluor.



WOB: 8-11 klbs
 RPM: 84-160
 GPM: 526-563
 PP: 637-717psi

WOB: 11-27 klbs
 RPM: 90-100
 GPM: 581-616
 PP: 670-700psi

26-29/03/07

Bit #2 REED PDC 12 1/4
 Jets 7x12
 in 556m/out 1072 m
 516m/70.7hrs
 not reuseable

WOB: 13-17 klbs
 RPM: 92-130
 GPM: 579-588
 PP: 667-700psi

Sandstone: It brn gy, vf-c, dom f-med, ang-sbang, mod srtd, v wk sil cmt, tr-com med-dk brn argill mtx, clr-opaq qtz gr, tr or rd liths,com blk coal det, tr c mic flks, rr pyr, unc
 v gd infer por,no oil fluor.

Claystone: (weathered volcanics), off wh-org brn-brn, mottled txt, com vf-vc yel rd stained ang qtz grs, sft-mod hd, v disp, non fiss.

Survey @ 546m, 2 Deg

Claystone: (weathered volcanics), off wh-brick rd, mottled txt, tr vf-vc yel rd stained ang qtz grs, sft-mod hd, v disp, non fiss.

Claystone: (partially weathered volcanics), off wh-brick rd, mottled txt, cryptoxln-microxln,tr vf-vc yel rd stained ang qtz grs, sft-hd, non fiss.

Claystone: (lightly metamorphosed), med gy-med grn gy, microxln txt i/p,sl slty,tr blk carb flecks, tr micmic, hd, sbfiss.

Sandstone: It grn gy, vf, sbang-sbrnd, mod srtd, mod sil cmt, abdt wh argill mtx, abdt off wh altd felds grs, com grn gy & tr rd liths,tr f blk carb det,hd, no vis por,no oil fluor

Drilled 16" hole to 556m. POOH to run casing
 12.25" Hole drill from 556m
 Leak off test @ 424m MW 9.1 ppg,150 psi, EMW = 11.1 ppg

Survey @ 581m, 2 Deg. AZI 93
 Sandstone:It grn gy, slty-vf, sbang-sbrnd,mod srtd, mod-strg sil cmt, abdt wh argill mtx, abdt off wh altd felds grs, com grn gy & tr rd liths, tr f blk carb det,hd, no vis por,no no oil fluor.

Claystone: med gn gy-med dk gy, sli-occ v slty, occ comm disp vf altd felds grs, tr blk carb flks & blk coal det,tr micmic, rr calc lined frac, mod hd, sbfiss.

Carbide Lag Checked @ 575m
 Ave hole size 13.8"
 Claystone: med dk gry,occ med gn gy, sli-occ v slty, occ comm disp vf altd felds grs, tr blk carb flks & blk coal det, tr micmic, mod hd, sbfiss.

Sandstone: It grn gy, slty-vf, sbang-sbrnd, mod srtd, strg sil cmt & wk calc cmt, abdt wh argill mtx - mtx supported, abdt off wh altd felds grs, com grn gy & tr rd liths,tr f blk hd, no vis por, no oil fluor.

Claystone: med dk gry-med gn gy, sli-occ v slty, com disp vf altd felds grs i/p, tr blk carb flks, tr micmic, mod hd, sbfiss.

WOB: 14-16 klbs
RPM: 96-131
GPM: 368-595
PP: 368-898psi

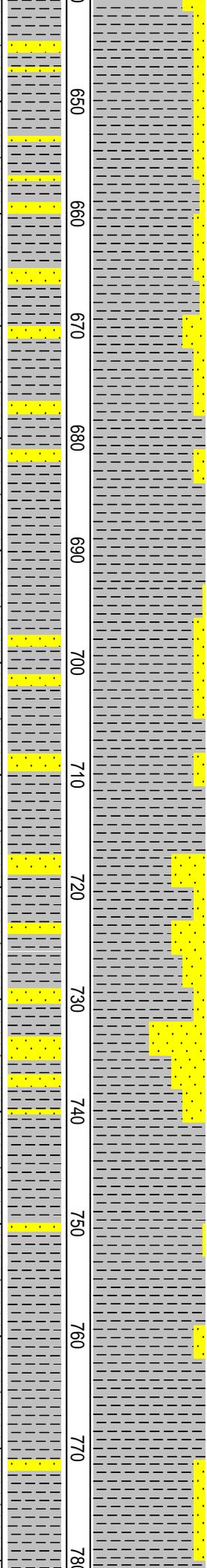
30/03/07

WOB: 16-19 klbs
RPM: 96-116
GPM: 672-870
PP: 672-870psi

WOB: 12-18 klbs
RPM: 116
GPM: 570-598
PP: 832-998 psi

31/30/07

650
660
670
680
690
700
710
720
730
740
750
760
770
780



Cutting Gas: C1:9 ppm, C2+: 0

nd, sbrss.
Sandstone: lt gy-lt grn gy, slty-vf, sbang-sbrnd, mod srtd, strg sil cmt & wk calc cmt, abdt wh argill mtx - mtx supported, abdt off wh altd felds grs, com grn gy & tr rd liths,tr

Sandstone:lt grn gy, slty-vf, sbang-sbrnd,mod srtd, strg sil cmt, abdt wh argill mtx - mtx supported, abdt off wh altd felds grs, com grn gy & tr rd liths,tr f blk carb det, tr cal lined frac, hd, no vis por, no oil fluor.

MW 9.0 Vis 7.0
PV/YP 7/10 Gels 2/3
Sol 4.6 Sd Tr Cl 3000

Sandstone: lt-med grn gy, slty-vf, sbang-sbrnd, mod srtd, strong sil cmt, abnt wh argill mtx-mtx suptd, abnt off wh alter felds grs, com grn gy and tr rd liths, tr f blk carb det, com calc ln fract, hd, n vis por, no oil fluor

Claystone: med-dk gry-med grn gy, sli-occ v slty, com disp vf altd felds grs i/p, tr blk carb flks, tr micmic, tr calc lined frac,hd, sbfiss.

