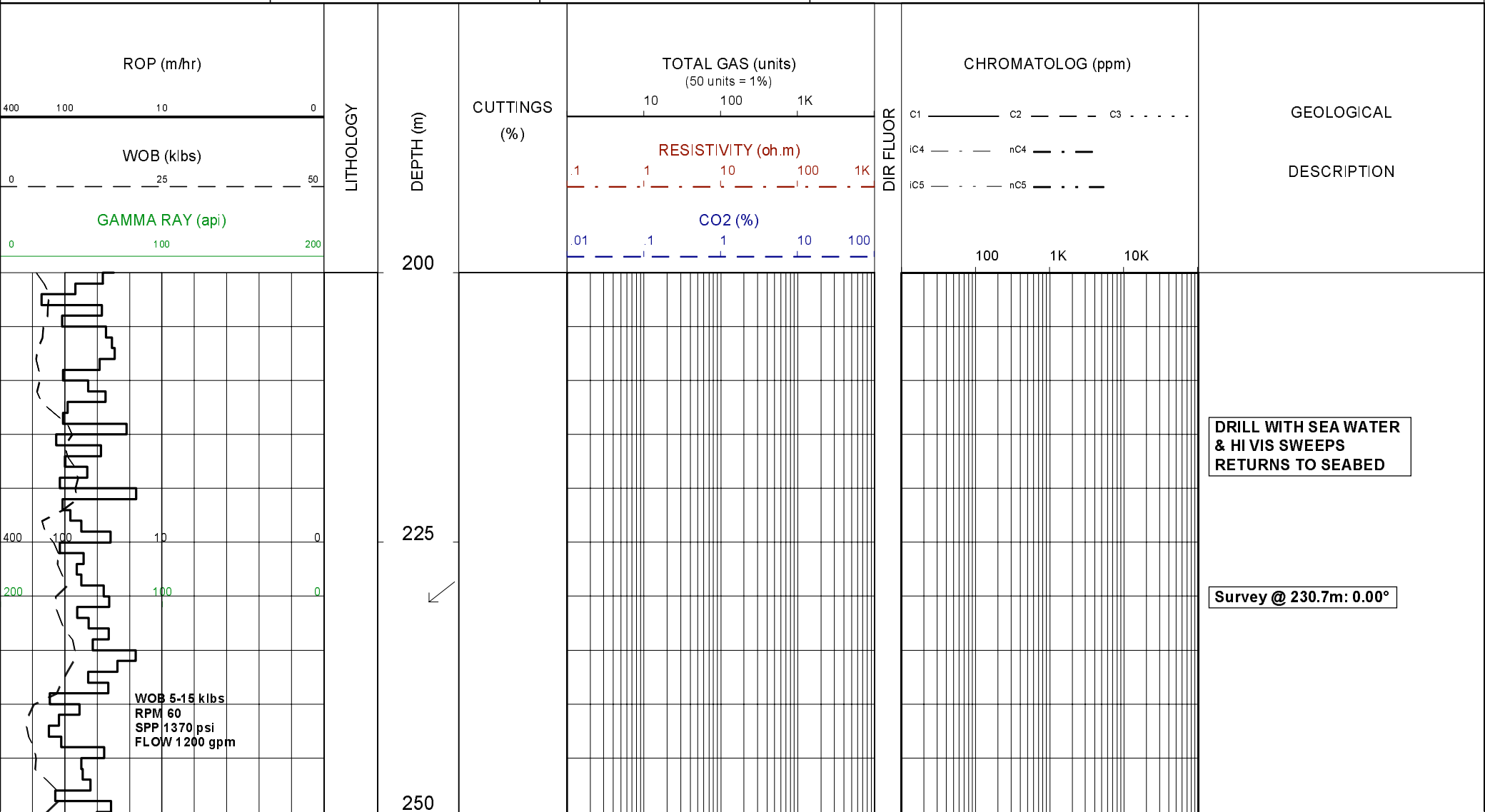
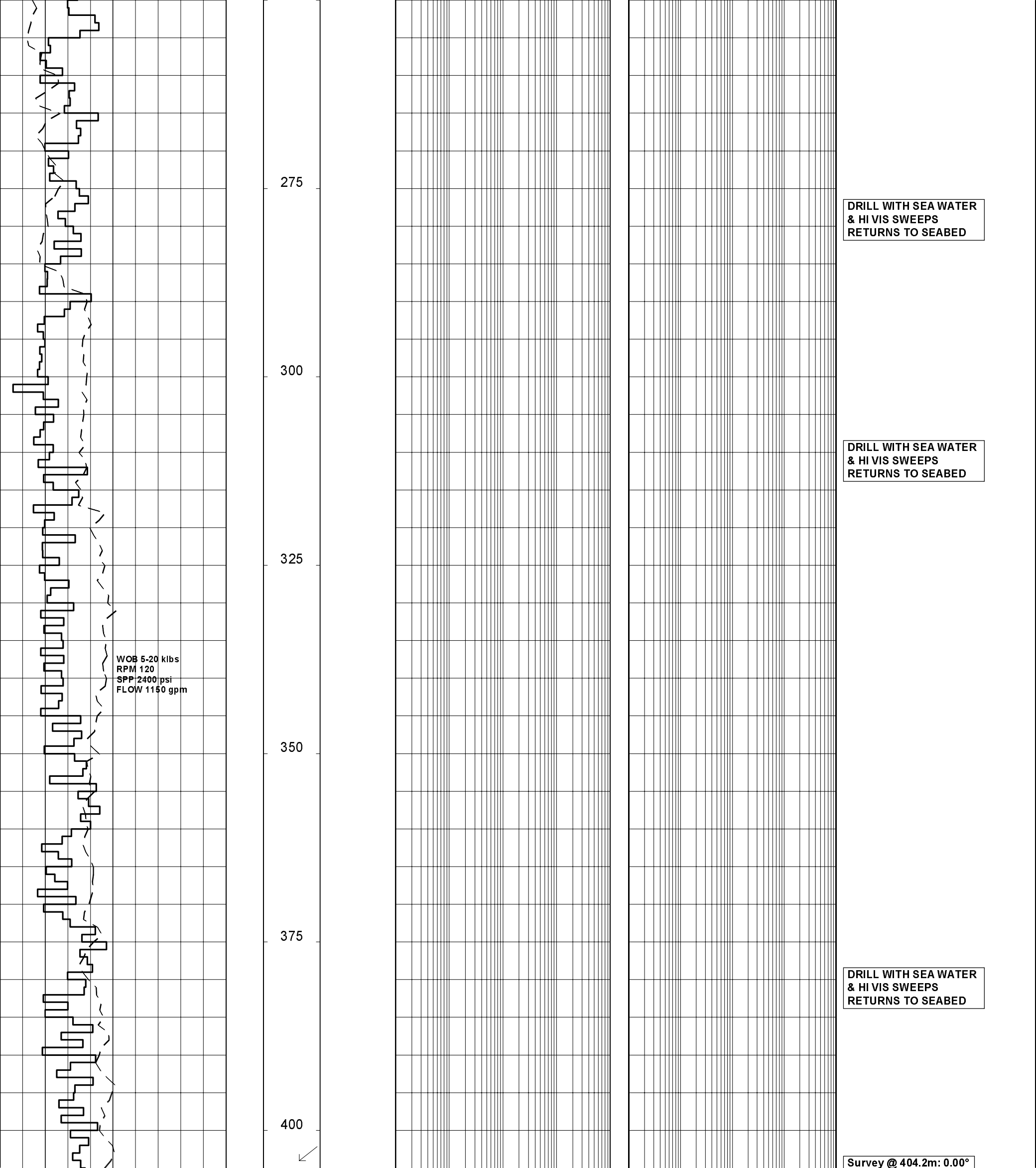


Basin : Otway Basin	LAT - RT (m) : 22.4	Rig : Ocean Epoch	Open Hole:	Cased Hole:	Engineers : Gavin Fernandes
Permit: VIC/P44	Seabed - LAT (m) : 66.65	Spud Date : 14-10-2003	36" 121.3 m	30" / 20" 121.3 m	Gedeon Doczy
State : Victoria	Seabed - RT (m) : 89.05	TD Date : 30-10-2003	17.5" 645.0 m	13.375" 635.83 m	Stan Willson
Country : Australia	Lat. : 38° 46' 34.558" S	Total Depth : 2112.4 m	12.25" 2135.0 m	9.625" 2113.25 m	Patrick Misquitta
Scale : 1/ 500	Long. : 142° 44' 05.437" E	Final Status : Plugged & Suspended			Loggers : David Adderley Babu JV

