

COMPANY	ORIGIN ENERGY ORIGIN ENERGY	SPUD DATE	19-09-2005
RIG	CENTURY 7	TD DATE	TD DATE
AREA	PEP 154	TD DRILLER	TD DRILLER
STATE/COUNTRY	VICTORIA, AUSTRALIA	TD WIRELINE	TD WIRELINE
LOCATION	38ø29'31.96"S 142ø44'46.66"E	LOGGED FROM	LOGGED FROM
GROUND LVL	46.17m	LOGGED TO	TD WIRELINE
RT HEIGHT	5.3m	FINAL STATUS	STATUS
DEPTH REF	ROTARY TABLE		

WELL CONFIGURATION				LOGGING ENGINEERS		SCALE 1/ 200
BIT SIZE	HOLE DEPTH (m)	CASING SIZE	CASING DEPTH (m)	Rory McLellan		
311mm	551m	245mm	544.5m	Aroop Dev		
216mm	OH TD			W.S.G. John Hobday		

#### SYMBOLS

- NEW BIT RUN
- NEW CORE BIT RUN
- CASING SHOE
- LINER HANGER
- MUD LOSS / MUD GAIN
- Recovered SIDEWALL CORES
- Not Recovered

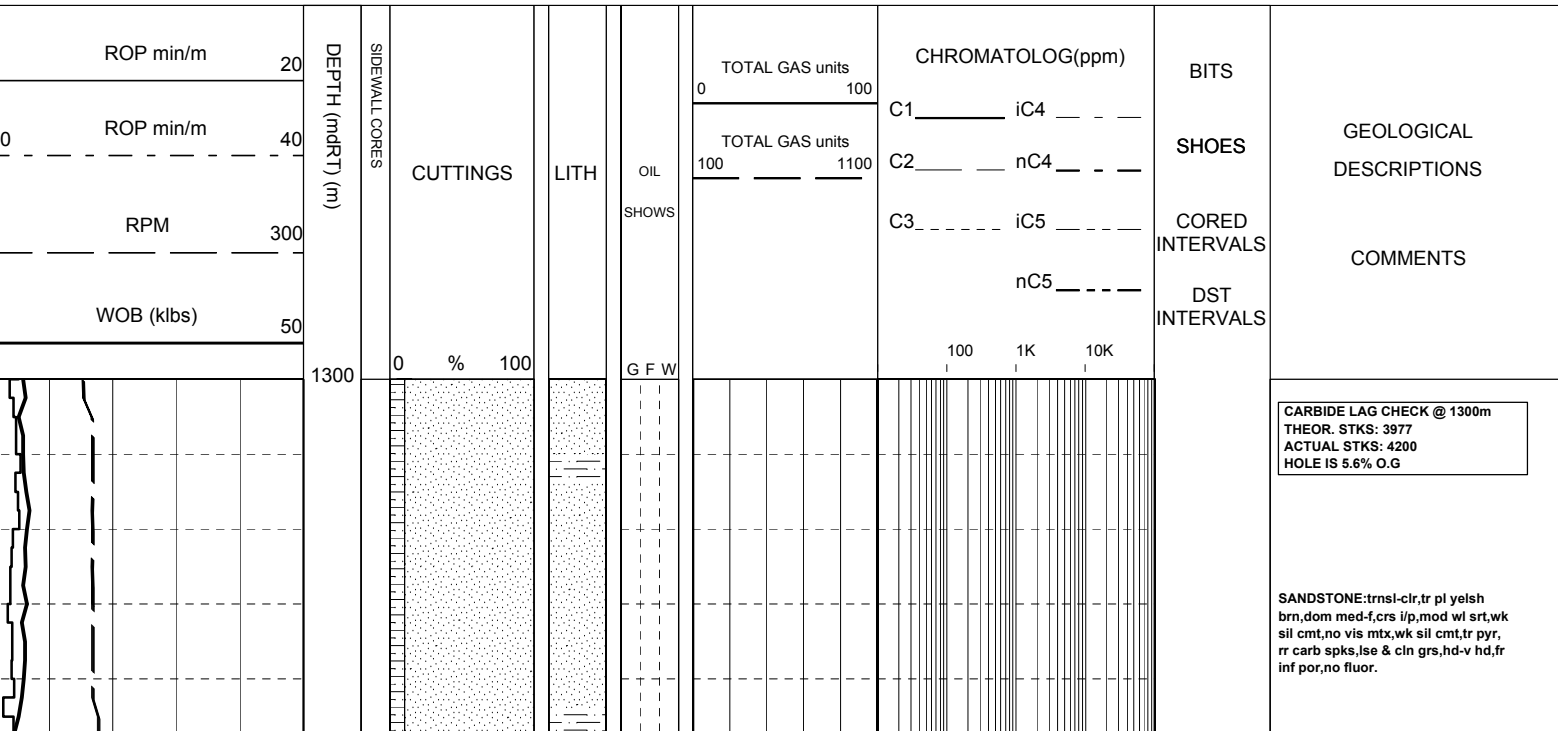
#### ABBREVIATIONS

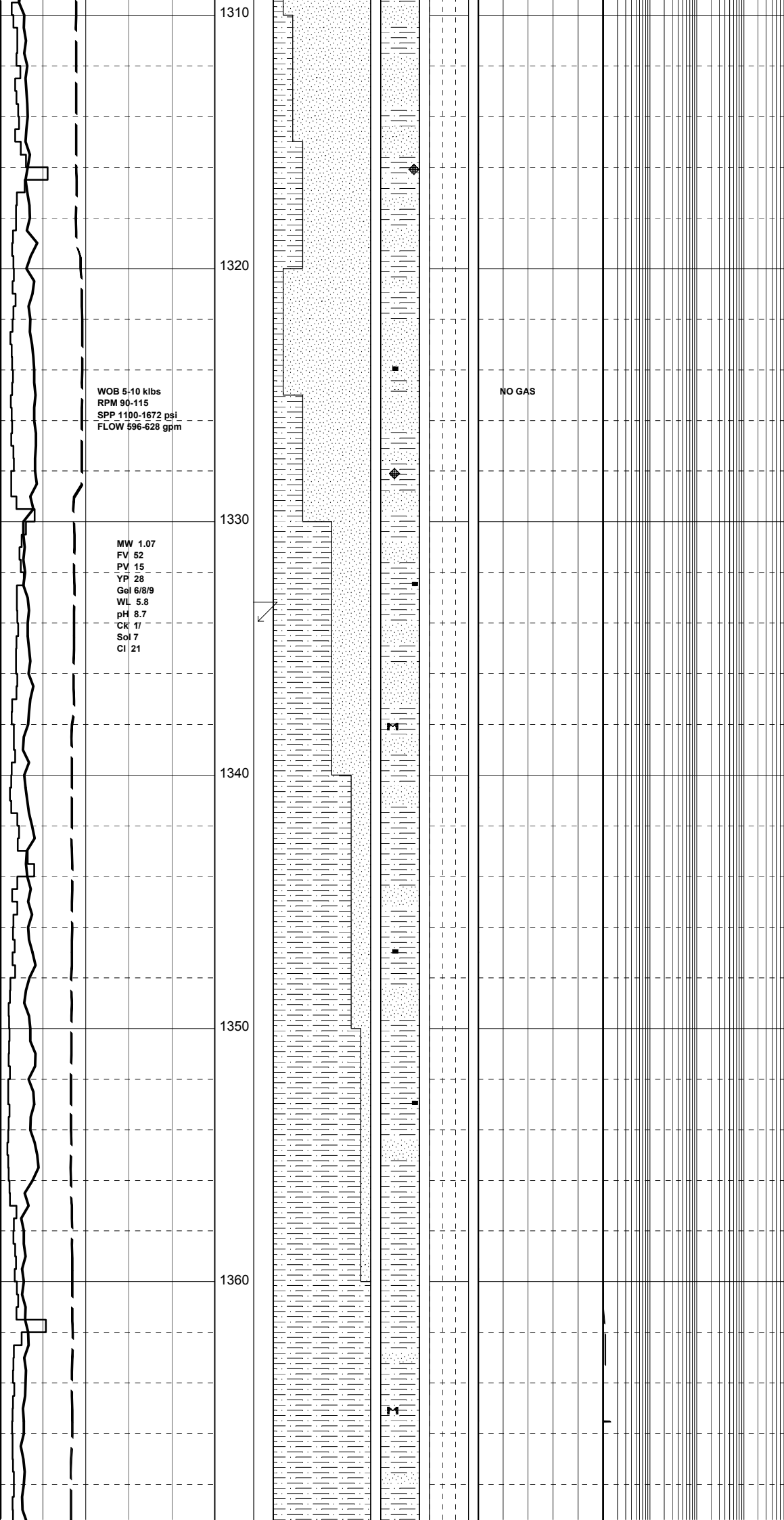
NB NEW BIT	DS DIRECTIONAL SURVEY
NCB NEW CORE BIT	WT WIPER TRIP
RRB RE-RUN BIT	POOH PULL OUT OF HOLE
CS CASING SHOE	RIH RUN IN HOLE
SWC SIDE WALL CORE	AZI AZIMUTH
EL ELECTRIC LOG	INCL INCLINATION
WOB WEIGHT ON BIT	LCM LOST CIRCULATION MATERIAL
RPM REVOLUTIONS/MINUTE	DC DEPTH CORRECTION
SPP STAND PIPE PRESSURE	DST DRILL STEM TEST
SPM STROKES/MINUTE	RMG REAMING
CR CIRCULATED RETURNS	ML MUD LOSSES
PR POOR RETURNS	FR FLOW RATE
NR NO RETURNS	FC FLOW CHECK
TG TRIP GAS	BR BIT RUN
CG CONNECTION GAS	MMCFD Million Cubic Feet/Day
WTG WIPER TRIP GAS	U UNITS OF GAS
SG SWAB GAS	FLUOR FLUORESCENCE