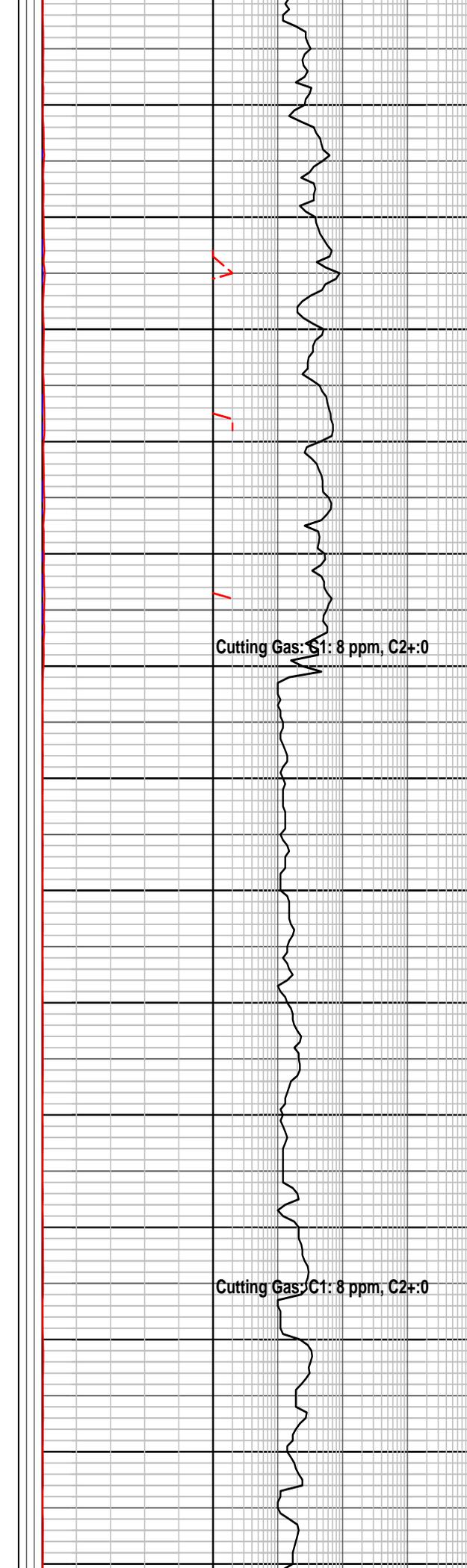
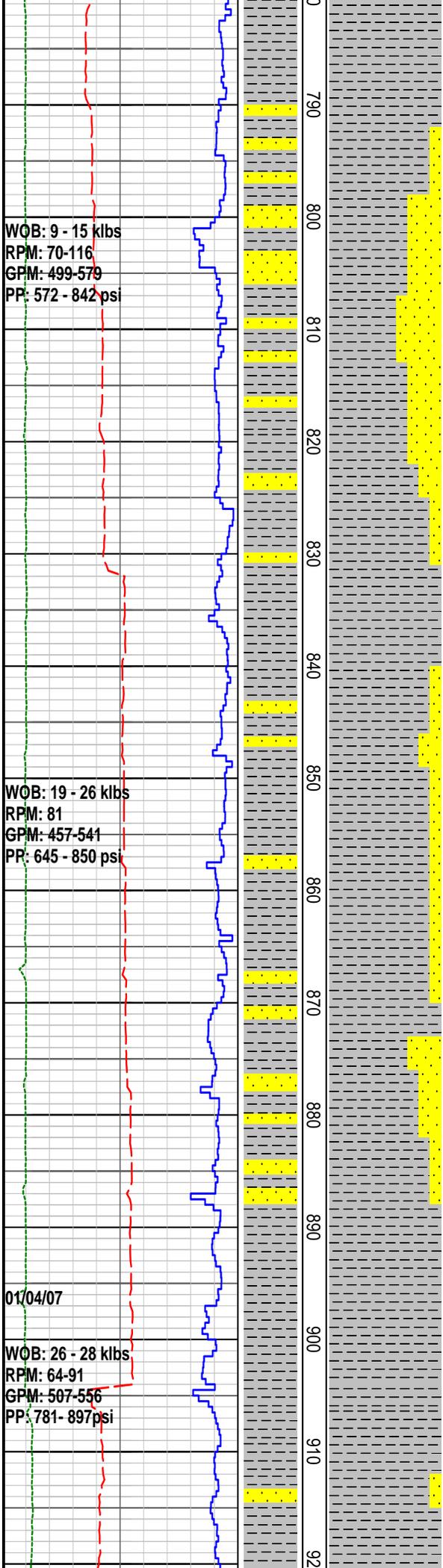
Claystone: med-dk gry-med grn gy, sli-v slty, com-abdt disp vf altd felds grs i/p, tr blk carb flks, tr micmic, tr calc lined frac,hd, sbfiss.

Sandstone: lt-med grn gy, slty-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh argill mtx-mtx suptd, abdt off wh alter felds grs, com grn gy and tr rd liths, tr f blk carb det, tr calc lined frac, hd, no vis por, no oil fluor.

Wiper trip @ 754m to casing shoe
WTG =0.29 units
Claystone: med-dkgy-med grn gy, sli-occ v slty, com disper v f altrd felds gr i/p, tr blk carb flecks, tr micmic, tr calc ln fract, hd, sbfiss

MW 8.9 Vis 35
PV/YP 7/3 Gels 1/2
Sol 3.9 Sd Tr Cl 3000

Survey @ 742m, 1.5 Deg. AZI 88 deg



Claystone: med-dkgy-med grn gy, sli-occ v slty, com disper v f altrd felds gr i/p, tr blk carb flecks, tr micmic, tr calc ln fract, hd, sbfiss

Sandstone: med grn gy, slty-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh argill mtx-mtx suptd, abdt off wh alter felds grs, com grn gy and tr rd liths, tr f blk carb det, com calc lined frac, v hd, no vis por, no oil fluor.

Claystone: med-dkgy-med grn gy, sli-occ v slty, com dispered v f altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Sandstone: med grn gy, slty-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh argill & slty mtx, abdt off wh alter felds grs, com grn gy & tr rd liths, tr f blk carb det, com calc lined frac, v hd, no vis por, no oil fluor.

change out shaker screen - moved gas trap to running shaker possam ~~Belvey~~ @ 840m, 2 Deg AZI 88

Claystone: med-dkgy-med grn gy, sli-v slty, com dispered v f altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Sandstone: med grn gy, slty-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh & gy argill & slt mtx, abdt off wh alter felds grs, com grn gy & tr rd liths, tr f blk carb det, com calc lined frac, v hd, no vis por, no oil fluor.

Claystone: med dkgy-occ med grn gy, sli-v slty, com dispered vf altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Sandstone: lt-med grn gy, slty-, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh & gy argill & slt mtx, abdt off wh alter felds grs, com grn gy & tr rd liths, tr f blk carb det, com calc lined frac, v hd, no vis por, no oil fluor.

MW 8.85 Vis 29
PV/YP 3/2 Gels 1/1
Sol 3.6 Sd Tr Cl 2500

@904m, Wiper trip to shoe. WTG= 0.23units

Claystone: med dkgy-occ med grn gy, sli-v slty, com dispered vf altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Carbide Lag Checked @ 923m
Ave hole size 12.9"

Sandstone: med gy-med grn gy, sity-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh & gy argill & slt mtx, abdt off wh alter felds grs, com grn gy & tr rd liths, tr f blk carb det

com calc lined frac, v hd, no vis por, no oil fluor.

Claystone: med dkgy-occ med grn gy-med brn gy, sli-v slty, com disperd vf altrd felds grs i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

@947m, rig power Failure - restarted generator.

Survey @ 940m, 3 Deg.
MW 8.85 Vis 29
PV/YP 2/2 Gels 1/1
Sol 3.5 Sd Tr Cl 1800

Claystone: med dkgy-occ med grn gy, sli-v slty, com disperd vf altrd felds gr i/p, tr blk carb flecks, tr-com micmic, com calc ln fract, hd, sbfiss.

