

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

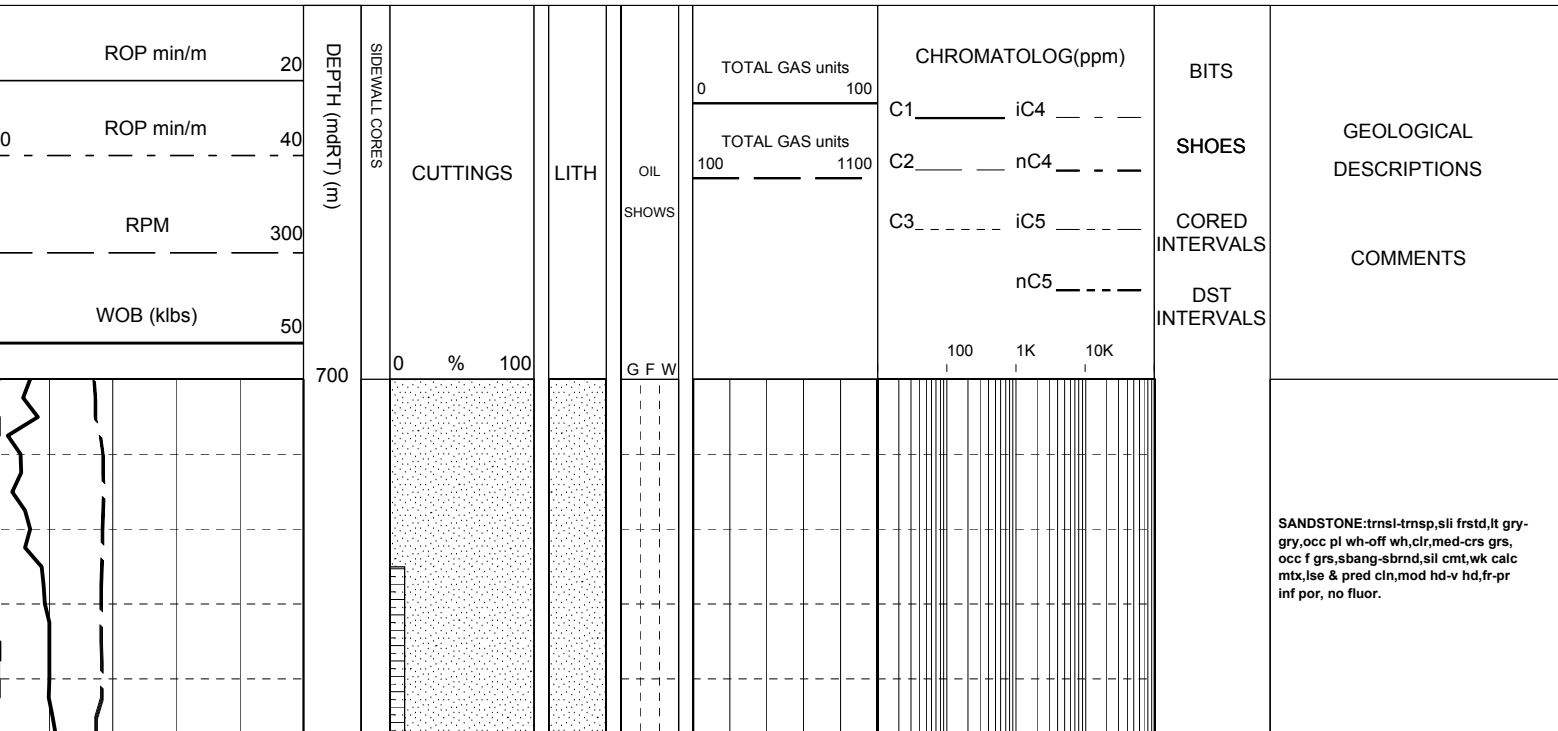
#### ABBREVIATIONS

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

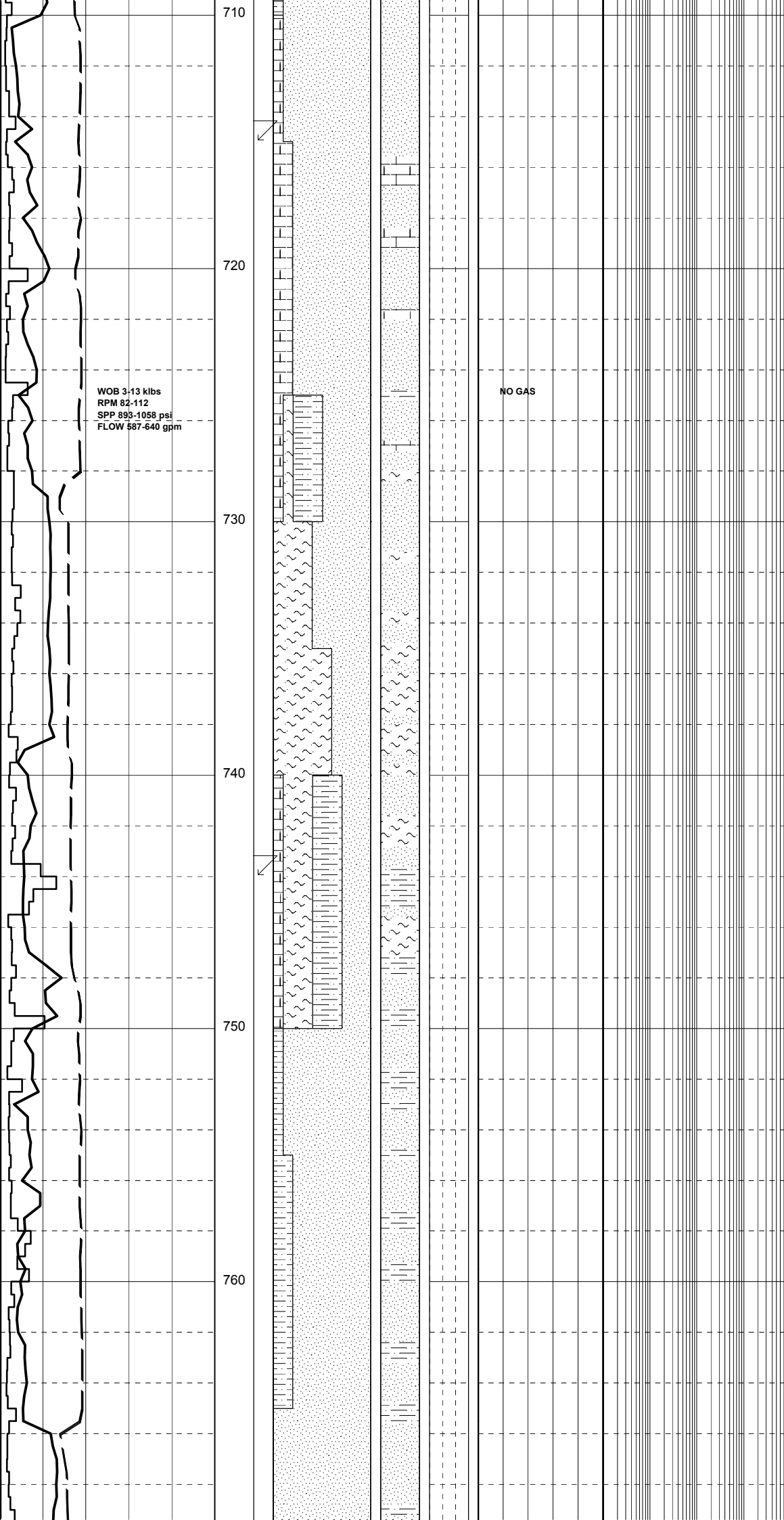
#### MUD DATA

- 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



SANDSTONE:trns1-trnsp,sli frstd,t gry-gry,occ pl wh-off wh,clr,med-crs grs, occ f grs,sbang-sbrnd,sil cmt,wk calc mtx,lse & pred cln,mod hd-v hd,fr-pr inf por, no fluor.