#### MUD DATA

MW MUD WEIGHT	sg(kg/l)
MG MUD GRADIENT	KPA/mt
FV FLUID VISCOSITY	sec
PV PLASTIC VISCOSITY	Cp
YP YIELD POINT	lb/cf2
Gel GEL STRENGTH	lb/cf2
pH ACIDITY	
F FILTRATE	cm3/30
Ck CAKE THICKNESS	cm/32
S SALINITY	kg/m3
SD SAND CONTENT	%
O OIL CONTENT	%
WL WATER LOSS	cm3/30
Sol SOLIDS CONTENT	%
Cl CHLORIDES	
KCl POTASSIUM CHLORIDE	mg/l
Ca CALCIUM CONTENT	

CLAYSTONE	MEDIUM SST	LIMESTONE	GYPSUM	TUFF	FERRUGINOUS	CALCAREOUS	GLAUCONITE	MICROFOSSILS
SILTSTONE	FINE SANDSTONE	DOLOMITIC LIMES	HALITE	VOLCANIC ROCK	FORAMINIFERA	DOLOMITIC	MICACEOUS	FOSSILS
CONGLOMERATE	VF SANDSTONE	DOLOMITE	CEMENT	IGNEOUS ROCK	BRYOZOA	CARBONACEOUS	PYRITE	LITHICS
COARSE SST	BRECCIA	COAL	CALCARENITE	METAMORPHICS	FELDSPAR	CHERTY	BROKEN FOSSILS	SIDERITE





SILTSTONE:dk gry,grysh blk,occ med-dk gry,arg,sl calc,occ micmic,mnr dissem pyr,tr carb spks,dom sft-v sft,occ frm-mod hd,sbbiky-blky.

SANDSTONE:trnsi-clr,frstd-opq, med-crs,occ f,rr v crs,sbang-ang,occ sbrnd,wk sil cmt,tr pl-dk gry arg mtz occ carb frags,mnr nod pyr,rr mic flks, gen cln & lse,fr-gd por,no fluor.

SURVEY @ 1334m: 0.00°

SILTSTONE:med-dk gry,dk gry,mnr grysh blk,dom arg,com loc aren,occ carb spks,mnr dissem pyr,v sft-sft, sbbiky-blky.

SILTSTONE:med gry,med-dk gry,arg, aren i/p,occ micmic,tr carb spks,tr glauc,v sft-disp,amorph-sbbiky.

SILTSTONE:med gry,med-dk gry,arg, aren i/p,occ micmic,tr carb spks,tr glauc,v sft-disp,amorph-sbbiky.