Cutting Gas: C1:8 ppm, C2+: 0

Claystone: med dkgy-occ med grn gy, sli-v slty, com disperd vf altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Sandstone: med gy-med grn gy, sity-vf, sbang-sbrnd, mod srtd, strng sil cmt, abdt wh & gy argill & slt mtx, abdt off wh alter felds grs, com grn gy & tr rd liths, tr f blk carb det

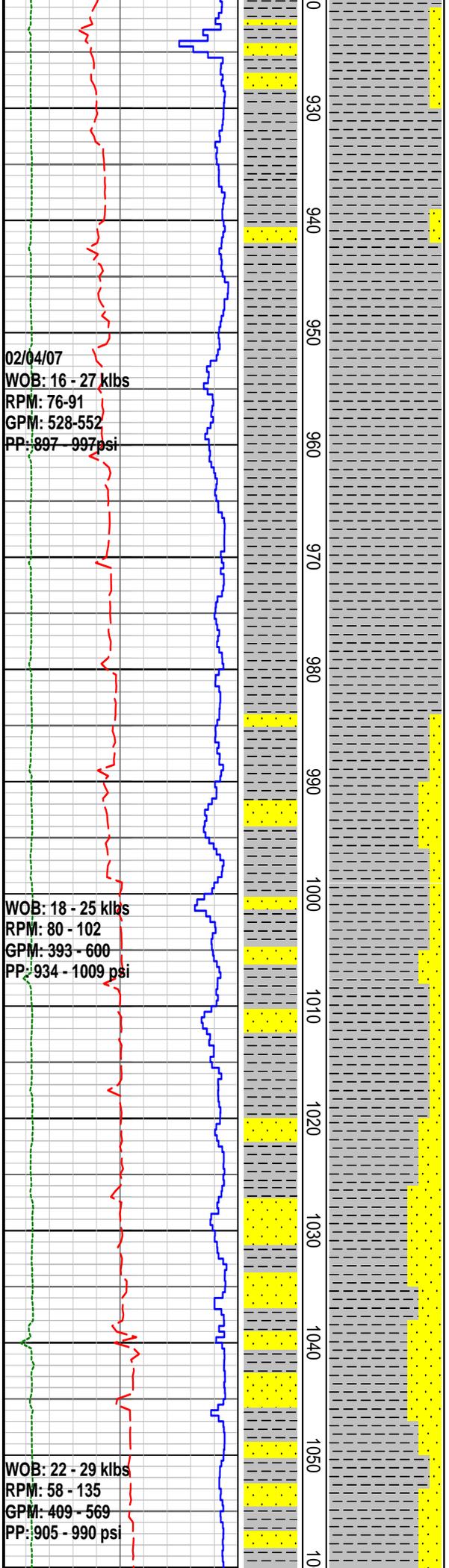
com calc lined frac, v hd, no vis por, no oil fluor.

Sandstone: med gy-med grn gy, sity-vf subang-surnd, mod srtd, strng sil cmnt, abdt wh and med gy argill and silt mtx, abdt off wh atrd felds gr, comm grn gy, tr rd liths,

tr vf blk carb det, tr calc ln fract, v hd, n vis por, no oil fluor

Survey@1040m,4.25 Deg.
Claystone: med dkgy-med grn gy-rrly med brn gy, sli-v slty, com disperd vf altrd felds gr i/p, tr blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Sandstone: med gy-med grn gy, sity-vf sbang-sbrnd, mod srtd, strng sil cmt, abdt wh & med dk gy argill & silt mtx, abdt off wh atrd felds grs, com grn gy & tr rd liths



02/04/07
WOB: 16 - 27 klbs
RPM: 76-91
GPM: 528-552
PP: 897 - 997psi

WOB: 18 - 25 klbs
RPM: 80 - 102
GPM: 393 - 600
PP: 934 - 1009 psi

WOB: 22 - 29 klbs
RPM: 58 - 135
GPM: 409 - 569
PP: 905 - 990 psi

0
930
940
950
960
970
980
990
1000
1010
1020
1030
1040
1050
10

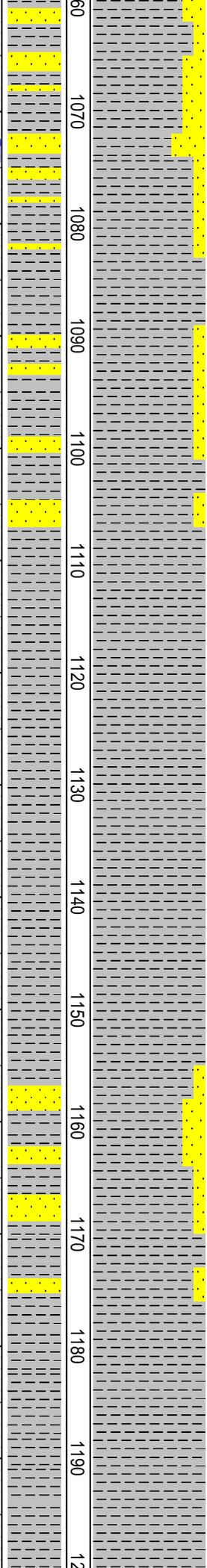
03/04/07
Bit #3 Insert REED, 12 1/4
Jets 3x18
in 1072m/out 1298m
226m/ 36.7hrs
T1B1 In gauge