LITHOLOGY	ACCESSORIES	DRILLING DATA	ABBREVIATIONS
<ul style="list-style-type: none"> <li> Conglomerate</li> <li> Coarse Sandstone</li> <li> Med Sandstone</li> <li> Fine Sandstone</li> <li> VF Sandstone</li> <li> Siltstone</li> <li> Carb. Siltstone</li> <li> Calc. Siltstone</li> <li> Clay</li> <li> Limestone</li> <li> Dolomite</li> <li> Coal</li> <li> Anhydrite</li> <li> Gypsum</li> <li> Igneous</li> <li> Volcanic</li> <li> Metamorphic</li> <li> Cement</li> </ul>	<ul style="list-style-type: none"> <li> Pyrite</li> <li> Siderite</li> <li> Glauconite</li> <li> Feldspar</li> <li> Mica</li> <li> Ferrous</li> <li> Chert</li> <li> Calcareous</li> <li> Dolomitic</li> <li> Carbonaceous</li> <li> Lithoclast</li> <li> Breccia</li> <li> Foraminifera</li> <li> Corals</li> <li> Inoceramus</li> <li> Bryozoa</li> <li> Plant remains</li> <li> Fossils</li> </ul>	<ul style="list-style-type: none"> <li> Casing Shoe</li> <li> Bit Trip</li> <li> Wiper Trip</li> <li> Core</li> <li> DST</li> <li> Deviation Survey</li> </ul>	<ul style="list-style-type: none"> <li>BOPD - Barrels of Oil Per Day</li> <li>BWPD - Barrels of Water Per Day</li> <li>CG - Connection Gas</li> <li>CO - Circulate Out</li> <li>COND - Condensate</li> <li>c/c - Crush Cut</li> <li>DST - Drill Stem Test</li> <li>FLOW - Flow Rate (gal/min)</li> <li>GCM - Gas Cut Mud</li> <li>GCW - Gas Cut Water</li> <li>GTS - Gas To Surface</li> <li>INJ - Injection of Mist (bbls/hr)</li> <li>LCM - Lost Circulation Material</li> <li>MMCFD - Million Cubic Feet / Day</li> <li>NGTS - No Gas To Surface</li> <li>NOTS - No Oil To Surface</li> <li>NR - No Returns</li> <li>OCM - Oil Cut Mud</li> <li>OG - Over Gauge</li> <li>OH - Open Hole</li> <li>OTS - Oil To Surface</li> <li>Q - Flow Rate</li> <li>REC - Recovery</li> <li>Rmf - Resistivity Mud Filtrate</li> <li>ROP - Rate Of Penetration</li> <li>RPM - Revolutions Per Minute</li> <li>RTSTM - Rate Too Small To Measure</li> <li>Rw - Resistivity water</li> <li>r/r - Ring Residue</li> <li>SCFM - Standard Cubic ft/min (air)</li> <li>SGCM - Slightly Gas Cut Mud</li> <li>SPM - Strokes Per Minute</li> <li>SPP - Stand Pipe Pressure</li> <li>SWC - Side-Wall Core</li> <li>TG - Trip Gas</li> <li>WOB - Weight On Bit</li> </ul>
		<b>MUD DATA</b> MW - Mud Weight FV - Funnel Viscosity (s/qt) PV - Plastic Viscosity (cps) YP - Yield Point (lb/100ftsq) Gel - Gel Strength (10sec) WL - Water Loss (cc/30min) pH - Acidity / Alkalinity Ck - Cake (32nd/inch) Sol - Solids (% vol) Cl - Chlorides (mg/l)	





275

300

325

350

375

400

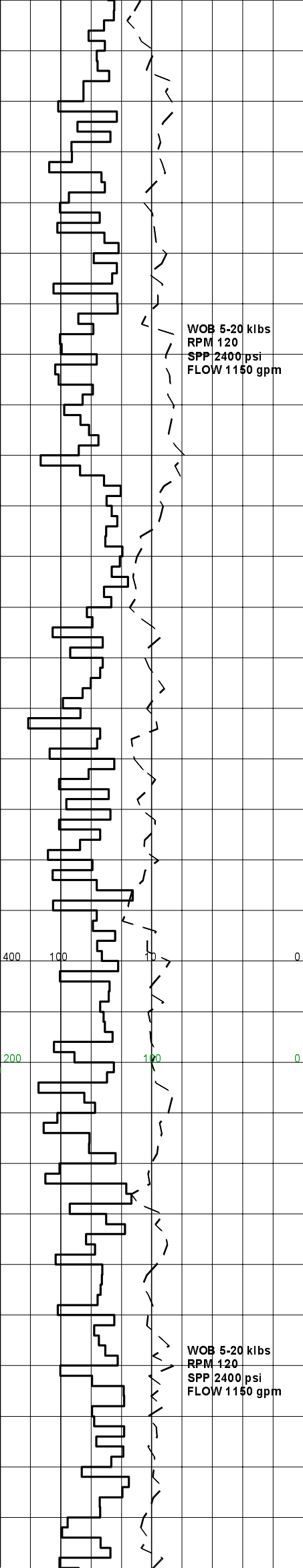
WOB 5-20 klbs  
RPM 120  
SPP 2400 psi  
FLOW 1150 gpm

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

Survey @ 404.2m: 0.00°



425

450

475

500

525

550

10 100 1K

.1 1 10 100 1K

.01 1 1 10 100

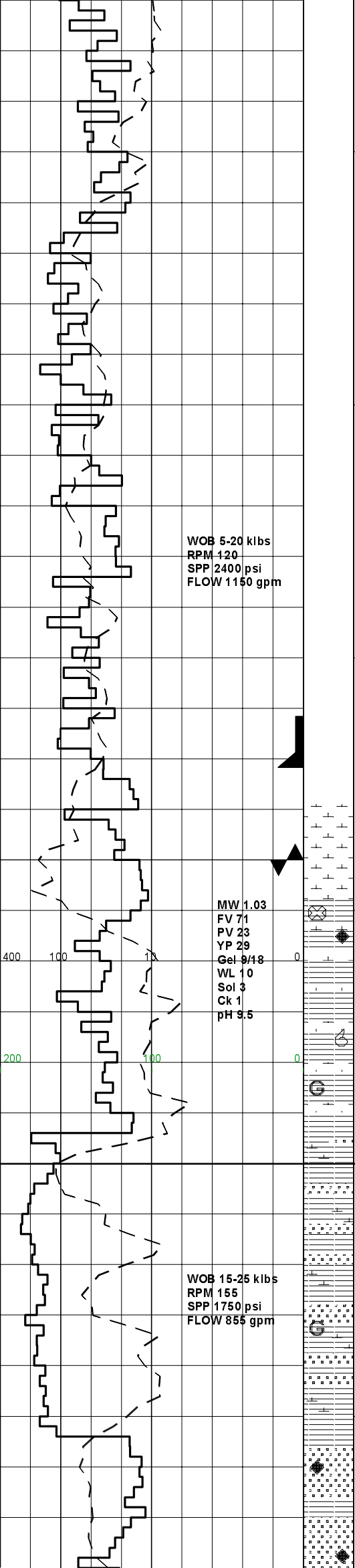
100 1K 10K

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED

Survey @ 520m: 0.00°



575  
600  
625  
650  
675  
700

10 100 1K  
.1 1 10 100 1K

.01 1 1 10 100

100 % C1

**DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED**

**DRILL WITH SEA WATER  
& HI VIS SWEEPS  
RETURNS TO SEABED**

**13.375" CASING SHOE  
SET @ 635.83m**

**Survey @ 639.5m: 0.00°**

**BIT #3: Smith MOZTL TCI  
SIZE: 12.25" JETS: 4x16  
IN: 645m OUT: 1226m  
RUN: 581m HRS: 13.7  
COND: 3-4-BT-M2-E-2-ER-BHA**

**L.O.T. @ 648m: EMW = 15.0 ppg**

MARL: pl brn gry, occ med brn, com  
arg, rr foss frags, occ pyr nods,  
corals, echinoid spines, occ f-med  
qtz grs, occ liths, v sft-disp,  
amorph.

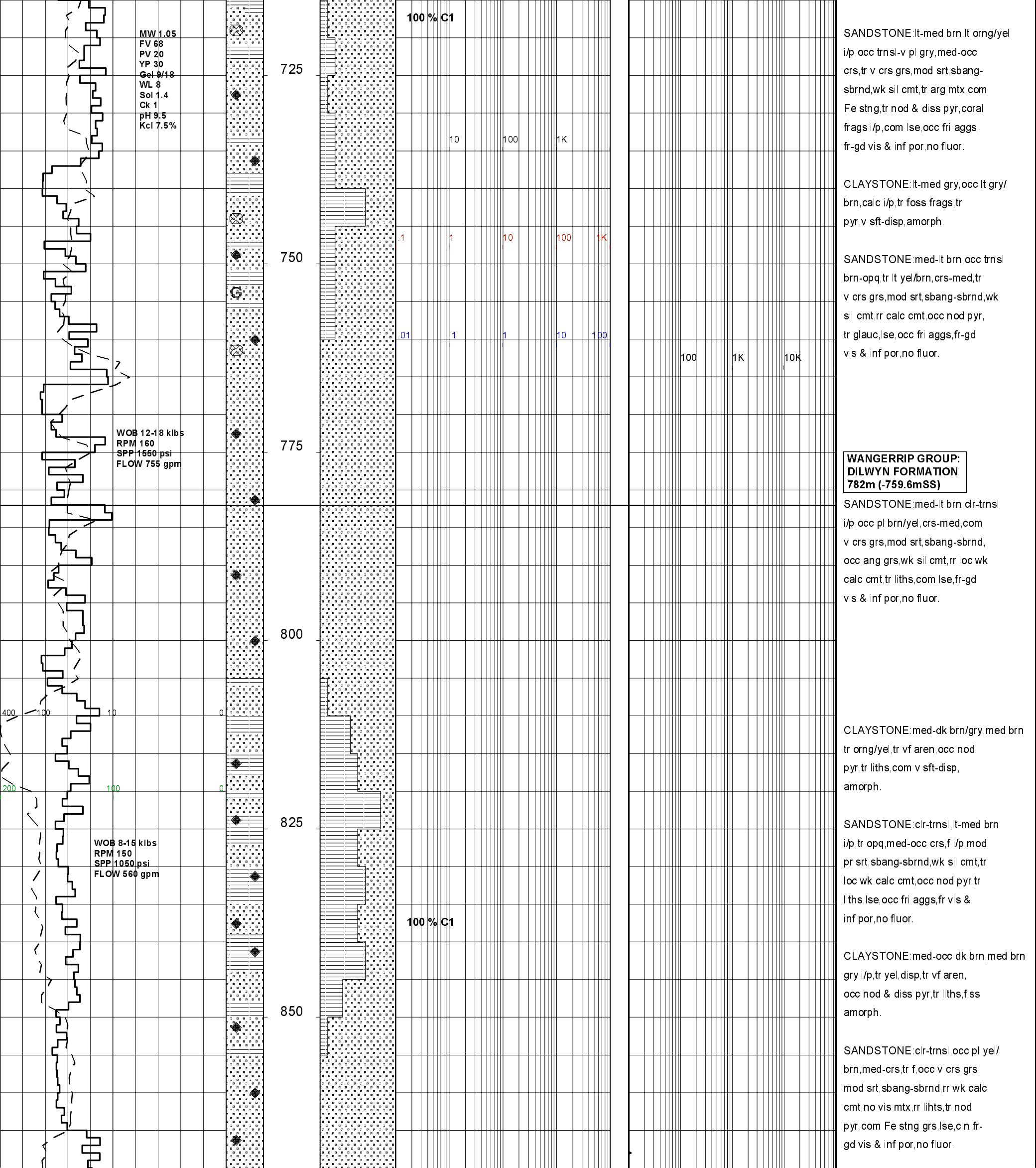
MARL: pl brn gry, occ med brn, com  
arg, rr foss frags, occ f-med qtz  
grs w/pl yel-orng stng, rr glauc  
incl, dom disp-v sft, amorph.