SURVEY @ 1381m: 0.50°

SANDSTONE:trnsi-clr,frstd,opq-miky,i/p,med-crs,com v crs,occ f, sbang-sbrnd,occ ang,mod srt,tr wk sil cmt,tr nod pyr,carb frags cln & lse,gd inf por,no fluor.

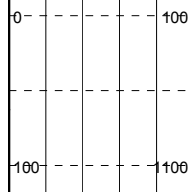
SILTSTONE:med-dk gry,med gry,grysh brn,arg,mnr-com carb spks, occ dissem pyr,tr glauc,sft,disp i/p,rr sbbiky-amorph

SILTSTONE:med-dk gry,grysh brn, arg,mnr-com carb spks,occ dissem pyr, tr glauc,sft,disp i/p,rr sbbiky-biky,com amorph.

SILTSTONE:med-dk gry,brnsh gry, arg,aren i/p,com nod & dissem pyr, occ glauc,carb spks,sft-frn,occ disp sbbiky-biky,amorph.

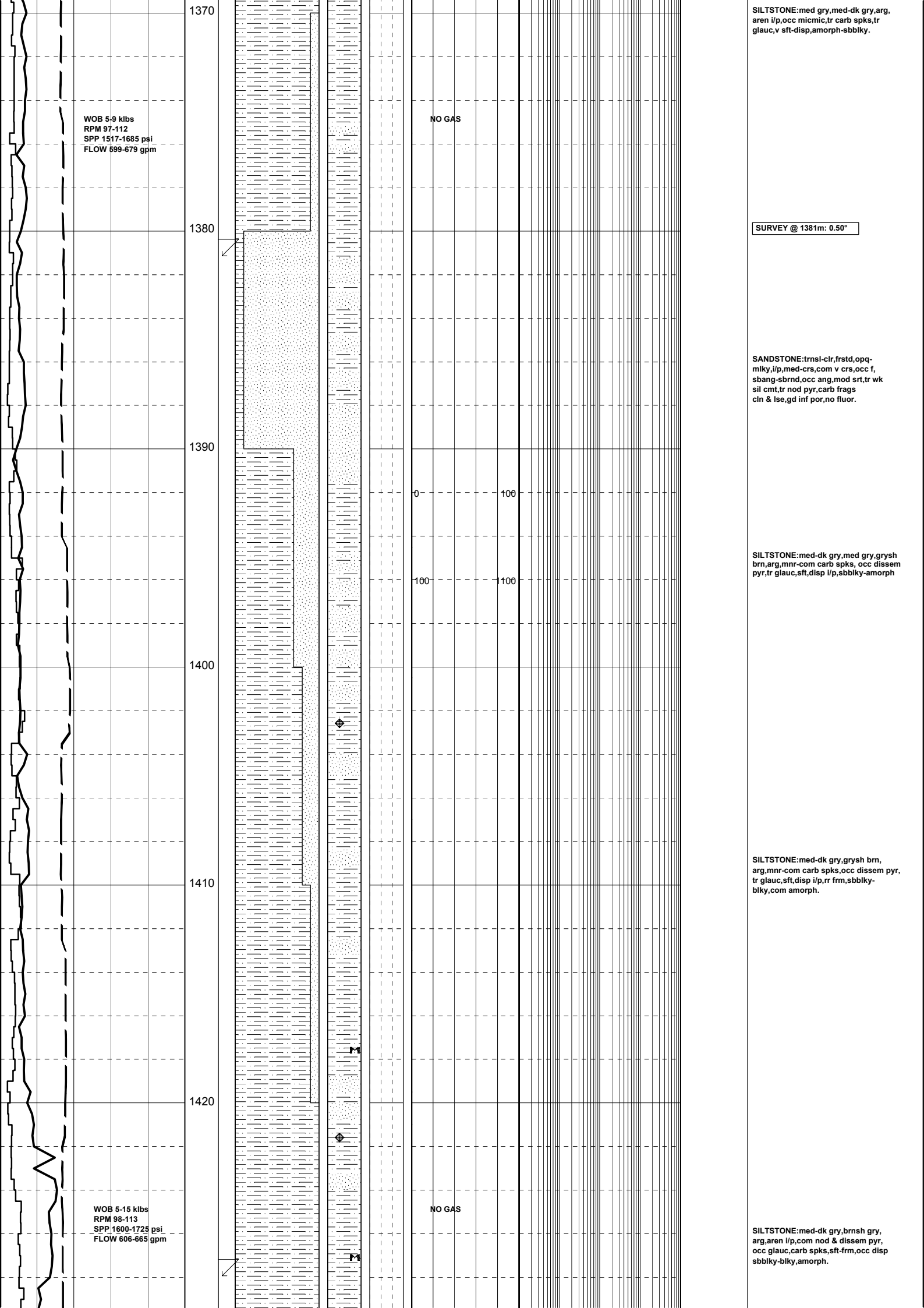
WOB 5-9 klbs  
RPM 97-112  
SPP 1517-1685 psi  
FLOW 599-679 gpm

NO GAS



WOB 5-15 klbs  
RPM 98-113  
SPP 1600-1725 psi  
FLOW 606-665 gpm

NO GAS



SURVEY @ 1428m: 0.50°

SILTSTONE: med-dk gry, brnsh gry, arg, aren i/p, com nod & dissem pyr, occ glauc, carb spks, sft frm, occ disp sbbiky-biky, amorph.