WOB: 24 - 30 klbs
RPM: 40 - 82
GPM: 320 - 547
PP: 375 - 915 psi

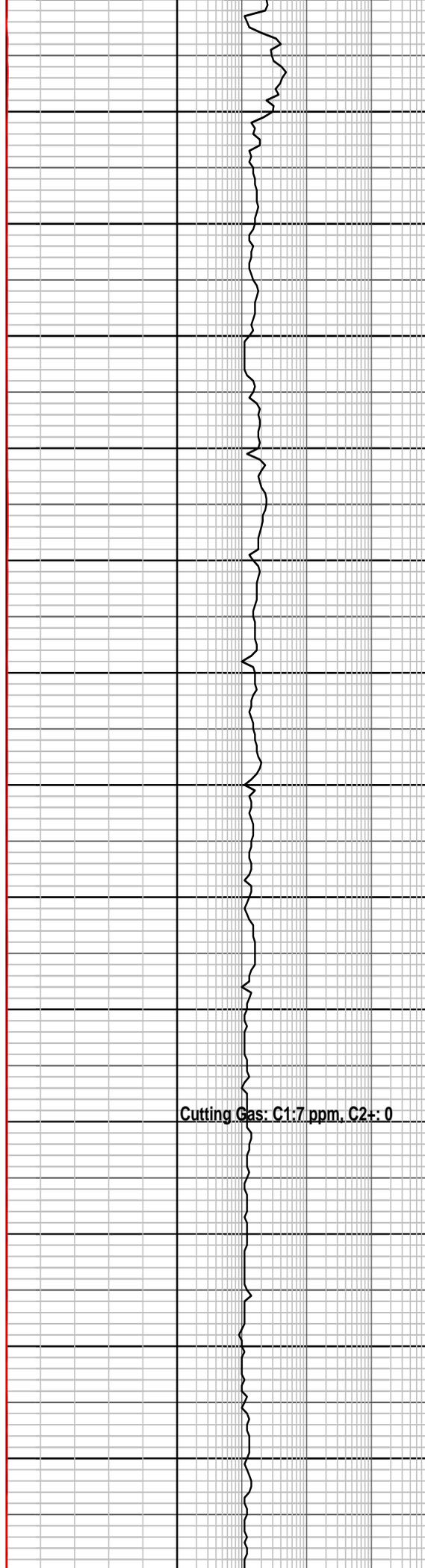
04/04/07

WOB: 28 - 32 klbs
RPM: 85 - 95
GPM: 538-572
PP: 965 - 1012 psi

05/04/07



60
1070
1080
1090
1100
1110
1120
1130
1140
1150
1160
1170
1180
1190
1200



grn gy & tr rd liths,
tr vf blk carb det, tr calc ln fract, v hd,
n vis por, no oil fluor.

Claystone: med dkgy-med grn
gy,sli-oftn v slty, com dispered vf altrd
felds gr i/p, tr blk carb flecks, tr-com
micmic, tr calc ln fract, hd, sbfiss.

At 1072m Trip Gas: 0.23 Unit
Sandstone: med grn-med grn
gy,vf,sbrnd, wl srted, strng sil cmt, sil
mtx, abdt atrd felds grs, com grn gy &
tr rd liths,v hd,no vis por, no oil fluor.

Carbide Lag Checked @ 1091m
Ave hole size 14.9"

Claystone: med grn gy,occ med
gy-med brn gy, mod slty i/p, tr-com
micmic, tr calc ln fract, hd, sbfiss.

Sandstone: med grngy, slty-vf, sbrnd,
mod-w srted, strng sil cmt, abdt lt
grngy sil mtx, abdt alt felds gr, com
grn gy and tr rd liths, tr blk carb
flecks, hd-v hd.
n vis por, no oil fluor.
MW 9.2 Vis 46
PV/YP 16/21 Gels 3/5
Sol 6.1 Sd Tr Cl 1100

Claystone: med grn gy,occ med
gy-med brn gy, mod slty i/p, tr-com
micmic, tr calc ln fract, hd, sbfiss.

Claystone: med-dk grn gy-med gy,occ
med brn gy, mod slty i/p, tr vf altd
felds i/p, tr vf blk carb flecks, tr-com
micmic, tr calc ln fract, hd, sbfiss.

Sandstone: off wh-lt brn-med grn gy,
sity-vf, sbrnd, mod-w srted, strng sil
cmt, abdt lt grn gy sil mtx, abdt altd
felds grs, com grn gy & tr rd liths, tr
blk carb flecks, tr calc

In fract, hd-v hd, no vis por, no oil
fluor.

Cutting Gas: C1:7 ppm, C2+: 0

Claystone: lt-dk grn gy-med gy, occ
med brn gy, mod slty i/p, tr vf altd
felds i/p, tr vf blk carb flecks, tr-com
micmic, tr calc ln fract, hd, sbfiss.

Claystone: med-dk grn gy -med gy,
occ med brn gy, mod slty i/p, tr vf altd
felds i/p, tr vf blk carb flecks, tr-com
micmic, tr calc ln fract, hd, sbfiss.

MW 9.3 Vis 44
PV/YP 14/23 Gels 4/6
Sol 6.8 Sd Tr Cl 1100

WOB: 29 - 31 klbs
RPM: 74 - 83
GPM: 531 - 548
PP: 1035 - 1091psi

WOB: 28 - 35 klbs
RPM: 61 - 81
GPM: 535 - 546
PP: 1043 - 1133psi

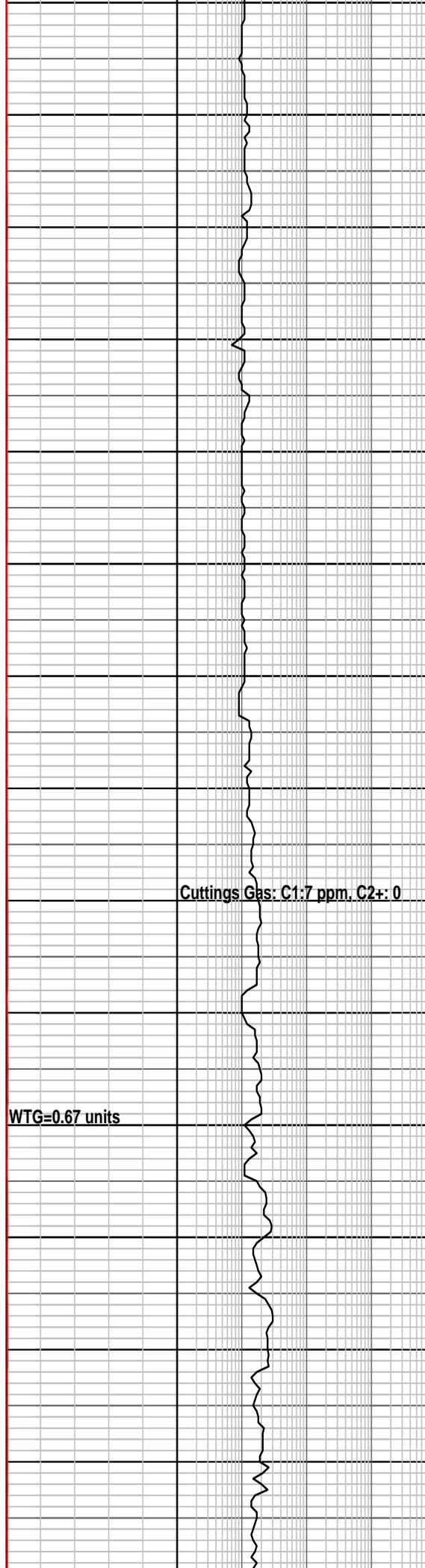
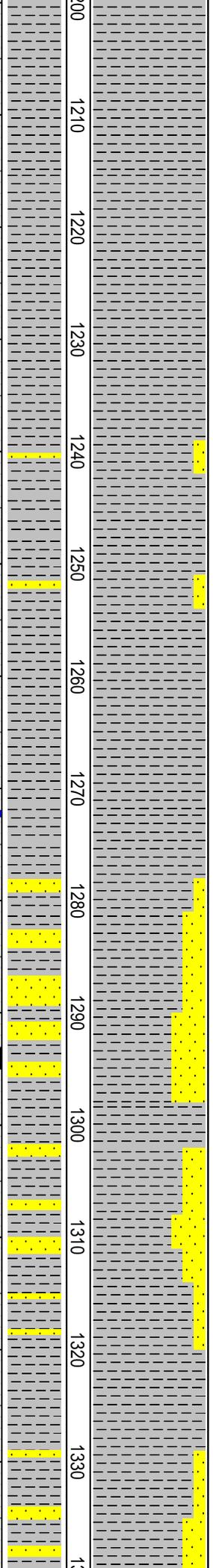
WOB: 28-33klbs
RPM: 70-84
GPM: 533-551
PP: 999-1230psi