SURVEY @ 715.0m: 0.00°

LIMESTONE:mlky wh-dsky wh,lut,ool text, micrxln,sft-v sft,consol w arg mtrx.

WOB 3-13 klbs  
RPM 82-112  
SPP 893-1058 psi  
FLOW 587-640 gpm

NO GAS

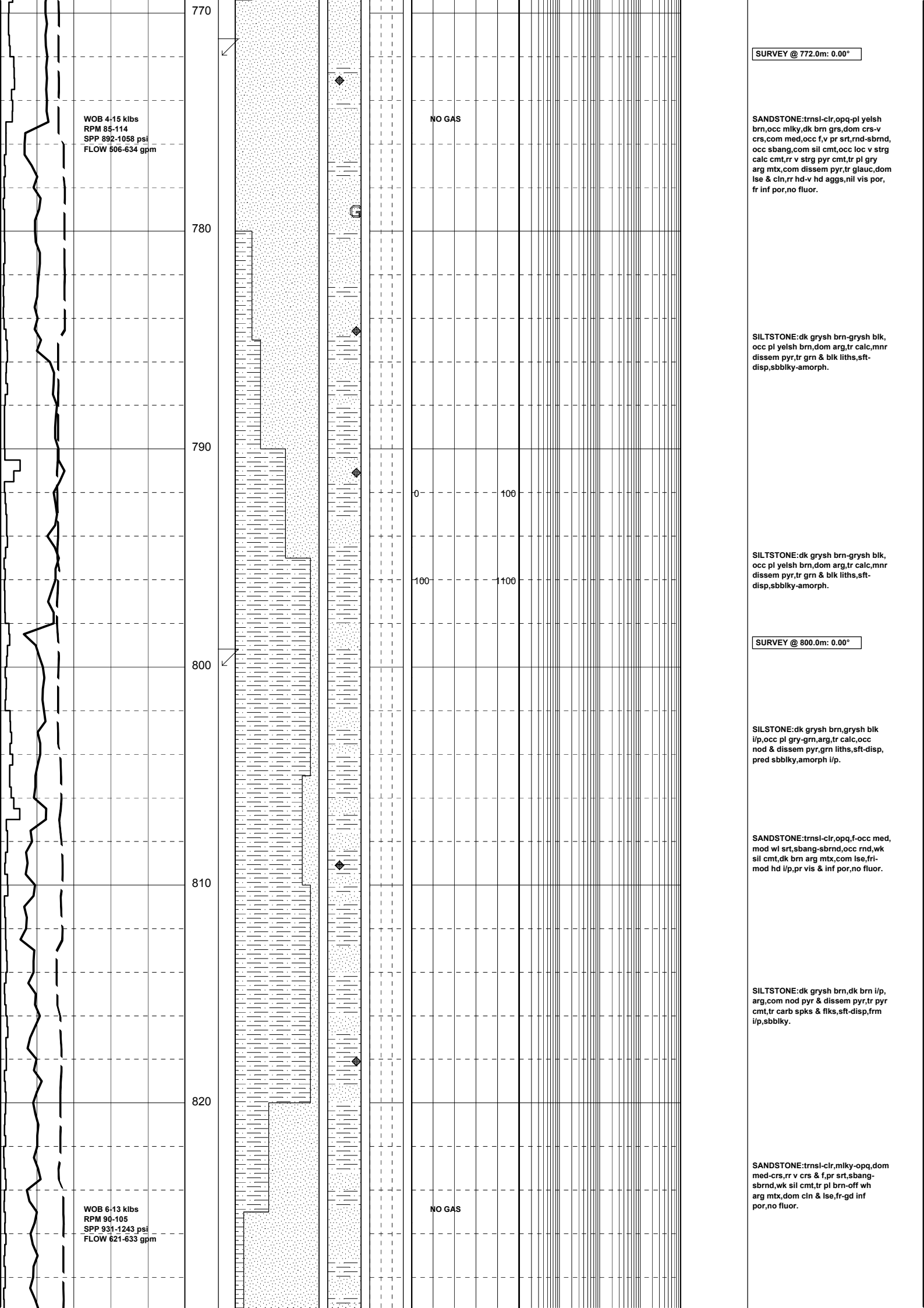
SANDSTONE:trnsi,clr,pl brn,occ pl wh-off wh,occ clr org grs of qtz,pred med-crs grs,occ f grs,sil cmt,mod calc mtx,lse & pred cln,mod hd-v hd,fr-p inf por, no fluor.