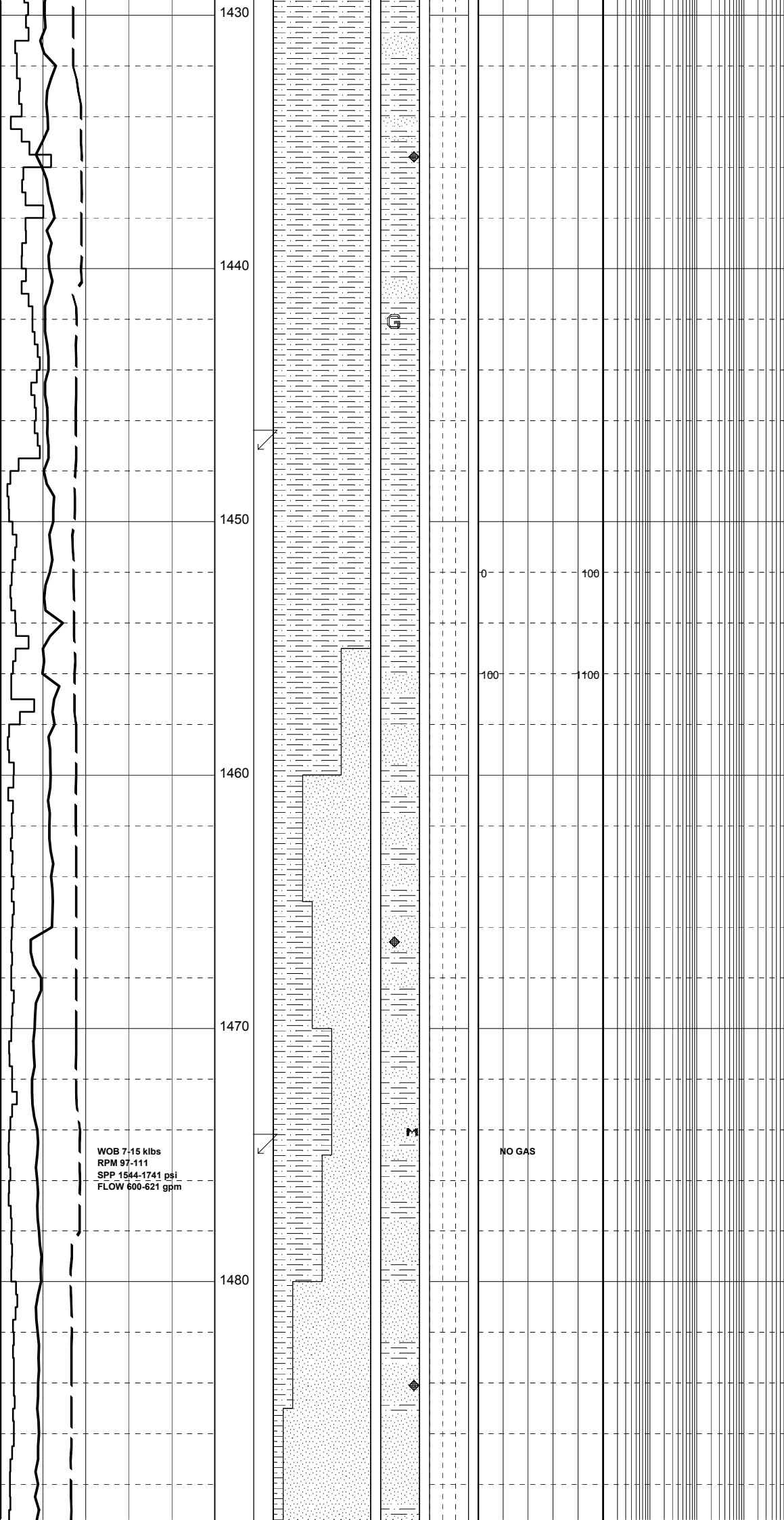
SURVEY @ 1447m: 0.00°

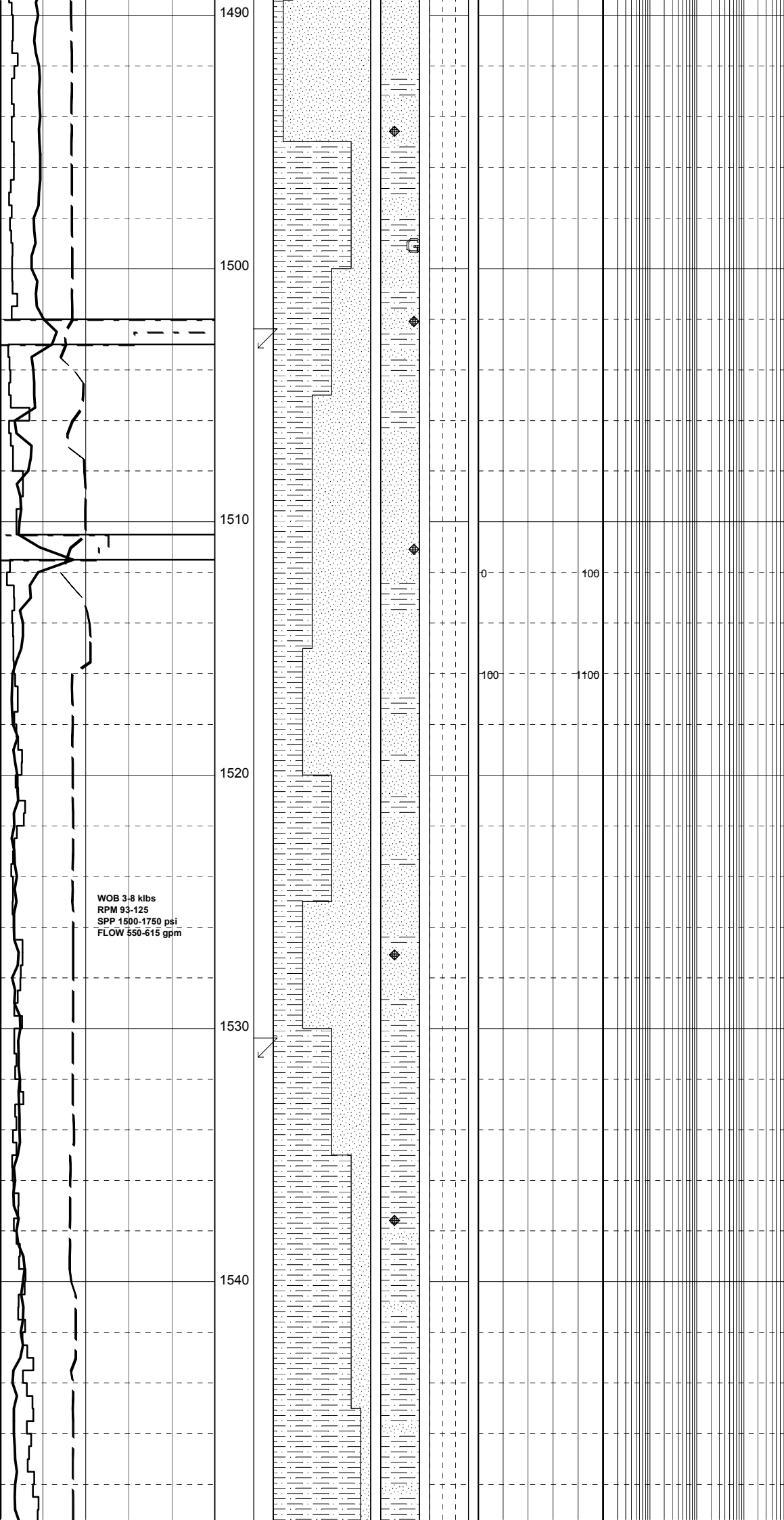
SANDSTONE: trnsl-clr, off wh-v pl gry, vf-crs, dom med-crs, pr srt, sbang-sbrnd, wk sil cmt, com loc pl gry-brn arg mtx, occ nod pyr, glauc, mnr carb spks & frags, dom clin & lse, loc fri-mod hd aggs, pr vis por, fr inf por, no fluor.