NB#4 REED HYCALOG 8 1/2"
Jets 5x14
in 1298m/1353m 55m/9.2hrs
T1B1 in gauge

11/04/07

06/04/07

1210
1220
1230
1240
1250
1260
1270
1280
1290
1300
1310
1320
1330
1340



Claystone: lt-dk grn gy-med gy, occ med brn gy, mod slty i/p, tr vf altd felds i/p, tr vf blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Claystone: med-dk gn gy- med gy- dk brn gy, mod slty i/p, tr vf altd felds i/p, tr vf blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Survey @ 1240m, 13.5 Deg. AZI 33

Claystone: lt-dk grn gy-med gy,v slty i/p, tr vf altd felds i/p, tr vf blk carb flecks, tr-com micmic, rr calc ln fract, hd, sbfiss.

Sandstone: med grn gy, slty-vf, sbrnd mod-w srtd, strng sil cmt, abdt grn gy sil mtx, abdt altd felds grs, com grn gy & tr rd liths, tr blk carb flecks, rr calc ln fract, v hd, no vis por, no oil fluor.

MW 9.35 Vis 45
PV/YP 15/20 Gels 4/6
Sol 7.1 Sd Tr Ci 1100

Claystone: med-dk gn gy- med gy- dk brn gy, mod slty i/p, tr vf altd felds i/p, tr vf blk carb flecks, tr-com micmic, tr calc ln fract, hd, sbfiss.

Claystone: lt-dk gn gy - med gy- med brn gy,non - occ slty i/p, tr vf altd felds i/p, tr vf blk carb flecks i/p, com micmic, rr calc ln fract, hd, sbfiss.

Cuttings Gas: C1:7 ppm, C2+: 0

Carbide Lag Checked @ 1288m
Ave hole size 15.2"

Sandstone: lt-med grn gy,slty-vf,sbrnd, mod-wl srtd, strng sil cmt, tr wk calc cmt,abdt gn gy sil mtx, abdt atrd felds grs, com grn gy & tr rd liths.

WTG=0.67 units

tr blk carb flks, rr calc ln frac, v hd,no vis por,no oil fluor.

12.25" Hole TD 1298m. Reached on 7th April 2007 at 15:00 hrs.

9 5/8" Casing Shoe Set At : 1295m

P I T @ 1301m MW 9.1
ppg,1100psi,EMW = 14.1 ppg

Claystone: med gy to med grn gy,n-occ vslty,occ vf arn w/ alt felds grs, tr vf blk carb flecks i/p,com micmic,tr to com cal ln fract, hrd,subfiss to fiss.

Sandstone: med grn gy,slty-vf,sbrnd, mod-wl srtd, vstrng sil & wk calc cmt,abdt gn gy sil mtx,com-abdt atrd felds grs,tr blk carb flecks,com calc lm frac,v hd,no vis por,no oil flo

MW 9.1 Vis 37
PV/YP 8/12 Gels 2/3

WOB: 6-12 klbs
RPM: 77-110
GPM: 210-480
PP: 738-819psi

4RR1 REED HYCALOG 8 1/2"
Jets 5x14
in 1353m/out 1407m
134m/21.9hrs
TXBX In gauge

12/04/07

WOB: 5-10 klbs
RPM: 99-107
GPM: 402-435
PP: 780-881psi

WOB: 7-13 klbs
RPM: 85-104
GPM: 417-433
PP: 812-866psi

1340
1350
1360
1370
1380
1390
1400
1410
1420
1430
1440
1450
1460
1470
1

TG = 0.31units

Cuttings Gas: C1: 6 ppm, C2+:0

Cuttings Gas: C1: 7.9 ppm, C2+:0

Cuttings Gas: C1: 7 ppm, C2+:0

Survey@1340m,20 Deg. AZI: 88 deg
POOH @ 1353m to change BHA

Claystone: lt - med grn gy- med gy,
non-occ v slty, occ vf aren w/ altrd
felds gr, tr v f blk carb flecks i/p, com
micmic, com calc ln fract, hd, sbfiss -
fiss

Sandstone: lt - med grn gy to med brn
gy,slty-vf,sbrnd, mod-wl srtd, vstrng
sil & wk calc cmt,abdt gn gy sil
mtx,com-abdt atrd felds grs,tr blk carb
flecks,com calc lm frac,v hd.

Claystone: lt-med gn gy- med gy- dk,
n-v slty,occ vf arn w/ altrd felds grns, tr
vf blk carb flecks, com micmic, tr calc
tr qtz ln fract, vhd, no vis por,
sbfiss-fiss.

Sandstone: lt - med grn gy to med brn
gy,slty-vf,sbrnd, mod-wl srtd, vstrng
sil & wk calc cmt,abdt gn gy sil
mtx,com-abdt alt felds grs,tr blk carb
flecks,com calc, tr qtz ln frac,