**MEPUNGA FORMATION:  
675m (-652.6mSS)**

SANDSTONE: pl-med orng-yel, occ pl  
orng-orng brn, clr-trnsl, f-crs, sa  
pred sr, wk cmt, no vis mtx, com pl  
orng-orng yel Fe stng, lse cin  
grs, fr vis & inf por, no fluor.

**Survey @ 696m: 0.45° 010°T**

SANDSTONE: pl-med orng-yel orng  
brn, crs-v crs, occ med, mod srt, sa  
sr, rr rnd, wk sil cmt, nil vis mtx  
com orng Fe stng, lse grs, fr-gd  
inf & vis por, no fluor.



MW 1.05  
 FV 68  
 PV 20  
 YP 30  
 Gel 9/18  
 WL 8  
 Sol 1.4  
 Ck 1  
 pH 9.5  
 Kcl 7.5%

WOB 12-18 klbs  
 RPM 160  
 SPP 1550 psi  
 FLOW 755 gpm

WOB 8-15 klbs  
 RPM 150  
 SPP 1050 psi  
 FLOW 560 gpm

100 % C1

100 % C1

SANDSTONE:lt-med brn,lt orng/yel  
 i/p,occ trns-lv pl gry,med-occ  
 crs,tr v crs grs,mod srt,sbang-  
 sbrnd,wk sil cmt,tr arg mtx,com  
 Fe stng,tr nod & diss pyr,coral  
 frags i/p,com lse,occ fri aggs,  
 fr-gd vis & inf por,no fluor.

CLAYSTONE:lt-med gry,occ lt gry/  
 brn,calc i/p,tr foss frags,tr  
 pyr,v sft-disp,amorph.

SANDSTONE:med-lt brn,occ trns-l  
 brn-opq,tr lt yel/brn,crs-med,tr  
 v crs grs,mod srt,sbang-sbrnd,wk  
 sil cmt,rr calc cmt,occ nod pyr,  
 tr glauc,lse,occ fri aggs,fr-gd  
 vis & inf por,no fluor.

**WANGERRIP GROUP:  
 DILWYN FORMATION  
 782m (-759.6mSS)**

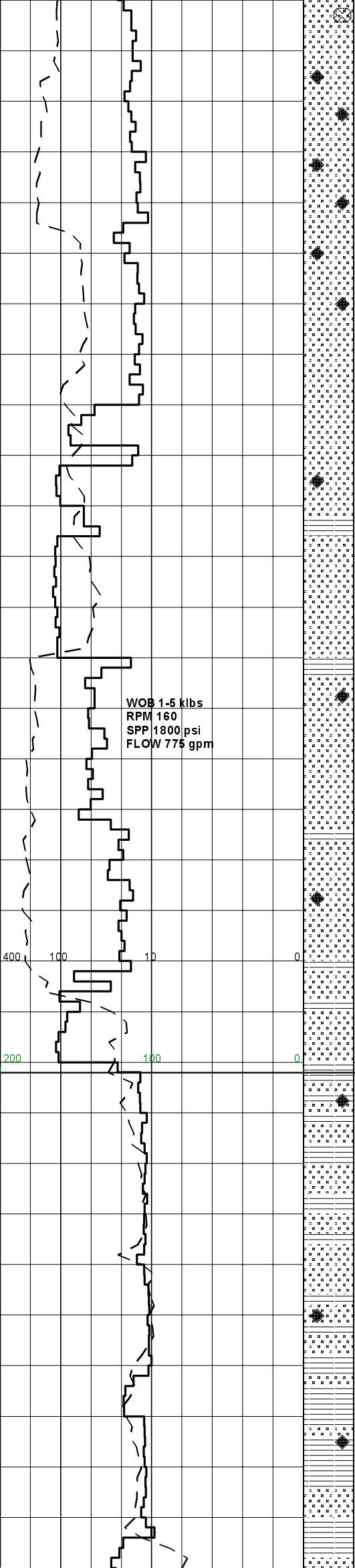
SANDSTONE:med-lt brn,clr-trns-l  
 i/p,occ pl brn/yel,crs-med,com  
 v crs grs,mod srt,sbang-sbrnd,  
 occ ang grs,wk sil cmt,rr loc wk  
 calc cmt,tr liths,com lse,fr-gd  
 vis & inf por,no fluor.

CLAYSTONE:med-dk brn/gry,med brn  
 tr orng/yel,tr vf aren,occ nod  
 pyr,tr liths,com v sft-disp,  
 amorph.

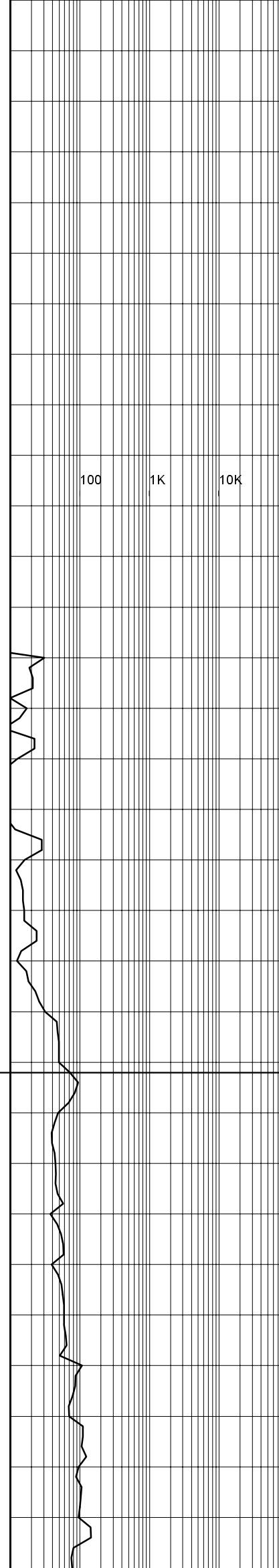
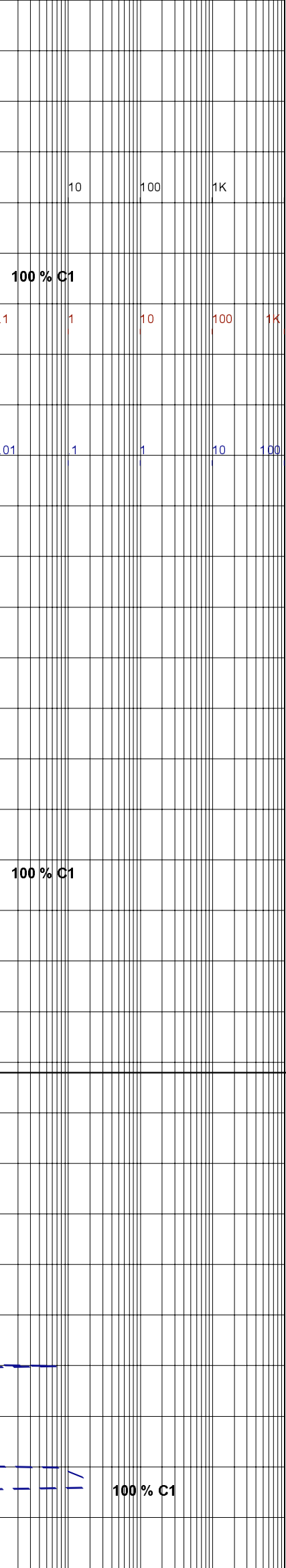
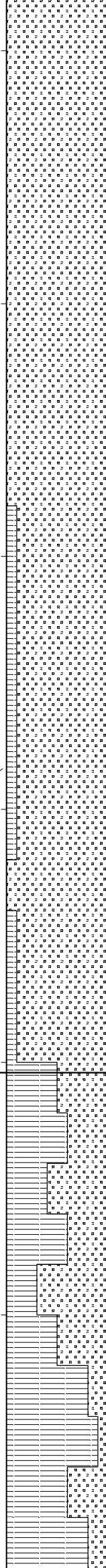
SANDSTONE:clr-trns-l,lt-med brn  
 i/p,tr opq,med-occ crs,f i/p,mod  
 pr srt,sbang-sbrnd,wk sil cmt,tr  
 loc wk calc cmt,occ nod pyr,tr  
 liths,lse,occ fri aggs,fr vis &  
 inf por,no fluor.

CLAYSTONE:med-occ dk brn,med brn  
 gry i/p,tr yel,disp,tr vf aren,  
 occ nod & diss pyr,tr liths,fiss  
 amorph.

SANDSTONE:clr-trns-l,occ pl yel/  
 brn,med-crs,tr f,occ v crs grs,  
 mod srt,sbang-sbrnd,rr wk calc  
 cmt,no vis mtx,rr liths,tr nod  
 pyr,com Fe stng grs,lse,cln,fr-  
 gd vis & inf por,no fluor.



875  
900  
925  
950  
975  
1000  
1025



SANDSTONE: clr-trnsl, opq i/p, med-crs, mod srt, sbang-sbrnd, wk sil cmt, tr yel/orng liths, abdt pyr, tr coral frags, lse, fr-gd vis & inf por, no fluor.

SANDSTONE: com trnsl-occ clr, i/p lt brn/yel, crs-occ med, mod srt, sbrnd-sbang, tr wk calc cmt, no vis mtx, com nod pyr, occ milky wh qtz, tr lt gry/blu qtz, lse, cln, fr gd vis & inf por, no fluor.

SANDSTONE: clr-trnsl, off wh-rr milky, frstd, occ pl org, pred med-crs, gen wl srt, sa-sr, rr ang-rnd, wk sil cmt, nil vis mtx, occ Fe Stng, occ disseminated Pyr, occ lith frags, com lse cln grns, fr vis por, fr inf por, no fluor.

CLAYSTONE: med-dk gy brn, occ pl-med gry, slty, occ gft SLTST, com disseminated & nod Pyr, occ carb incl, occ micmic, sft-frm, occ mod hd, blk-y-sbbkly.

**Survey @ 947.8m: 0.49° 308°T**

SANDSTONE: clr-trnsl, pl gry-off wh, frstd i/p, med-crs, occ v crs, mod-pr srt, sa-pred sr, occ rnd, wk sil cmt, nil vis mtx, occ Fe stng, occ-rr pyr nods, lse, pr-occ gd inf & vis por, no fluor.