SILTSTONE: med-dk gry, grysh blk, dk gmsh gry, dom arg, aren i/p, com dissem pyr, occ micmic, nod pyr, sft frm, sbbiky-biky.

SURVEY @ 1475m: 0.00°

SANDSTONE: trnsl-clr, frstd, v pl gry, f-med, occ crs-v crs, mod srt, sbang-sbrnd, loc wk-mod sil cmt, loc pl gry arg mtx, grd to aren SLTST i/p, dom clin & lse grs, mnr-com nod pyr, occ mic, carb frags, rr mod hd aggs, pr vis por, fr-gd inf por, no fluor.





SILTSTONE: med-dk gry, grysh blk, dk grnsh gry, dom arg, aren i/p, com dissem pyr, occ micmic, nod pyr, sft-frm, sbbiky-blky.

SURVEY @ 1503m: 0.00°

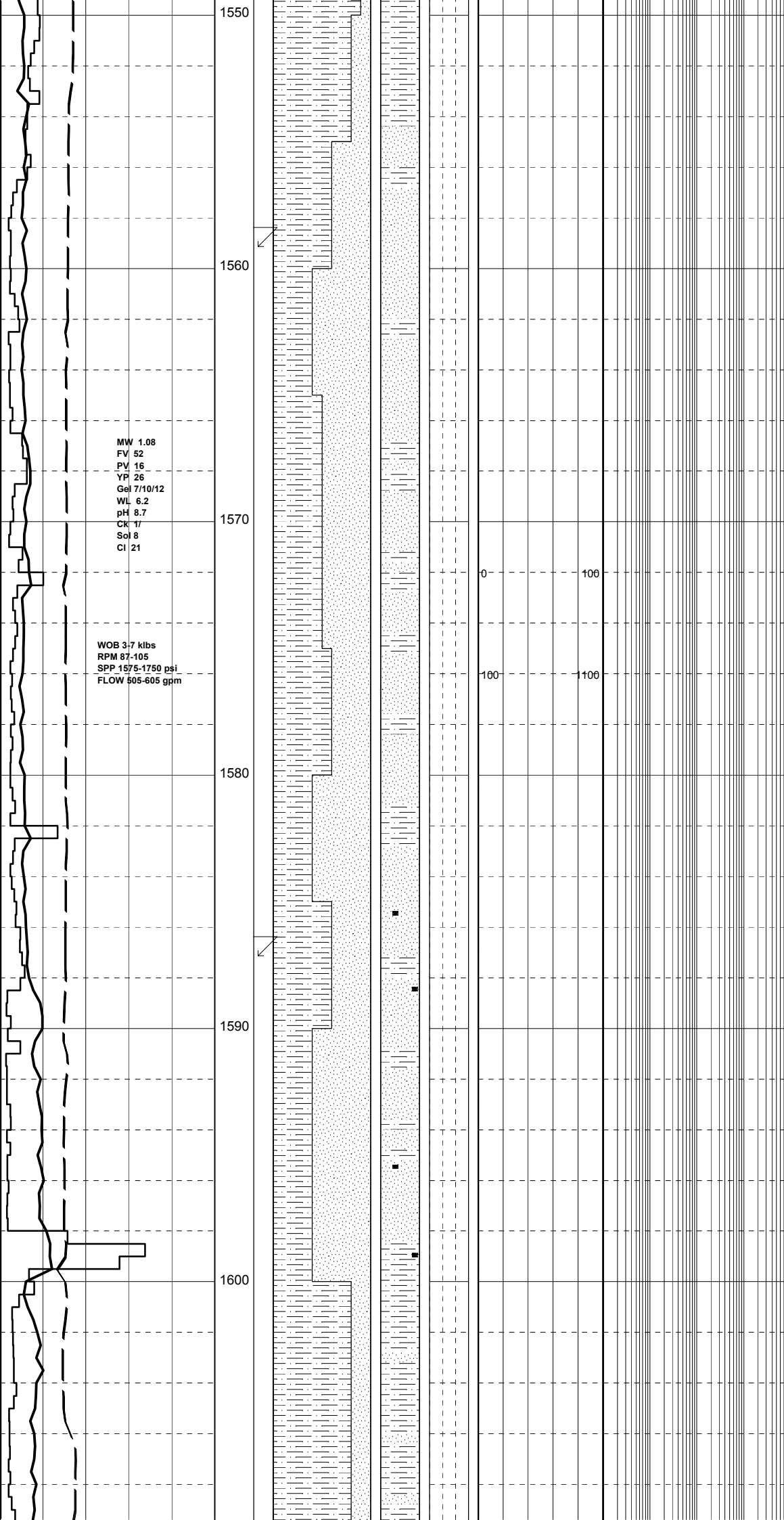
SILTSTONE: med-dk brn, brnsh gry, occ lt gry, dom arg, com aren, slii calc grd to vf SST i/p, com dissem pyr, occ glauc, dom frm-mod hd, sbbiky-blky.

SANDSTONE: trnsi-clr, frstd, f-med, occ crs, mod srt, sbang-sbrnd, tr wk calc cmt, loc wk-mod sil cmt, tr pl brn-gry arg mtx, com dissem pyr, occ carb spks & frags, tr pl yel, dom lse & cln, occ mod hd-hd aggs, pr vis por pr-fr inf por, no fluor.