MW 9.1 Vis 35
PV/YP 9/8 Gels 2/3
Sol 5.3 Sd Tr Cl 1800

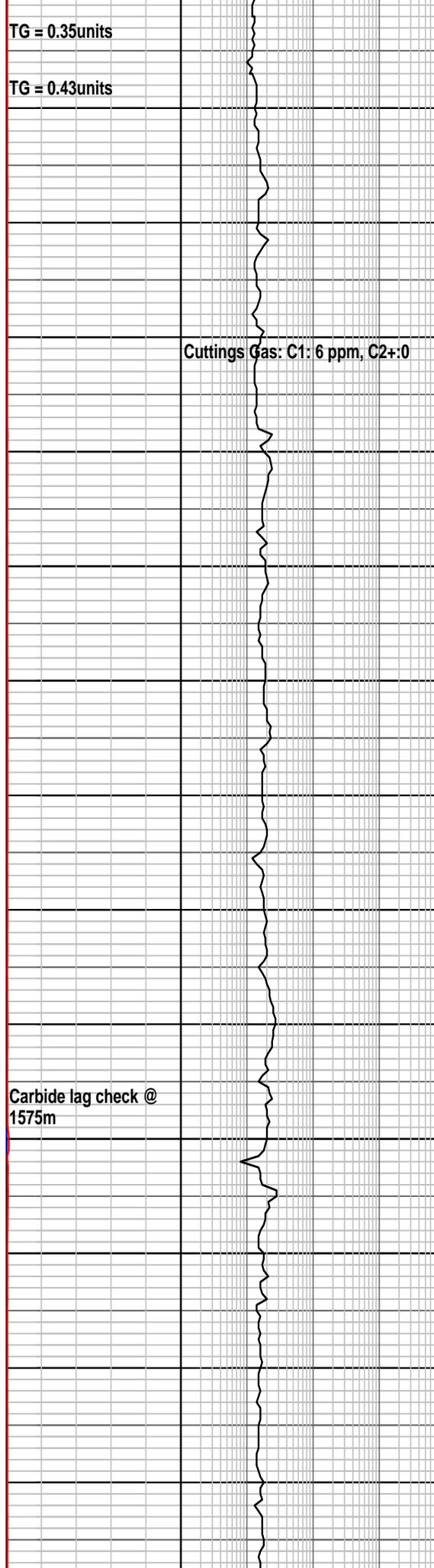
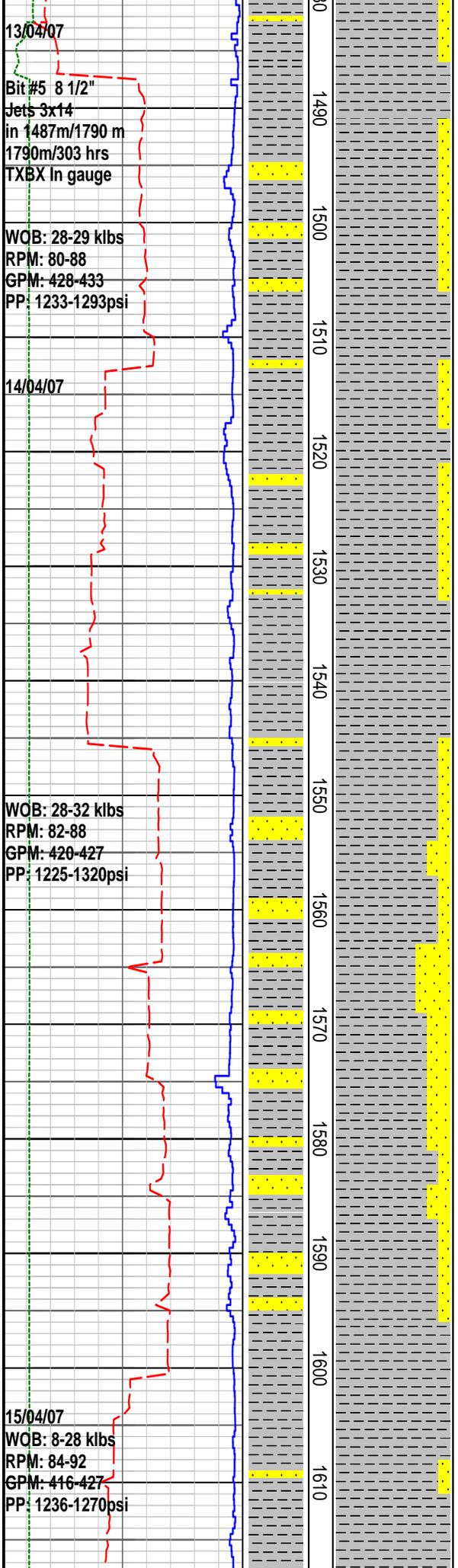
Sandstone: lt-med grn gy-lt med brn
gy, slty- vf , sbrn-rnd, mod srtd, strng
sil and calc cmt, abdt grngy sil matx,
abdt alt feld gr, tr blk carb flecks , tr
calc ln fract,
hd, no vis por, no oil fluor.

Claystone: lt - med grn gy- med gy,
non-occ v slty, occ vf aren w/ altrd
felds gr, tr v f blk carb flecks i/p, com
micmic, com calc ln fract, hd, sbfiss -
fiss

Sandstone: lt-med grn gy-lt med brn
gy, slty- vf , sbrn-rnd, mod srtd, strng
sil and calc cmt, abdt grngy sil matx,
abdt alt feld gr, tr blk carb flecks , tr
calc ln fract,
hd, no vis por, no oil fluor.

Survey@1460m,28.5 Deg. AZI: 108
Deg

Claystone: lt-med grngy-med brngy,
non - v slty, occ vf aren w/ altrd felds
gr, tr vf blk carb flecks i/p, com
micmic, tr calc ln fract, hd sbfiss-fiss



Sandstone: lt-med grngy-occ lt med brngy, slty-vf, sbrnd, mod -w srtd, strng sil and wk calc cmts, abdt grngy sil mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, hd, no vis por, no oil fluor.

Claystone: lt - med grn gy- med gy, non-occ v slty, occ vf aren w/ altrd felds gr, tr v f blk carb flecks i/p, com micmic, com calc ln fract, hd, sbfiss - fiss

MW 9.0 Vis 34
 PV/YP 7/7 Gels 1/2
 Sol 4.6 Sd Tr Cl 2000

Claystone: med dk grn gy-med brn gy non - v slty, occ vf aren w/ altrd felds gr, tr blk carb flecks, tr calc ln fracs, hd sbfiss-fiss

Sandstone: med grngy-med brngy, slty-vf, sbrnd, mod -w srtd, strng sil and wk calc cmts, abdt grngy arg mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, hd, no vis por, no oil fluor.

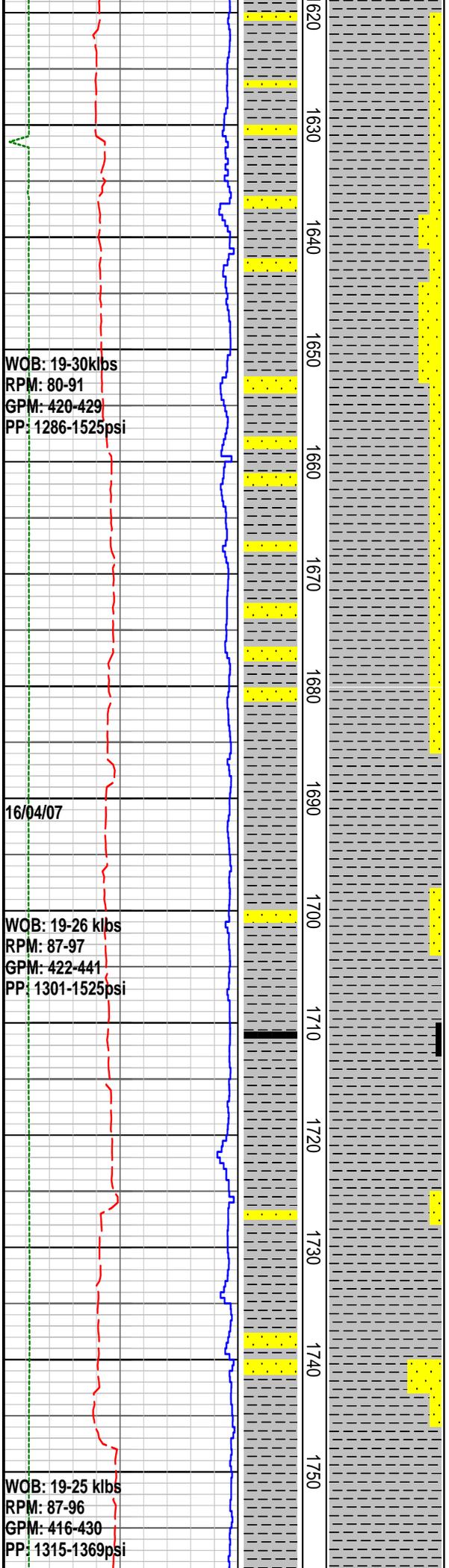
Claystone: lt - med grn gy- med gy, non-occ v slty, occ vf aren w/ altrd felds gr, tr v f blk carb flecks i/p, com micmic, com calc ln fract, hd, sbfiss - fiss.
 Survey@1554m,37 Deg. AZI: 110 Deg