**WANGERRIP GROUP:  
PEMBER MUDSTONE  
976m (-953.6mSS)**

CLAYSTONE: pl-med brn, occ org brn brn gry, occ-com vf micmic, com micro carb spks, v disp, amorph.

CLAYSTONE: med brn, occ pl brn, rr brn gry, com micmic, com carb spks disp, occ v sft, amorph.

SANDSTONE: trnsl-clr, pl yel/brn i/p, occ frstd, v crs-crs, mod srt, sbang-sbrnd, wk sil cmt, tr clayey mtx, tr pl gry qtz, lse, fr vis & inf por, no fluor.

CLAYSTONE: lt-med brn, pl brn-off wh i/p, med gry/brn i/p, micmic i/p occ grd to arg SLTST, tr lith

WOB 8-18 klbs  
RPM 180  
SPP 2040 psi  
FLOW 855 gpm

WOB 5-8 klbs  
RPM 140  
SPP 1940 psi  
FLOW 800 gpm

1050

1075

1100

1125

1150

1175

100 % C1

100 % C1

100 % C1

100 % C1

92 / 8

92 / 8

10 100 1K

1 1 10 100 1K

1 1 10 100

100 1K 10K

**WANGERRIP GROUP:  
PEBBLE POINT FM  
1037m (-1014.6mSS)**

SANDSTONE: clr-trnsl, occ wh, v crs  
crs, mod srt, sbang-sbrnd, wk sil  
cmt, com nod pyr, lse, fr-gd inf &  
vis por, no fluor.  
CLAYSTONE: med brn, occ brn/gry,  
i/p micmic, frm occ grd to arg  
SLTST, v sft-occ disp, fiss-i/p  
amorph.

**WANGERRIP GROUP:  
PEBBLE POINT EQUIVALENT  
1084m (-1061.6mSS)**

SANDSTONE: clr-trnsl, tr pl brn,  
crs-v crs i/p, mod srt, sbang-  
sbrnd, tr rnd grs, com nod pyr, occ  
glauc, cln, lse, fr-gd vis & inf  
por, no fluor.

SANDSTONE: clr-trnsl, occ pl brn,  
crs-v crs, mod srt, sbang-sbrnd, tr  
wk sil cmt, no vis mtx, com nod  
pyr, cln, lse, fr-gd vis & inf por,  
no fluor.

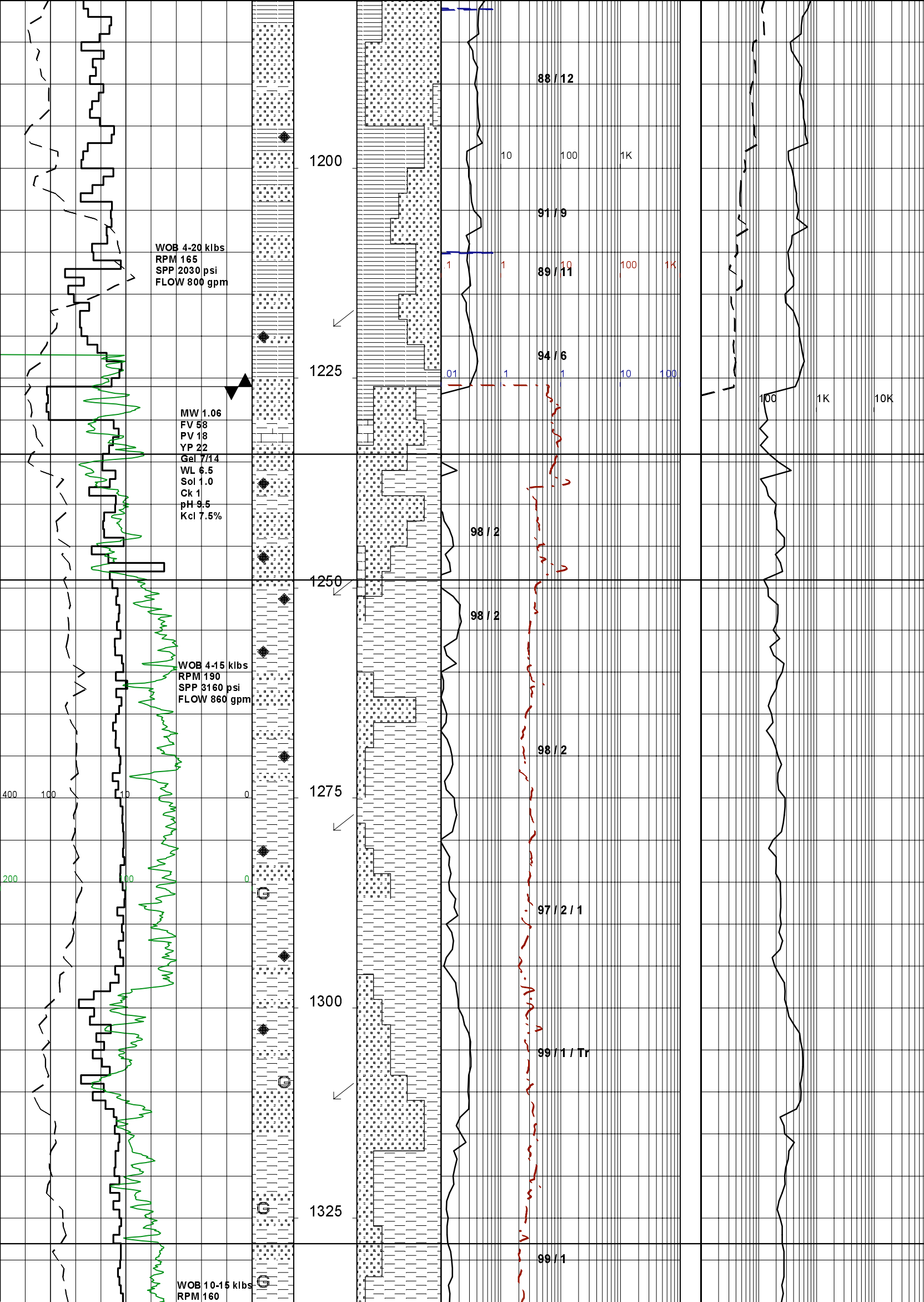
SILTSTONE: gry, gry/brn, arg, disp  
occ grd to CLYST, occ micmic, tr  
carb mat, frm-v sft, fiss-sbfiss.

**CARBIDE LAG CHECK @ 1138m  
THEOR. STROKES: 6565  
ACTUAL STROKES: 6750  
OPEN HOLE O.G.: 6.62 %**

SANDSTONE: trnsl-clr, v pl brn i/p  
med, occ crs, mod wl srt, sbang-  
sbrnd, tr wk calc cmt, occ clayey  
mtx, occ pyr nod, lse, fr inf & vis  
por, no fluor.

CLAYSTONE: pl gry/brn, occ pl brn,  
disp-v sft, tr vf aren i/p grd to  
SLTST, tr diss pyr, amorph-fiss.

**WANGERRIP GROUP:**



**MASSACRE SHALE**  
1180m (-1157.6mSS)

SANDSTONE: trnsi-pl brn, opq i/p, med-occ crs, tr f, mod wl srt, sbang-sbrnd, tr wk calc cmt, occ clayey mtx, tr micr carb spks, tr nod pyr, lse, occ fri aggs, fr vis & inf por, no fluor.

CLAYSTONE: lt brn, occ lt brn/gry, disp-v sft, tr carb spks, tr nod pyr, amorph-fiss.

Survey @ 1218.7m: 0.44° 231.5°T

**BIT #4: Reed Hycalog DSX195D**  
SIZE: 12.25" JETS: 3x13,2x12  
IN: 1226m OUT: 2004m  
RUN: 778m HRS: 26.5  
COND: 1-1-RR-A-X-I-IN-CP

**TIMBOON SANDSTONE:**  
1234m (-1211.6mSS)

SANDSTONE: cir-trnsi, pl brn, med-f occ crs grs, mod wl srt, sbang-ang occ wk dol cmt, com stly mtx, diss pyr i/p, occ glauc, lse-fri aggs, pr vis & inf por, no fluor.

**SHERBROOK GROUP:**  
**SKULL CREEK MUDSTONE**  
1249m (-1226.6mSS)

SILTSTONE: pl gry/brn, pl brn-occ off wh, arg, calc i/p, occ grd to CLYST, micmic i/p, tr carb mat & spks, abdt nod pyr, sft-frm, sbfiss

Survey @ 1251.6m: 0.80° 142.8°T

SILTSTONE: lt brn/gry, arg occ grd to CLYST, calc, tr micmic, occ nod & diss pyr, tr carb spks, sft-frm, sbfiss.

Survey @ 1278.9m: 0.75° 149.32°T

SANDSTONE: trnsi-clr, v pl brn, f, vf i/p occ grd to aren SLTST, occ med, mod srt, sbang-sbrnd, occ calc cmt, com stly mtx, com nod pyr, lse fri-mod hd aggs i/p, pr vis & inf por, no fluor.