SILTSTONE: lt-med gry, dk gry, grysh blk, aren, com arg, com dissem pyr, occ micmic, tr calc mat, dom frm-mod hd, sft i/p, sbbiky-blky.

SURVEY @ 1531m: 0.00°

SILTSTONE: med gry-dk gry, tr lt gry, grysh blk, aren, tr arg, com w/dissem pyr, pred sft-mod hd, tr frm, sbbiky-blky



SANDSTONE:trnsi,clr,frstd,tr pl yel,  
pred med-crs grs,mnr f grs,mod wl srt,  
pred sbrnd,tr sbang-sbrnd,wk sil cmt,  
no vis mtx,com disse pyr,tr carb spks,  
rr mic,lse & cln grs,hd-v hd,  
fr inf por, no fluor.

SURVEY @ 1559m: 0.00°

SANDSTONE:trnsi-trnsp,clr,frstd,pred  
med-f grs,mnr crs grs,mod wl srt,  
sbang-sbrnd,wk sil cmt,no vis mtx,tr pyr,  
com w/disse carb spks,rr mic,lse & cln grs,  
hd-v hd,fr inf por,no fluor.

SURVEY @ 1587m: 0.00°

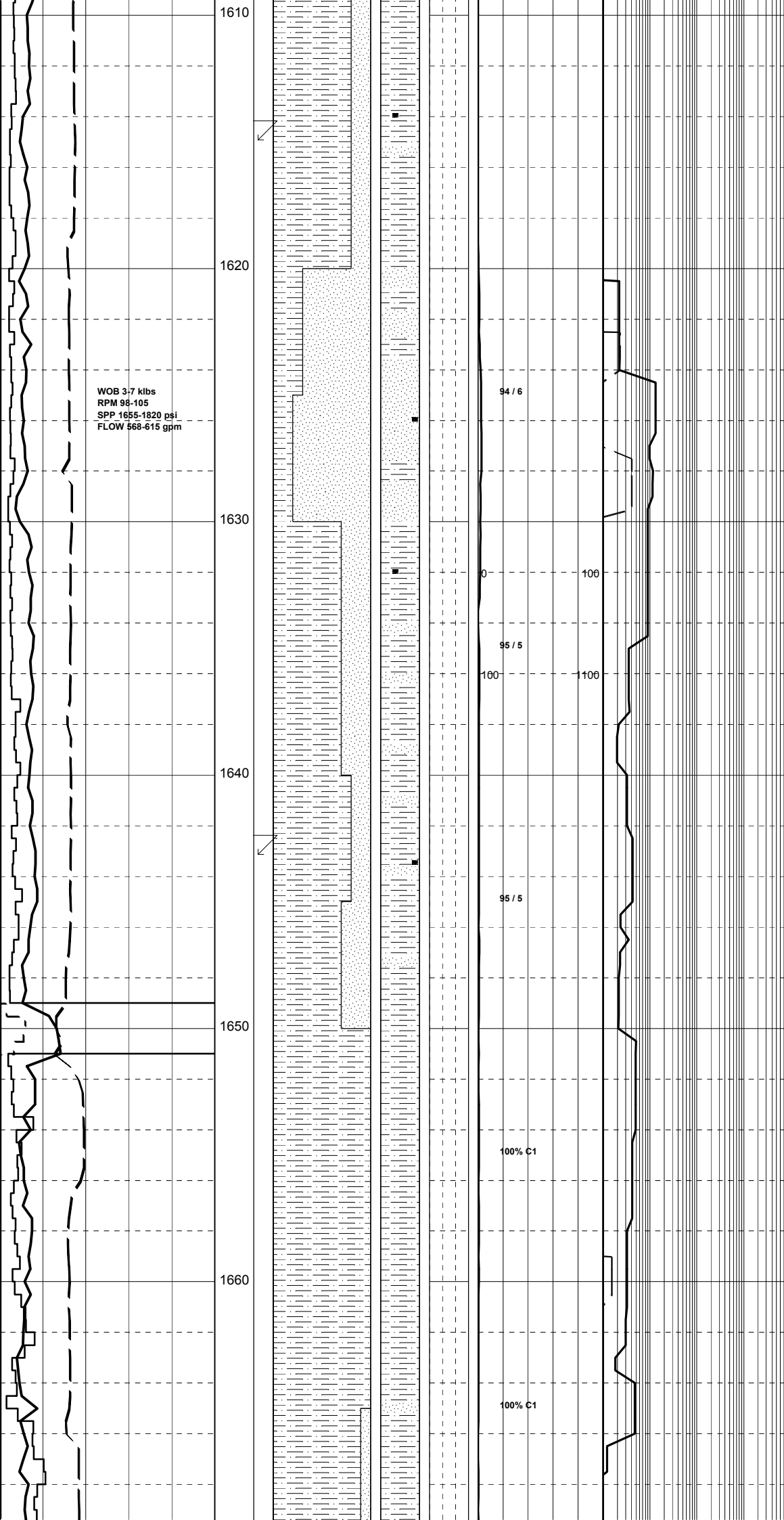
SILTSTONE:med gry-dk gry,dk olv gry,  
grysh blk,aren,tr pyr,com carb spks,sft-frm,  
mod hd i/p,pred sbblk, sbfiss-fiss i/p,  
amorph.

SANDSTONE:trnsi,clr,frstd,tr pl yel,med-  
crs grs,f grs i/p,moe wl srt,sbang-sbrnd,  
pred sbrnd,wk sil cmt,no vis mtx,tr pyr,  
com carb spks,lse & cln,hd-v hd,fr inf por,  
no fluor.

CARBIDE LAG CHECK @ 1600m  
THEOR. STKS: 4846  
ACTUAL STKS: 4950  
HOLE IS 2.1% O.G

MW 1.08  
FV 52  
PV 16  
YP 26  
Gel 7/10/12  
WL 6.2  
pH 8.7  
CK 17  
Sol 8  
CI 21

WOB 3-7 klbs  
RPM 87-105  
SPP 1575-1750 psi  
FLOW 505-605 gpm



SILTSTONE: pred med gry-dk gry, grysh blk, mnr lt gry, aren, mnr arg, com carb spks, tr pyr, pred frm-mod hd, loc sft-disp, sbblky-sbfiss.