Sandstone: med grn gy-med brn gy, slty-vf, sbrnd, mod -w srtd, v strong siland wk calc cmt, abdt grn gy sil mtx, abdt altrd feld gr, tr blk carb flecks, tr calc ln fract, v hd, no vis por, no oil fluor.
 Carbide Lag Checked @ 1575m
 Ave hole size 10.0"

Claystone: med-dk grngy-med brn gy, non - n slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p, com micmic, com calc ln fract, hd, sbfiss-fiss.

Sandstone: med grn gy-med brn gy, slty-vf, sbrnd, mod -w srtd, strng sil and wk calc cmts, abdt grngy sil mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, v hd, no vis por, no oil fluor.

Claystone: med - dk grn gy - med brn gy, non- v slty, occ vf aren w/ altrd felds gr, tr v f blk carb flecks i/p, com micmic, com calc ln fract, hd, sbfiss - fiss



nss.

Survey@1628m,39.5 Deg. AZI: 108 Deg

Sandstone: med grngy-med brngy, slty-vf, sbrnd, mod -w srtd, strng sil and wk calc cmts, abdt grngy arg mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, hd, no vis por, no oil fluor.

Claystone: med-dkgrn gy -med-dkbrn gy, non - v slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p tr-com micmic, tr calc ln fract,hd, sbfiss-fiss

Sandstone: med grngy-med brngy, slty-vf, sbrnd, mod -w srtd, strng sil and wk calc cmts, abdt grngy arg mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, hd, no vis por, no oil fluor.

Claystone: med-dk grn gy - dk gy - dk brn gy, non - v slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p tr-com micmic, tr calc ln fract,hd, sbfiss-fiss

Sandstone: med grngy-med brngy, slty-vf, sbrnd, mod srtd, v strng sil and wk calc cmts, abdt grngy sil mtx, abdt alt felds gr, tr blk carb fecks, tr calc ln fract, v hd,

Coal: v dkbrn-blk,mod -v argll, eathy lstr, irreg fract, hd, no fluor or cut.

Survey @1722m, 43 Deg. AZI: 110 Deg

Claystone: med-dk grn gy - dk gy - dk brn gy, non - v slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p, tr-com micmic, tr calc ln fract,hd, sbfiss-fiss, abdt calc qtz

Sandstone: med gngy-med brngy, slty-vf, sbrnd-mod srtd, strong sil and wk calc cmt, abdt sil mtx, abdt altr feld gr, tr blk carb flecks, com calc and qtz ln fract, hd,n vis por, no oil fluor.

17/04/07

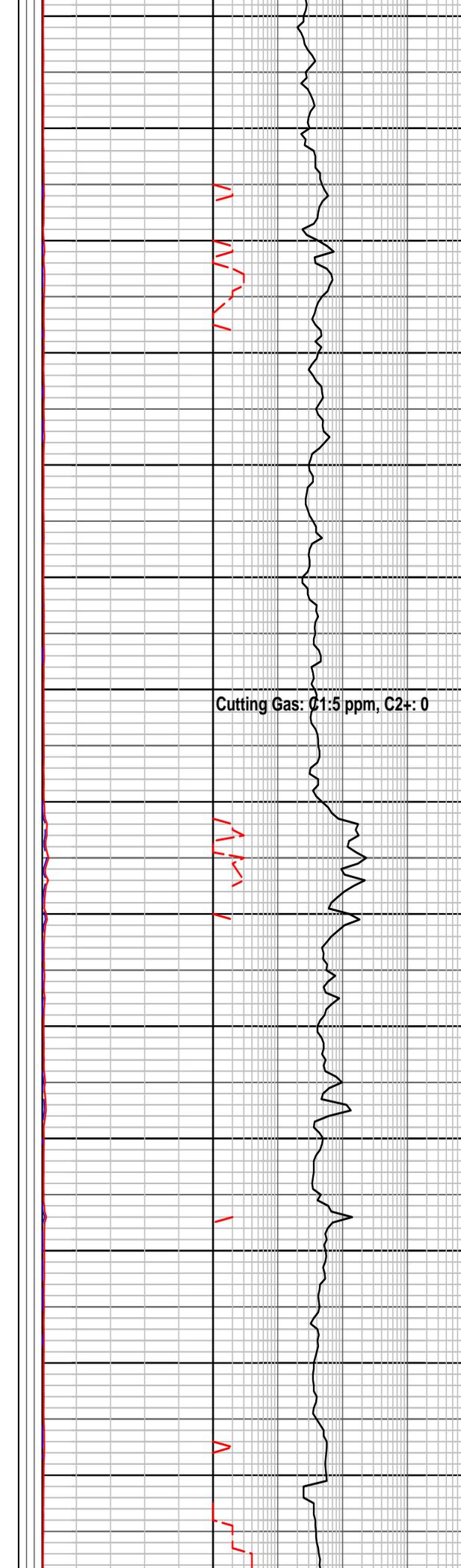
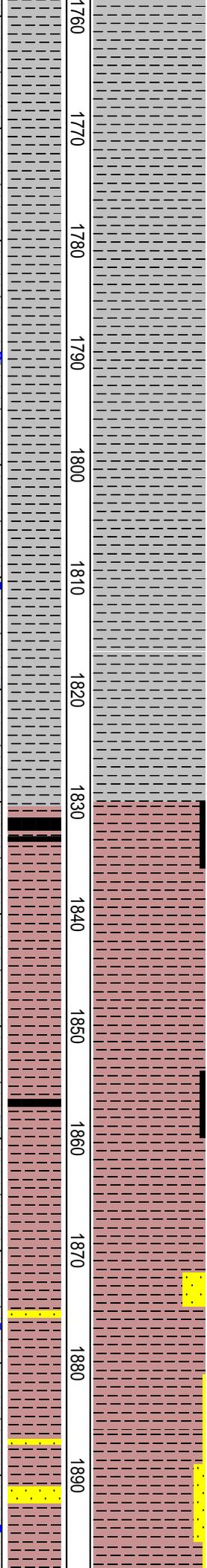
18/04/07
 Bit #6 BN4935 8 1/2"
 Jets 3x14
 in 1790m/1886 out m
 96m/24.8 hrs
 T1B1 In gauge

WOB: 17-25klbs
 RPM: 82-91
 GPM: 421-433
 PP: 1345-1376psi

19/04/07
 WOB: 17-23 klbs
 RPM: 91-97
 GPM: 412-432
 PP: 1280-1420psi

20/04/07

21/04/07
 Core#1 Corpro 8 1/2"
 1886m/out 1889m
 3m/8 hrs



Claystone: med-dk gy - med brn gy - med gn gy, sl - v slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p, com micmic, com calc and qtz In fract,hd, sbfiss-fiss.