Survey @ 1311.4m: 0.64° 145.23°T

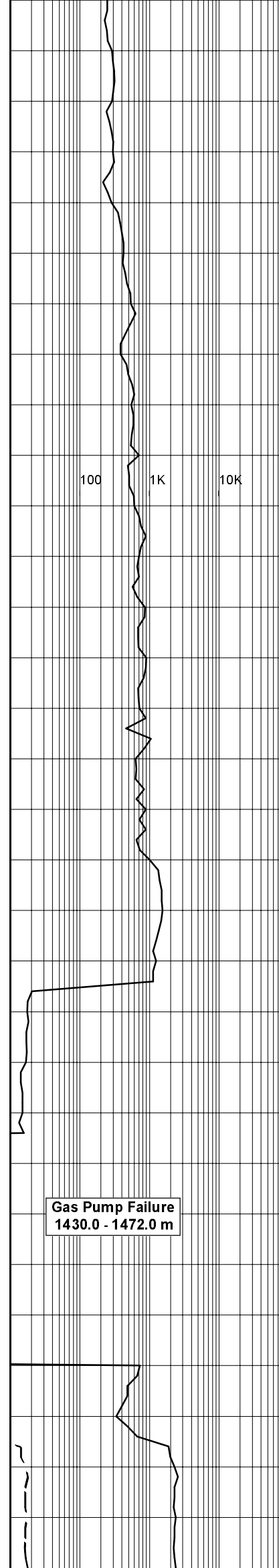
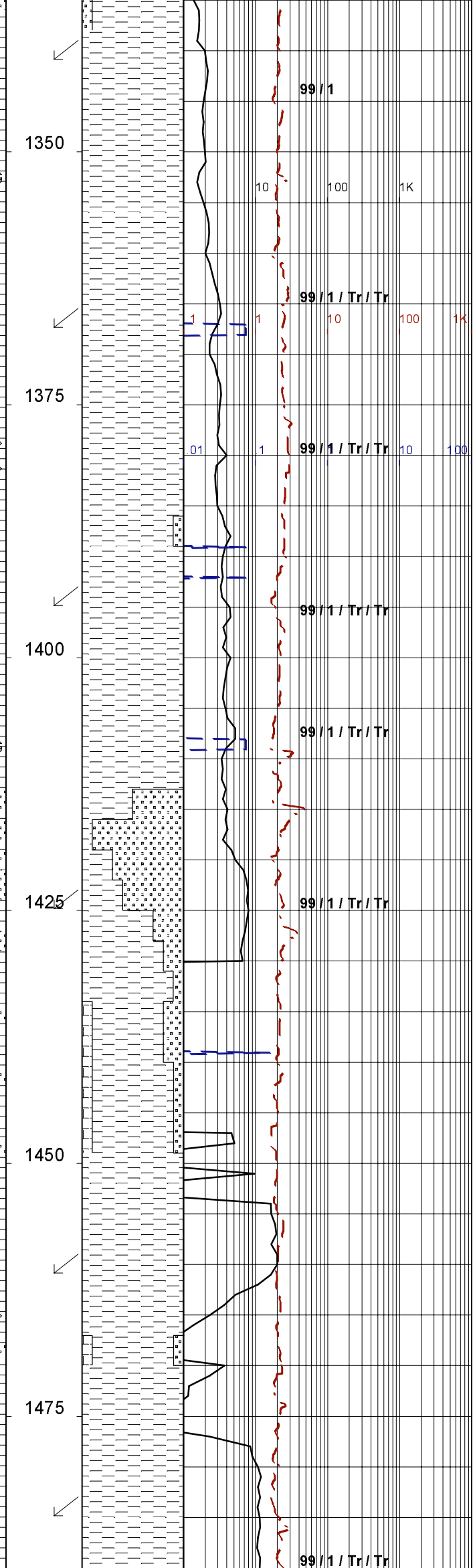
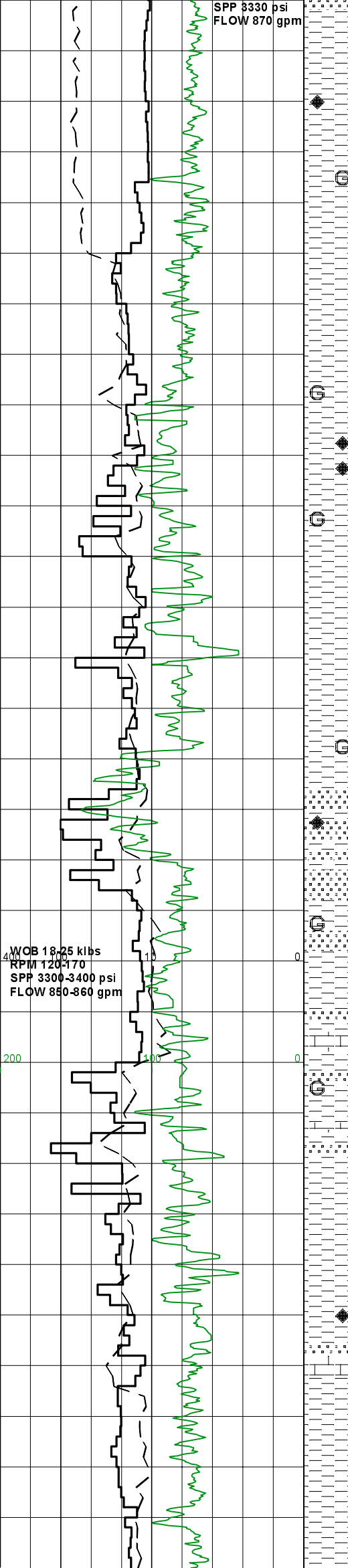
SANDSTONE: cir-trnsi, pl gry i/p, med, occ crs grs, f i/p, mod wl srt sbang-sbrnd, com strg calc cmt, occ stly mtx, com nod pyr, glauc i/p, tr carb spks, mod hd-hd aggs, lse i/p, pr vis por, no fluor.

SILTSTONE: pl brn/gry, v arg occ grd to CLYST, calc i/p, tr vf aren tr carb spks, occ carb mat, tr pyr v sft-frm i/p, sbfiss-fiss.

**PAARATTE FORMATION:**  
1328m (-1305.6mSS)

SILTSTONE: med gry/brn, lt brn, com aren occ grd to vf SST, arg, com





micmic, com glauc grs, tr carb spks, frm-occ mod hd, sbfiss.

SILTSTONE: med gry brn, rr org brn occ med brn, arg-aren, occ vf qtz grs, occ glauc frags, rr-occ carb spks & frags, rr loc micmic, tr liths, v sft-occ mod hd, occ disp

**Survey @ 1341.1m: 0.57° 133.81°T**

SILTSTONE: pl brn-pl brn gry, occ med brn, occ arg-aren, com glauc pel, occ vf-rr med qtz grs, occ pyr nods, v sft-frm, occ disp, amorph.

**Survey @ 1367.4m: 0.72° 129.23°T**

SILTSTONE: pl brn, pl brn gry, com aren, rr arg, occ glauc frags, rr pyr nods, rr carb spks, frm-occ mod hd, occ sft-frm, sbbiky-occ amorph.

**Survey @ 1394.8m: 0.83° 105.22°T**

SILTSTONE: pl brn gry, pl brn, arg-aren, occ glauc grs, occ carb spks, occ-com qtz grs, v sft-frm, disp, amorph, sbbiky.

SANDSTONE: off wh-miky, occ clr-trnsl, med-crs, occ f, pr-occ mod srt, sbang-pred sbrnd, wk-mod sil cmt, occ off wh kaol mtz, occ glauc grs, occ pyr nods, gen lse, mod hd i/p, pr-occ fr inf & vis por, no fluor.

**Survey @ 1425.3m: 0.93° 117.62°T**

LIMESTONE: tn-off wh, occ v pl yel micr, aren, occ arg, microIn, mod hd-hd.

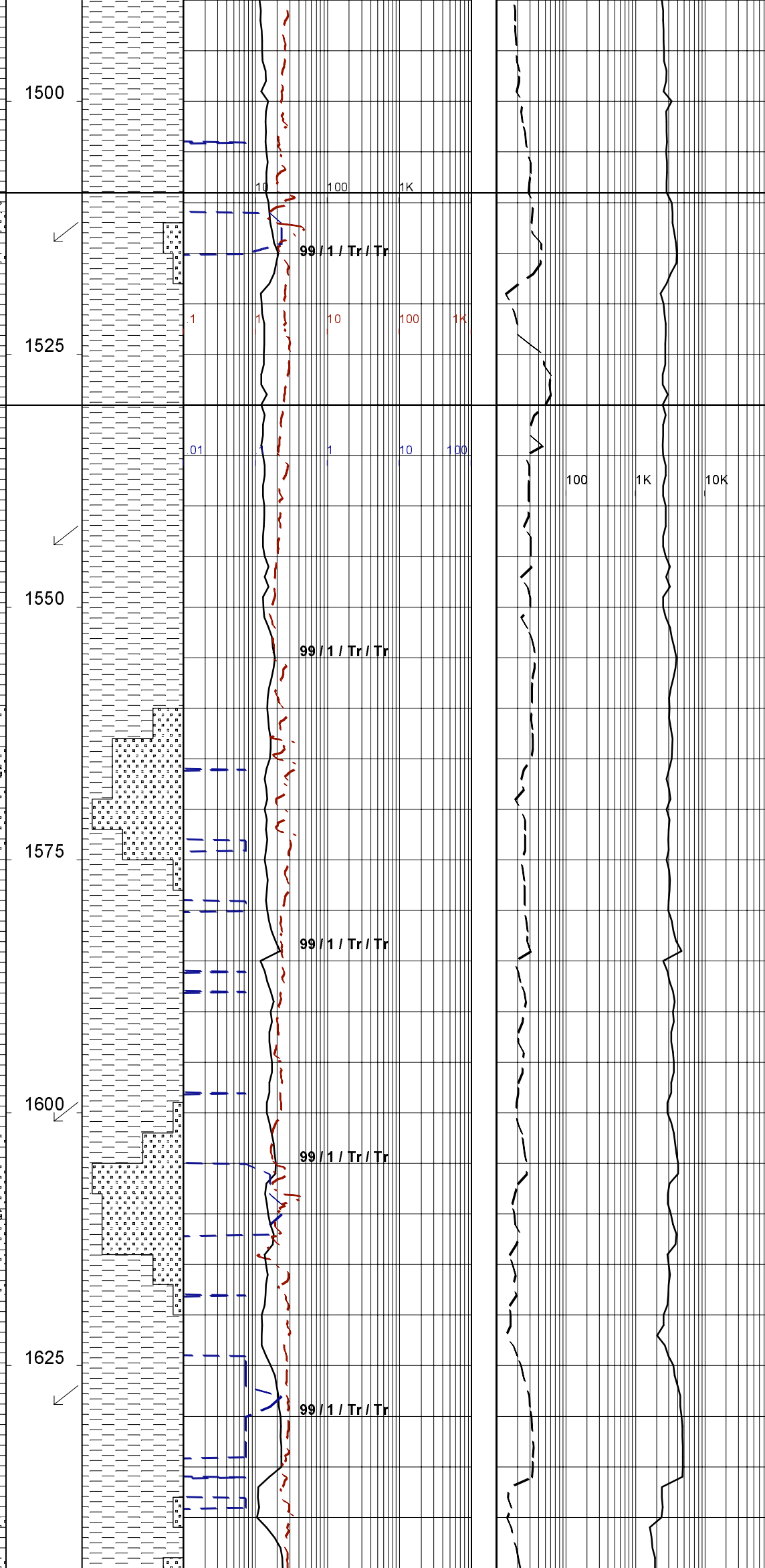
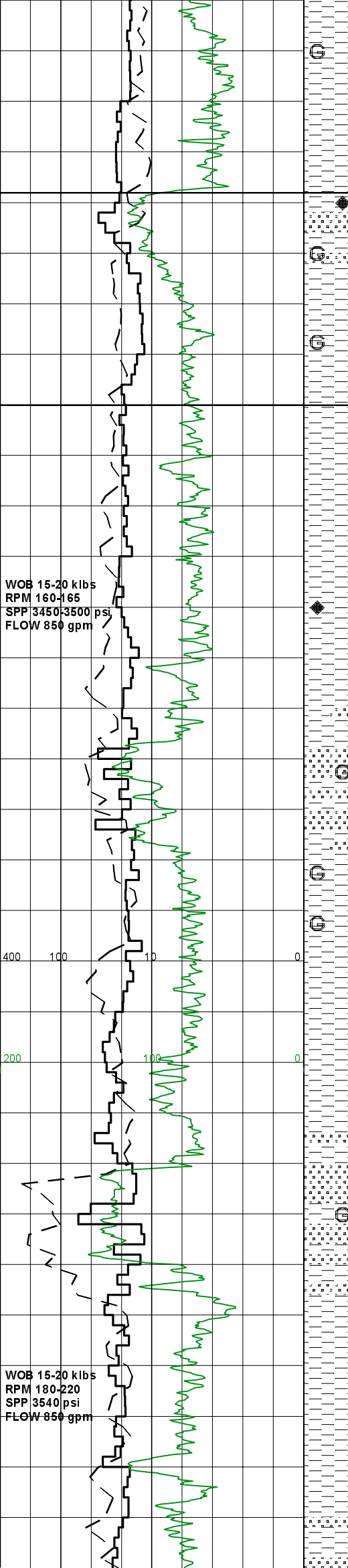
SILTSTONE: pl-occ med brn, rr brn gry, arg-aren, occ glauc grs, rr pyr nods, micro carb spks, v sft-disp, occ frm, amorph, sbbiky i/p.