SURVEY @ 1615m: 0.00°

SANDSTONE: trnsi, cir, rr pl yelsh wh, pred med grs, f grs i/p, mod wl srt, sbrnd, occ sbang-sbrnd, wk sil cmt, no vis mt, tr pyr, mnr carb spks, lse & cin grs, mod hd-v hd, fr inf por, no fluor.

SILTSTONE: lt gry, lt brnsh gry, med gry i/p, aren, occ arg, micmic, com blk carb spks & microlans, sft-frm, mnr mod hd, sbblky-sbfiss, mnr amorph.

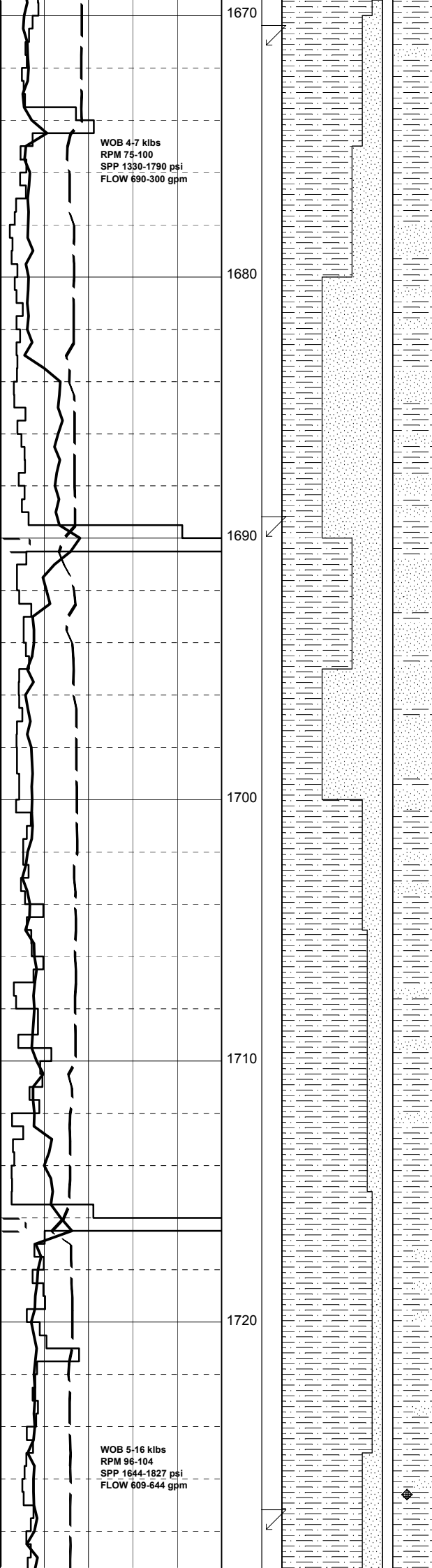
SANDSTONE: frstd, trnsi, mnr cir, mlky i/p, v crs-crs, tr med, incr v f grs, mod wl srt, sbang-sbrnd, com ang frac v crs grs, occ grd to aren SLTST i/p, tr-loc med calc cmt, mnr sil cmt, wh-off wh arg mt, incr nod & dissem pyr, carb spks, lse crs & v crs grs, frm-mod hd vf-f aggs, fr-gd inf & vis por, no fluor.

SURVEY @ 1643m: 1/2°

SILTSTONE: 1) wh-v lt gry, v arg, calc, mnr carb spks, disp-v sft, amorph 2) med-lt gry, dk gry i/p, mnr arg, dom aren, grd to vf SST i/p, fritocc mod hd, sbblky-sbfiss, occ fiss i/p.

SILTSTONE: dom wh-v pl gry, med-med dk gry i/p, arg, aren i/p, tr micro carb spks, dispfrm i/p, amorph-blk, mnr sbblky-sbfiss.

SILTSTONE: med gry-lt brnsh gry, decr wh-v pl gry, grnsh gry, tr dk gry, arg, tr aren, micro carb spks, dom disp, v sft-sft, loc frm-mod hd i/p, amorph, sbblky-sbfiss i/p.



SURVEY @ 1671m: 1/2°

SILTSTONE: gen lt gry-lt grnsh gry, yelsh gry, wh, lt gry-med gry i/p, arg, occ aren, abdt carb spks, disp-sft, rr sft-frm, sbblky-blky, amorph.

SANDSTONE: clr, trnsl, rr pl yel-pl org, gen med-f grs, crs grs i/p, mod wl srt, sbang-sbrnd, tr v wl rnd, wk sil cmt, no vis mtx, tr arg mtx, com carb spks, lse & unconsol, mod hd-v hd, fr-gd in por, fr vis por, no fluor.

SURVEY @ 1690m: 0.0°

95 / 5

99 / 1

0

100

95 / 5

100

100

SANDSTONE: frstd, trnsl-clr, col, occ mlky, tr v pl gry, med-v crs grs, mod srt, pred sbang, com ang, v crs frac grs, sbrnd i/p, wk calc & sil cmt, tr off wh-pl gry arg mtx, mic flks, lse & pred cin, pr-loc fr por, no fluor.

96 / 4

SILTSTONE: lt gry-grysh blk, lt grnsh gry, col, arg, com carb spks, gen v sft-disp, rr frm, sbblky-sbfiss, amorph.

94 / 6

94 / 6

SANDSTONE: clr, trnsl, lt gry-col, pred med-f grs, rr crs grs, pred sbang, mnr sbang-sbrnd, wk sil cmt, no vis mtx, tr pyr, com carb spks, lse grs, hd-v hd, fr inf por, pr-fr vis por, no fluor.

SURVEY @ 1728m: 0.50°



MW 1.08  
FV 61  
PV 23  
YP 31  
Gel 9/13/15  
WL 5.5  
pH 8.7  
Ck 1/  
Sol 8  
Cl 22

WOB 5-12 klbs  
RPM 97-105  
SPP 1770-1850 psi  
FLOW 590-660 gpm

1730

1740

1750

1760

1770

1780

95 / 5

95 / 5

0

100

100

100

94 / 6

95 / 5

SILTSTONE: med-dk gry, lt gry, aren, arg i/p, occ carb spks & flks, mnr disseminated pyr, sft-disp, blk-amorph.