MW 9.0 Vis 33
 PV/YP 3/76 Gels 1/2
 Sol 4.6 Sd Tr CI 1100

Survey @1778m, 45 Deg. AZI: 113 Deg

Claystone: med-dk gy - med brn gy - med gn gy, sl - v slty, occ vf aren w/altrd felds gr, tr vf blk carb flecks i/p, com micmic, tr calc and qtz In fract,hd, sbfiss-fiss.

Claystone: med-v dkgy-dk brn gy-med grn gy, sli-v slty, vf aren w/altrd felds gr/p, mod -v carb- gr i/p-coal, tr blk carb spks, com micmic, tr calc and qtz In fract, hd, sbfiss-fis

Cutting Gas: C1:5 ppm, C2+: 0

Top: Crayfish Equivalent - 1830 m.

Coal: blk-v dk gy, v argill i/p, blkly-slicknsld fract, sbvit-vit lstr, hd, brit, no fluor or cut.

MW 9.3 Vis 38
 PV/YP 6/8 Gels 1/2
 Sol 6.8 Sd Tr CI 1100

Shale: dk-v dkgy, sli-mod slty, mod -v carb, tr micmic, tr calc and qtz In fract,hd, sbfiss-fiss.

Coal: blk-v dk gy, v argill i/p, slicknsld fract, vit lstr, hd, brit, no fluor or cut.

Shale: med dkgy-blk, sli-mod slty, mod -v carb, tr blk coal det, vf aren i/p, com micmic, tr calc and qtz In fract,hd, sbfiss-fiss.

Sandstone: off wh-med brn gy, slty-vf sbrnd, mod srtd, strng sil and mod calc cmt, abdt off wh argill mtx, abdt altrd felds gr, tr calc and qtz In fract, v hd, no vis por, no oil por, no oil flour.

TXBX In gauge

Bit #7 BN4935 8 1/2"
Jets 3x14
in 1889m/out 2006 m
117m/xxx hrs
TXBX In gauge

WOB: 22-27klbs
RPM: 88-94
GPM: 371-434
PP: 1460-2290psi

22/04/07

WOB: 23-27klbs
RPM: 93-104
GPM: 231-235
PP: 2262-2415psi

Bit #8 SNE4478A 8 1/2"
Jets 4x16
in 2006m/out 2081 m
75m/41.4 hrs
TXBX In gauge

23/04/07

25/04/07

WOB: 23-27klbs
RPM: 94-143
GPM: 237-287
PP: 2263-2416psi

1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030

Cutting Gas: C1:8 ppm, C2+: 0

Cutting Gas: C1:7 ppm, C2+: 0

Cutting Gas: C1:6 ppm, C2+: 0

Shale: v dkgy-gy blk, sli stly i/p,
mod-dom v carb, tr vit blk coal det i/p,
com micmic, tr calc and qtz ln fract,
hd, sbfiss-fiss.

Shale: v dkgy-gy blk, sli stly i/p,
mod-dom v carb, tr vit blk coal det i/p,
com micmic, tr calc and qtz ln fract,
hd, sbfiss-fiss.

Sandstone: off wh-med brn gy, slty-vf
sbrnd, mod srted, v strng sil and wk
calc cmt, abdt wh sil mtx, abdt altrd
felds gr, tr v f carb flks, tr calc and qtz
ln fract, v hd, no vis
por, no oil flour.

Shale: v dkgy-gy blk, sli-mod sil i/p,
mod-dom v carb, abdt blk coal det i/p,
com micmic, tr calc and qtz ln fract,
hd, fiss.

Sandstone: off wh-med brn gy, slty-vf
sbrnd, mod srted, v strng sil and wk
calc cmt, abdt wh sil mtx, abdt altrd
felds gr, tr v f carb flks, tr calc and qtz
ln fract, v hd, no vis
por, no oil flour.

Shale: v dkgy-gy blk, sli-mod sil i/p,
mod-dom v carb, com micmic, tr calc
and qtz ln fract, hd, fiss.

Sandstone: off wh-med gy, slty-vf,
sbrnd, mod srted, v strng sil and wk
calc cmt, abdt wh-dk gy sil mtx, abdt
altrd felds gr, tr v f carb flks, tr calc
and qtz ln fract, v hd, no vs
por, no oil flour.

Coal: blk-v dk gy, oft v argill,
slicksl-d conc fract, argil earthy lstr,
cln vitr lstr, hd, brit, no fluor or cut.

Shale: v dkgy-gy blk, sli-occ v sil,
mod-dom v carb, com micmic,
com-abdt calc and qtz ln fract, hd,
fiss.

Coal: blk-v dk gy, oft v argill.

WOB: 29-32klbs
 RPM: 92-115
 GPM: 320-344
 PP: 970-2425psi

26/04/07

2040
2050
2060
2070
2080
2090

Cutting Gas: C1:6 ppm, C2+: 0

slicknsld-conc fract, argil earthy lstr, cln vitr lstr, hd, brit, no flour or cut.

Shale: v dkgy-gy blk, sli-occ v sil, mod-dom v carb, com micmic, com-abdt calc and qtz ln fract, hd, fiss.

Sandstone: off wh-dk gy, sity-vf ,sbrnd, mod srtd, v strng sil and wk calc cmt, abdt off wh- dk gy sil mtx, abdt altrd felds gr, tr v f carb flks, tr calc and qtz ln fract, v hd, n por, no oil flour.

Survey @2069m, 48 Deg. AZI: 110 Deg

Reached TD 2081 m @ 21:00 hrs, on 27 April 2007

FORMATION EVALUATION LOG

| RATE OF PENETRATION | | MD meters 1:500 | LITHOLOGY | OIL SHOWS | CORE | TOTAL GAS | CHROMATOGRAPH | REMARKS |
|--|---|-----------------|-----------|-----------|------|--|---|---------|
| ROP (0-100m/hr) | Backup ROP (100-200m/hr) | | | | | | | |
| 100 90 80 70 60 50 40 30 20 10 | 200 190 180 170 160 150 140 130 120 110 | | | | | 10 20 30 40 50 unit | 1 Methane ppm 10000 1 Ethane ppm 10000 1 Propane ppm 10000 1 iso-Butane ppm 10000 1 n-Butane ppm 10000 1 iso-Pentane ppm 10000 n-Pentane ppm 10 100 1000 10000 | |
| 5 10 15 20 25 30 35 40 45 50 | 5 10 15 20 25 30 35 40 45 50 | | | | | 10.4 20.3 30.4 40.1 50 unit | | |
| TORQUE AVG | | | | | | | | |
| WOB (klb) | | | | | | | | |