**Survey @ 1461.0m: 0.83° 126.97°T**

SILTSTONE: v pl-occ med brn, arg, com glauc grs, occ loc calc, rr loc pyr nods, v sft-disp, occ frm-mod hd, amorph, sbbiky-blky.

**Survey @ 1485.5m: 1.05° 125.52°T**

SILTSTONE: v pl brn-v pl brn gry,



v arg, g/t CLYST i/p, occ-rr glauc  
grs, occ micro carb spks, rr pyr  
nods, v sft-pred disp, sbbiky,  
amorph.

**NULLAWARRE SANDSTONE:  
1509m (-1486.6mSS)**

**Survey @ 1513.8m: 0.75° 121.22°T**

SANDSTONE: off wh, pl brn, pl grn  
i/p, vf-f, occ med, mod srt, sbang-  
sbrnd, mod-strg calc cmt, occ off  
wh kaol mtx, occ-com glauc grs,  
fri-mod hd, lse i/p, pr-v pr vis &  
inf por, no fluor.

**BELFAST MUDSTONE:  
1530m (-1507.6mSS)**

**Survey @ 1543.4m: 0.78° 125.17°T**

SILTSTONE: v pl brn-pl brn gry,  
com arg, occ carb spks, rr qtz  
grs, sft-frm, occ disp, sbbiky,  
amorph.

SILTSTONE: v pl brn, com arg, occ  
glauc grs, v sft-frm, sbbiky-occ  
blky, rr amorph.

SANDSTONE: off wh, clr-trnsl, f-med  
occ crs, mod srt, sbang-sbrnd, wk-  
mod sil cmt, occ wk calc cmt, occ  
off wh kaol mtx, com glauc grs,  
tr dissem pyr, occ micro carb  
spks, lse, fri-mod hd, pr vis & inf  
por, no fluor.

SILTSTONE: pl brn-occ pl brn gry,  
arg, occ micro carb spks, rr pyr  
nods, rr glauc grs, sft-frm, occ  
disp, sbbiky, occ amorph.

SILTSTONE: pl-occ med brn gry, arg  
occ glauc grs, sft-disp, occ frm,  
sbbiky, amorph.

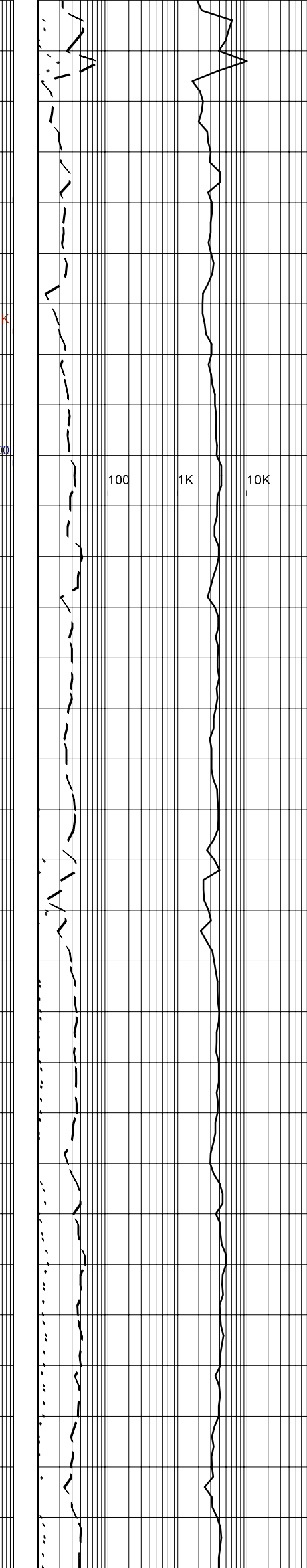
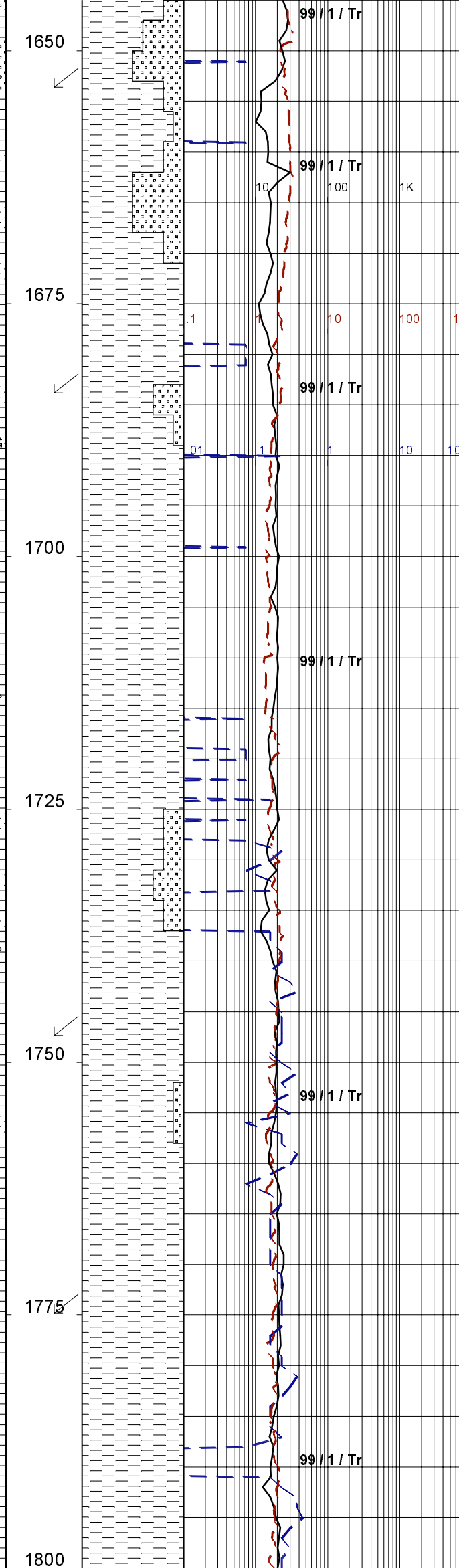
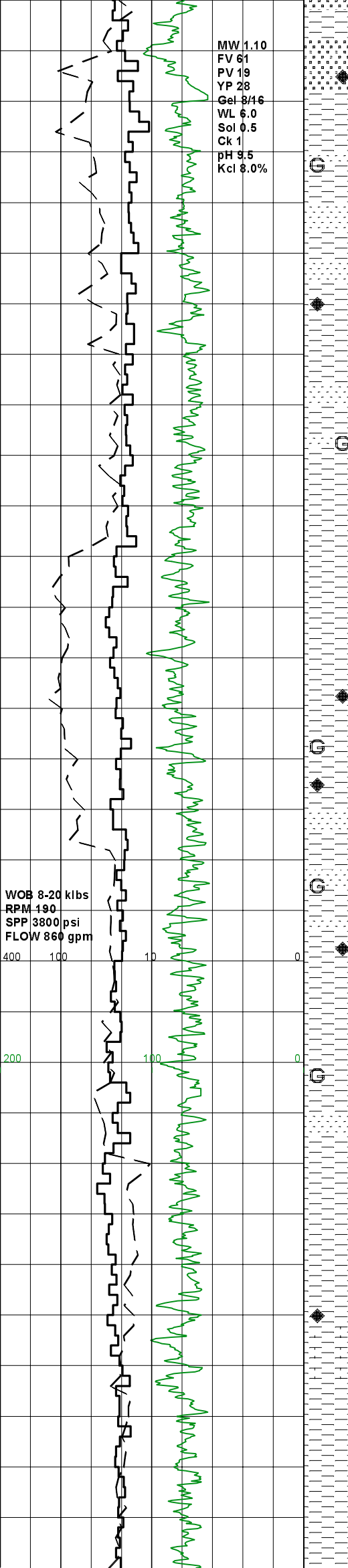
**Survey @ 1601.0m: 0.60° 149.21°T**

SANDSTONE: off wh-mlky, clr-trnsl,  
f-med, occ vf, mod-mod wl srt,  
sbang-occ sbrnd, wk-mod calc cmt,  
occ off wh-v pl brn arg mtx, occ  
glauc grs, lse, fri-mod hd, pr-occ  
fr vis & inf por, no fluor.