SANDSTONE: trnsi-clr, wh-lt gry, vf-f, wl srt, mnr wk calc cmt, abdt kaol mtx, rr lt brn liths, tr carb mat, pyr cmt, fri, occ mod hd, pr vis por, no fluor.

SURVEY @ 1756m: 0.50°

SILTSTONE: med-dk gry, grysh brn, lt gry, arg, mnr aren, rr glauc, micmic, tr carb spks, v sft-disp, dom amorph, blk i/p.

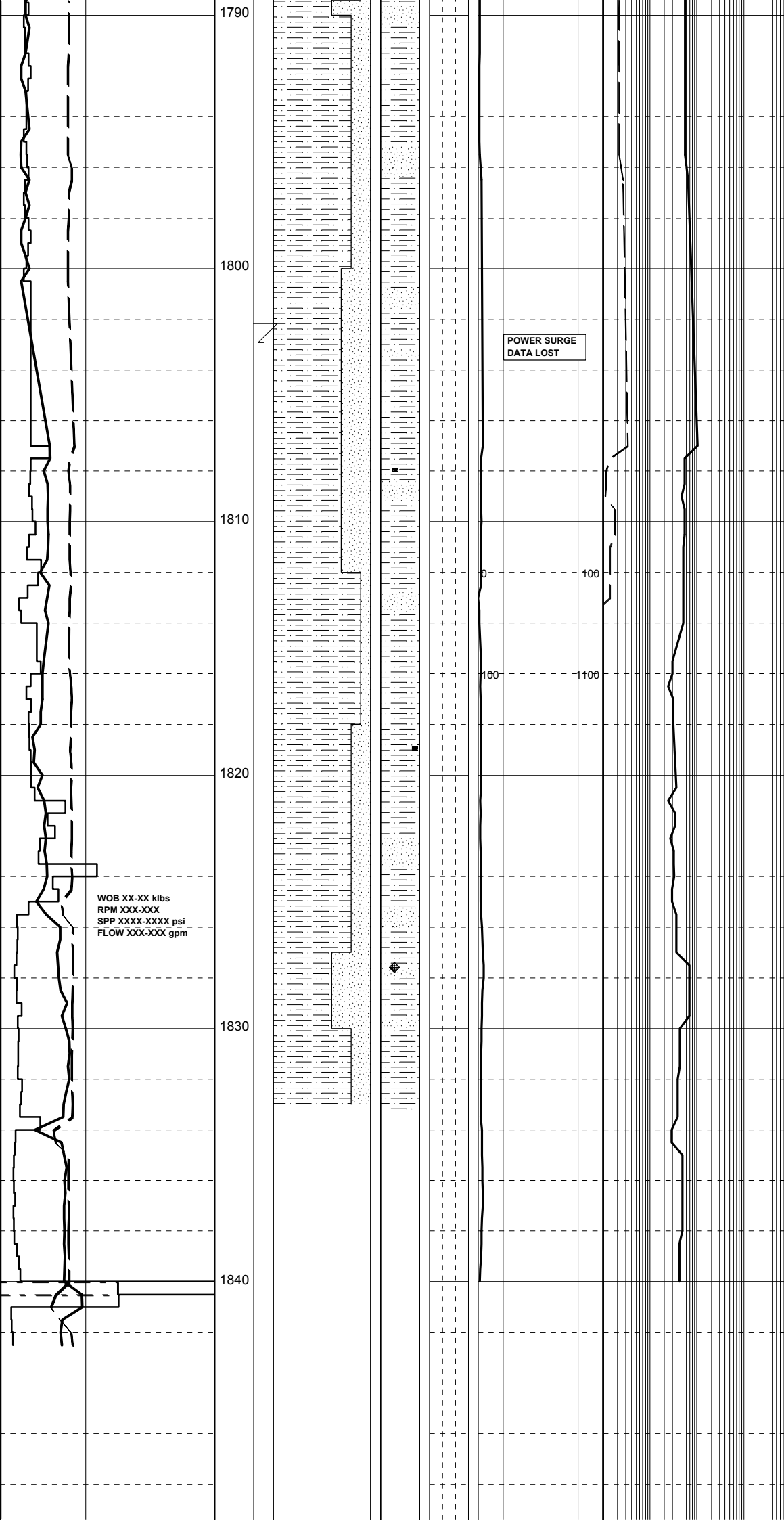
SANDSTONE: trnsi-clr, wh-off wh, v lt gry, vf-f, tr med, mod wl srt, sbang-sbrnd, loc abdt pl gry-brn arg mtx, tr kaol mtx, grd to aren SLTST i/p, tr glauc, carb spks, dom fri, rr mod hd, pr vis por, no fluor.

SILTSTONE: med-dk gry, grysh brn, lt gry, arg, mnr aren, rr glauc, micmic, tr carb spks, v sft-disp, dom amorph, blk i/p.

SURVEY @ 1784m: 0.50°

SANDSTONE: trnsi-clr, off wh-v pl gry, v f-f, wl srt, sbang-sbrnd, tr wk calc cmt, com-loc abdt pl gry off wh arg mtx, rr loc kaol mtx, occ carb spks, rr mod

pyr, tr glauc, dom tri, unconcs i/p, pr vis por, no fluor.



SURVEY @ 1803m: 0.50°

SANDSTONE: trnsi-clr, pl gry-off wh, vf-f, wl srt, tr wk calc cmt, abdt off wh-pl gry, arg mtx, rr carb spks, tr nod pyr, fri, pr vis por, no fluor.

SILTSTONE: lt-med gry, brnsh gry, lt gry i/p, arg, com loc aren, occ carb spks, sft-disp, sbbky-amorph.

SANDSTONE: trnsi-clr, pl gry-brn, off wh, vf-f, wl srt, tr sil cmt, abdt wh-off wh arg mtx, grd to aren SLTST i/p, mnr-com carb spks & micrlams, tr dk gm liths, fri, pr vis por, no fluor.

WOB XX-XX klbs  
RPM XXX-XXX  
SPP XXXX-XXXX psi  
FLOW XXX-XXX gpm