SILTSTONE: pl-occ med gry brn, arg  
i/p, occ loc carb spks, frm-sft,  
sbbiky.

**Survey @ 1629.2m: 0.45° 166.96°T**

SILTSTONE: pl gry-pl gry brn, occ-  
com micro carb spks, frm-sft,  
sbbiky.



SANDSTONE:trnsi-occ clr,v pl gry  
 pl brn i/p,f,vf i/p occ grd to  
 aren SLTST,mod wl srt,sbrnd-occ  
 rnd,sbang i/p,occ wk calc cmt,  
 com arg mtx,tr pyr,tr glauc,lse,  
 fri-mod hd aggs i/p,pr vis & inf  
 por,no fluor.

**Survey @ 1654.2m: 0.57° 146.54°T**

SILTSTONE:med gry,lt gry/brn,arg  
 aren i/p occ grd to vf SST,occ  
 micmic,tr pyr,occ glauc grs,frm,  
 occ mod hd,sbbky-sbfiss.

**Survey @ 1684.8m: 0.39° 155.53°T**

SILTSTONE:lt-med gry,lt brn/gry  
 i/p,com arg,tr aren,com micmic,  
 tr glauc & pyr,frm-occ mod hd,  
 sbbky-sbfiss.

SANDSTONE:trnsi-clr,tr v pl brn,  
 com f,occ vf i/p grd to aren  
 SLTST,mod wl srt,sbrnd,tr clac  
 cmt,com sity mtx,occ pyr & glauc  
 lse,fri aggs,pr-fr vis & inf por  
 no fluor.

**Survey @ 1747.5m: 0.70° 158.31°T**

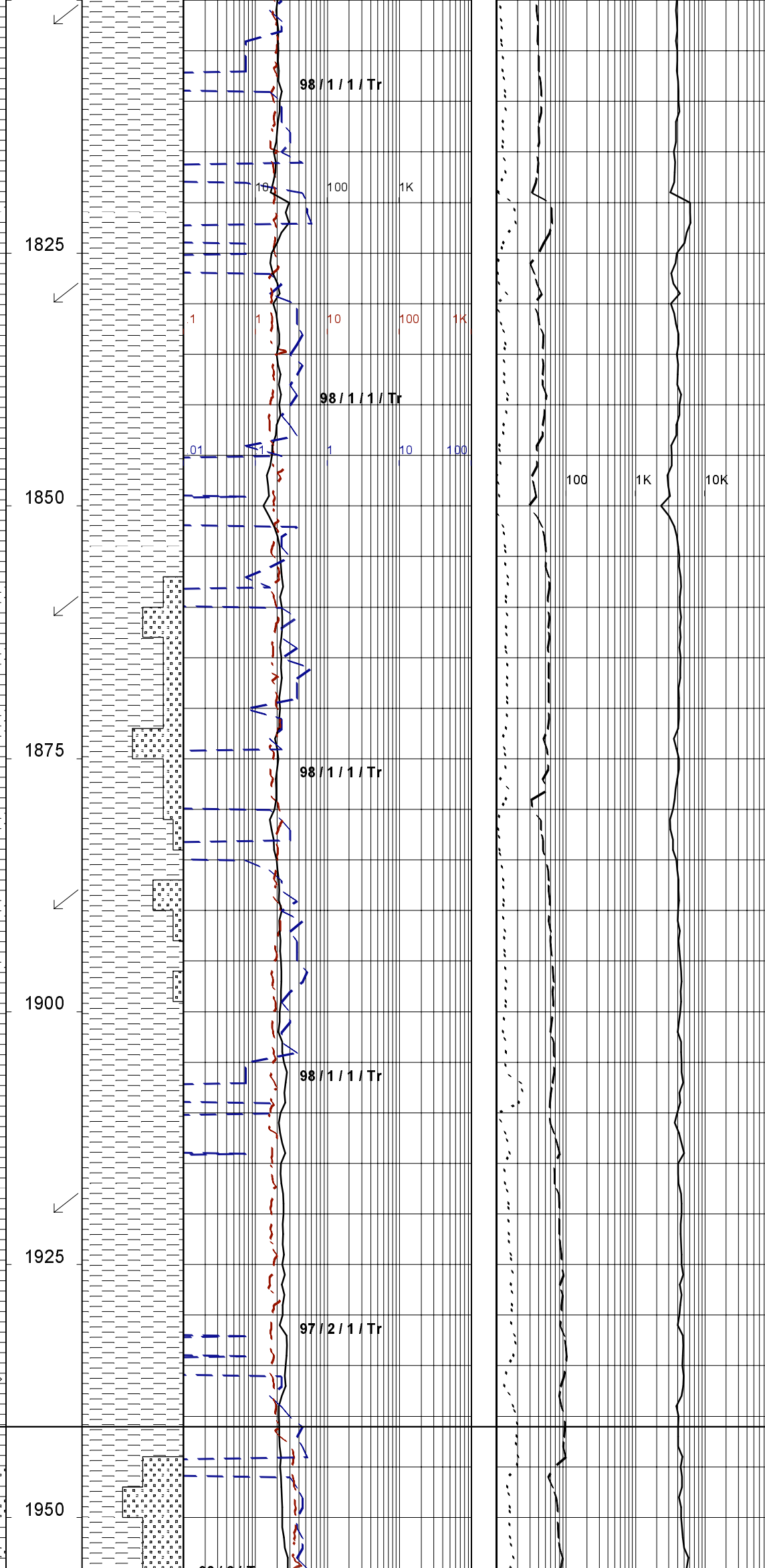
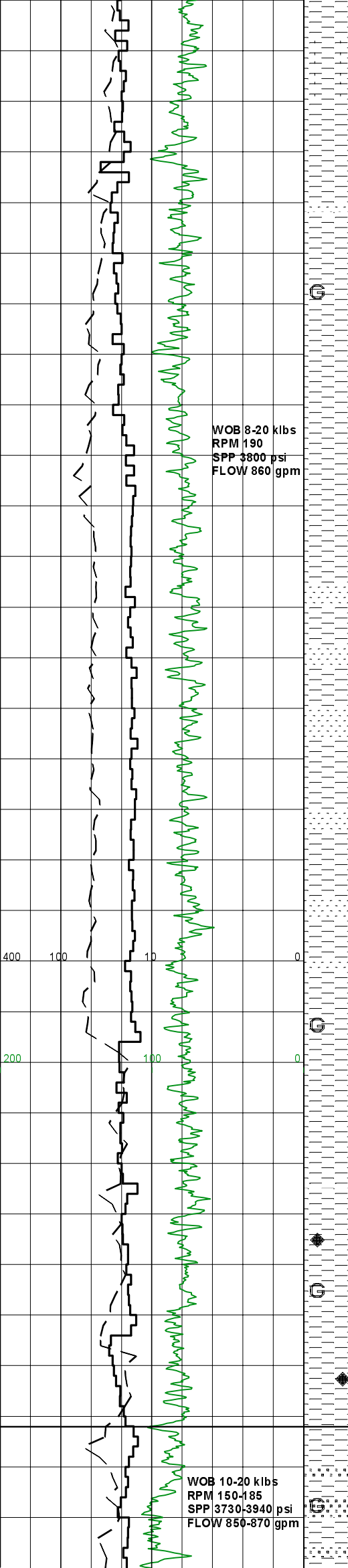
SILTSTONE:med-lt gry,lt brn/gry,  
 arg,aren i/p occ grd to vf SST,  
 micmic,com nod pyr & glauc grs,  
 frm,occ mod hd,sbbky-sbfiss.

SILTSTONE:med gry,occ med brn/  
 gry,arg,tr aren,com micmic,tr  
 pyr,tr glauc,frm-occ mod hd,  
 sbbky-sbfiss.

**Survey @ 1775.6m: 0.69° 181.94°T**

SILTSTONE:med gry,lt brn/gry,arg  
 calc i/p,micmic i/p,tr pyr,occ  
 glauc grs,tr shell frags,frm-mod  
 hd,sbbky-sbfiss.

**Survey @ 1802.2m: 0.74° 185.6°T**



SILTSTONE: med gry, lt brn/gry, arg  
occ calc, com micmic, tr glauc, tr  
diss pyr, mod hd-frm, sbblky-  
sbfiss.

**Survey @ 1830.4m: 0.84° 183°T**

SILTSTONE: med gry, lt brn/gry, arg  
aren i/p occ grd to vf SST, occ  
glauc, tr pyr, micmic, frm-mod hd,  
sbblky-sbfiss.

**Survey @ 1860.9m: 0.82° 186.01°T**

SANDSTONE: cir-trnsi, v pl brn i/p  
com f, vf i/p grd to aren SLTST,  
wl srt, sbrnd, occ calc wk calc  
cmt, com sly mtz, tr carb spks, tr  
glauc, lse, fri-occ mod hd aggs, pr  
vis & inf por, no fluor.

SILTSTONE: lt-med gry, occ lt brn/  
gry i/p, arg, i/p aren occ grd to  
vf SST, micmic, i/p glauc grs, frm-  
occ mod hd, sbblky-sbfiss.

**Survey @ 1890.6m: 0.81° 194.41°T**

SILTSTONE: lt-med gry, tr off wh-  
pl gry, arg, vf aren i/p, tr carb  
spks, com glauc, micmic i/p, frm-  
occ mod hd, sbblky-sbfiss.

**Survey @ 1919.3m: 0.89° 193.99°T**

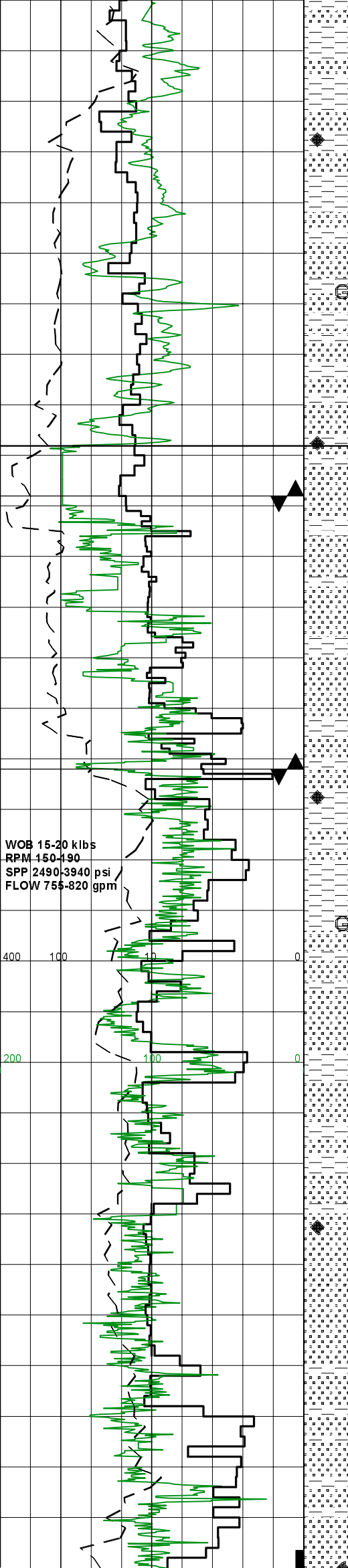
SILTSTONE: lt-med gry, occ off wh-  
pl gry, arg, vf aren i/p, tr glauc,  
com nod pyr, tr carb spks, frm-occ  
mod hd, sbfiss-sbblky.

**FLAXMANS FORMATION:  
1941m (-1918.6mSS)**

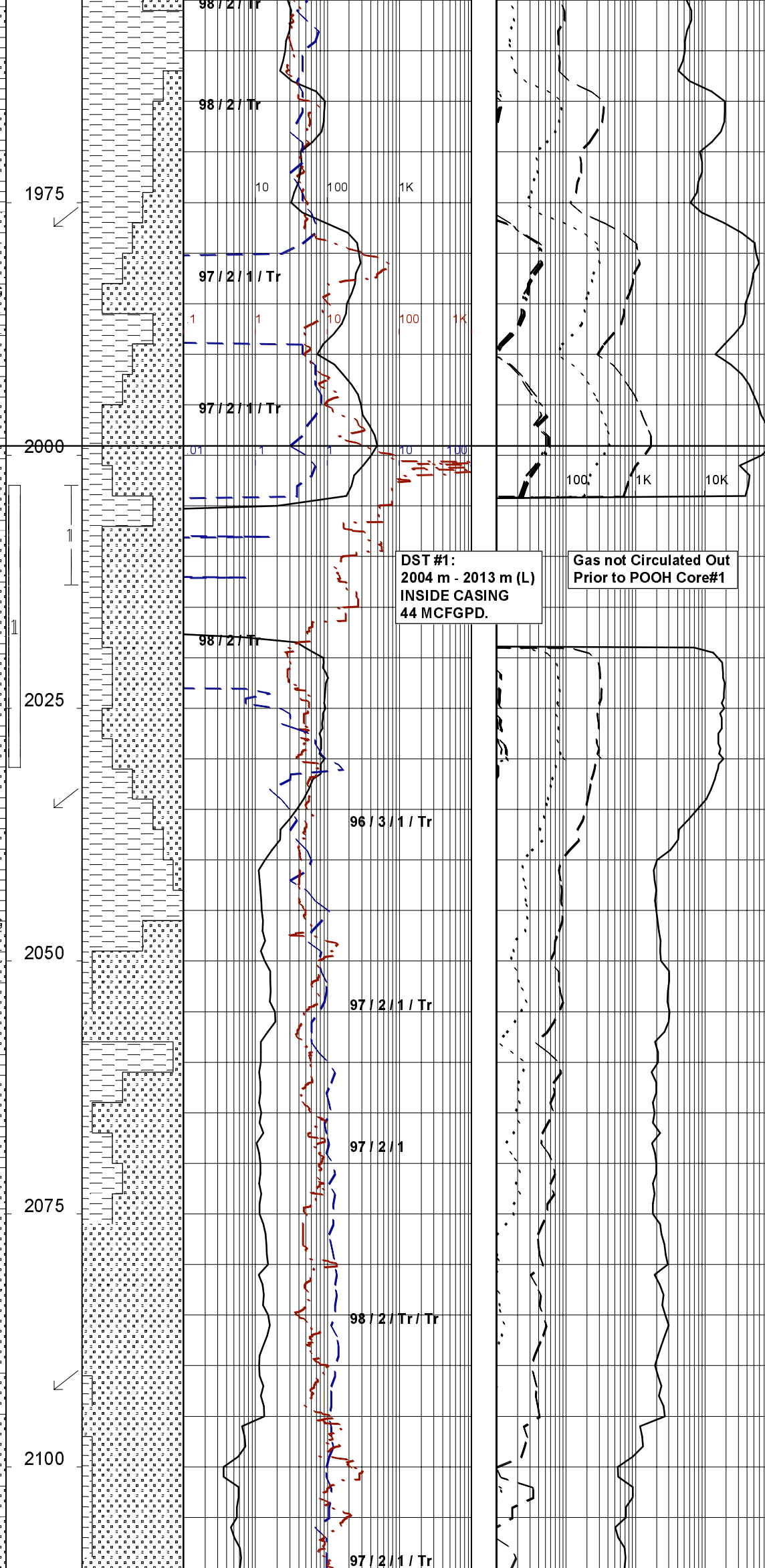
SANDSTONE: off wh-v pl brn, med  
grn, vf wl srt, sbang-sbrnd, mod  
sil cmt, com off wh kaol mtz, loc  
com glauc grs, mod hd-hd, pr-v pr  
vis por, no fluor.

**Survey @ 1977.5m: 1.18° 208.33°T**

SILTSTONE: v pl-pl brn, med brn,



WOB 15-20 klbs  
 RPM 150-190  
 SPP 2490-3940 psi  
 FLOW 755-820 gpm



DST #1:  
 2004 m - 2013 m (L)  
 INSIDE CASING  
 44 MCFGPD.

Gas not Circulated Out  
 Prior to POOH Core#1

brn gry, pl grn, com v aren, grad  
 to vf SST i/p, occ arg, loc com  
 glauc grs, mod hd-hd, blk-y-sbbkly  
 SANDSTONE: off wh-miky, med yel-pl  
 yel, crs-v crs, occ vf-med, pr srt,  
 ang-occ sbrnd, mod calc cmt, com  
 kaol mtx, occ glauc grs, mod hd-hd  
 pr vis & inf por, no fluor.

SANDSTONE: off wh-miky, pl yel, clr  
 trnsl, f-crs, pr srt, pred sbang,  
 ang-sbrnd, mod sil cmt, wk calc  
 cmt, occ-com kaol mtx, lse, mod hd-  
 hd, fr vis & inf por, no fluor.

**WAARRE FORMATION:  
 1999m (-1976.6mSS)**

SANDSTONE: off wh-miky, occ clr-  
 trnsl, occ pl yel, crs-v crs, occ f  
 med, pr srt, ang-sbrnd, mod sil cmt  
 occ kaol mtx, occ pyr nods, lse,  
 mod hd-hd, fr-gd vis & inf por, no  
 fluor.

**Survey @ 2005.9m: 0.83° 199.77°T**

**CORE BIT #1: Security CD93 CH  
 SIZE: 12.25" TFA: 1.5in²  
 IN: 2004m OUT: 2031m  
 RUN: 27m HRS: 2.8  
 COND: 1-1-NO-A-X-I-NO-TD  
 RECOVERY: 24.7m 91.5%  
**Survey @ 2035m: 1.10° 206.07°T****

SANDSTONE: clr-trnsl, occ off wh,  
 med-occ f, wl srt, sbang-sbrnd, wk  
 sil cmt, nil vis mtx, lse, cln grs,  
 fr-gd vis por, gd inf por, no  
 fluor.

**Rmf: 0.125 ohm @ 75° F**

**BIT #4RR: Reed Hycalog DSX195D  
 SIZE: 12.25" JETS: 2x12, 3x13  
 IN: 2031m OUT: 2135m(TD)  
 RUN: 104m HRS: 15.41  
 COND: 2-2-WT-T-X-I-BU/CT-TD**

SILTSTONE: pl-med gry brn, med-occ  
 dk gry, loc v aren grd to SST i/p  
 loc com micro carb spks, rr loc  
 glauc grs, v sft-mod hd, disp i/p,  
 blk-y-sbbkly, occ amorph.

SANDSTONE: off wh, clr-trnsl, vf-f,  
 occ med, wl srt, sbang, sbrnd, wk-  
 occ mod sil & calc cmt, com-abdt  
 off wh kaol mtx, occ liths & carb  
 spks, abdt rock flour, mod hd-hd,  
 occ lse grs, pr vis & inf por, no  
 fluor.

**Survey @ 2092m: 1.96° 211°T**

SANDSTONE: off wh, clr-trnsl, vf-  
 med, mod wl srt, sbang-sbrnd, mod  
 calc cmt, com kaol mtx, com rock  
 flour, mod hd, lse i/p, pr-v pr vis  
 & inf por, no fluor.

SANDSTONE: off wh, clr-trnsl i/p,  
 v pl gry, f-occ med, vf i/p, mod wl  
 srt, sbang-sbrnd, tr calc cmt, abdt

WOB 10-20 k/bs  
RPM 150-190  
SPP 2490-3990 psi  
FLOW 795-823 gpm

2125

2150

2175

10 100 1K

.1 1 10 100 1K

.01 1 1 10 100

100 1K 10K

wh kaol mtx, tr pyr nod & carb  
spks, mod hd-occ fri aggs, lse i/p  
pr vis & inf por, no fluor.

9.575" CASING SHOE  
SET @ 2113.25 m

Survey @ 2121.8m: 2.72° 218.57°T  
Survey @ 2125m: 2.92° 220.32°T  
Survey @ 2135m: 2.92° 220.32°T

CASINO-3 REACHED-TD  
@ 08:00 HRS ON 30-10-2003

DRILLERS' DEPTH: 2135m  
LOGGERS' DEPTH: 2125m

LOGGING RUNS:  
RUN #1: GR-HALS-DSI  
RUN #2: MDT  
RUN #3: GMR-HGNS  
RUN #4: MSCT  
RUN #5: CST  
(After Casing:)  
RUN #6: CBL