SANDSTONE:trnsi-clr,pl brn,occ wh-off wh,occ cln org grs of qtz,pred med-crs,occ f sil smt,mod calc cmt, tr arg mtx,gen lse & cln,mod hd-v hd,fr inf por,no fluor.

SURVEY @ 744.0m: 0.00°

SANDSTONE:trnsi-clr,opq-mod brn, dom med-crs,occ f,mod sil cmt,loc strg calc cmt,tr arg mtx,dom cln & lse,occ qtz grs w Fe stn,fr inf por, no fluor.

SANDSTONE:trnsi-clr,opq-mod brn, pred med-crs,occ v crs,tr f,sbrnd-rnd,rr ang,tr wk sil cmt,com loc calc cmt,tr off wh-wh arg mtx,tr calc mat,dissm pyr,fr-loc gd inf por,no fluor.



SURVEY @ 772.0m: 0.00°

SANDSTONE:trnsi-clr,opq-pl yelsh brn,occ mlky,dk brn grs,dom crs-v crs,com med,occ f,v pr srt,rnd-sbrnd, occ sbang,com sil cmt,occ loc v strg calc cmt,rr v strg pyr cmt,tr pl gry arg mtx,com dissem pyr,tr glauc,dom lse & clin,rr hd-v hd aggs,nil vis por, fr inf por,no fluor.

SILTSTONE:dk grysh brn-grysh blk, occ pl yelsh brn,dom arg,tr calc,mnr dissem pyr,tr grn & blk liths,sft-disp,sbbiky-amorph.

SILTSTONE:dk grysh brn-grysh blk, occ pl yelsh brn,dom arg,tr calc,mnr dissem pyr,tr grn & blk liths,sft-disp,sbbiky-amorph.

SURVEY @ 800.0m: 0.00°

SILTSTONE:dk grysh brn,grysh blk i/p,occ pl gry-grn,arg,tr calc,occ nod & dissem pyr,grn liths,sft-disp, pred sbbiky,amorph i/p.

SANDSTONE:trnsi-clr,opq,f-occ med, mod wl srt,sbang-sbrnd,occ rnd,wk sil cmt,dk brn arg mtx,com lse,frimod hd i/p,pr vis & inf por,no fluor.

SILTSTONE:dk grysh brn,dk brn i/p, arg,com nod pyr & dissem pyr,tr pyr cmt,tr carb spks & flks,sft-disp,frm i/p,sbbiky.

SANDSTONE:trnsi-clr,mlky-opq,dom med-crs,rr v crs & f,pr srt,sbang-sbrnd,wk sil cmt,tr pl brn-off wh arg mtx,dom clin & lse,fr-gd inf por,no fluor.

WOB 4-15 klbs  
RPM 85-114  
SPP 892-1058 psi  
FLOW 506-634 gpm

WOB 6-13 klbs  
RPM 90-105  
SPP 931-1243 psi  
FLOW 621-633 gpm

NO GAS

NO GAS

770

780

790

800

810

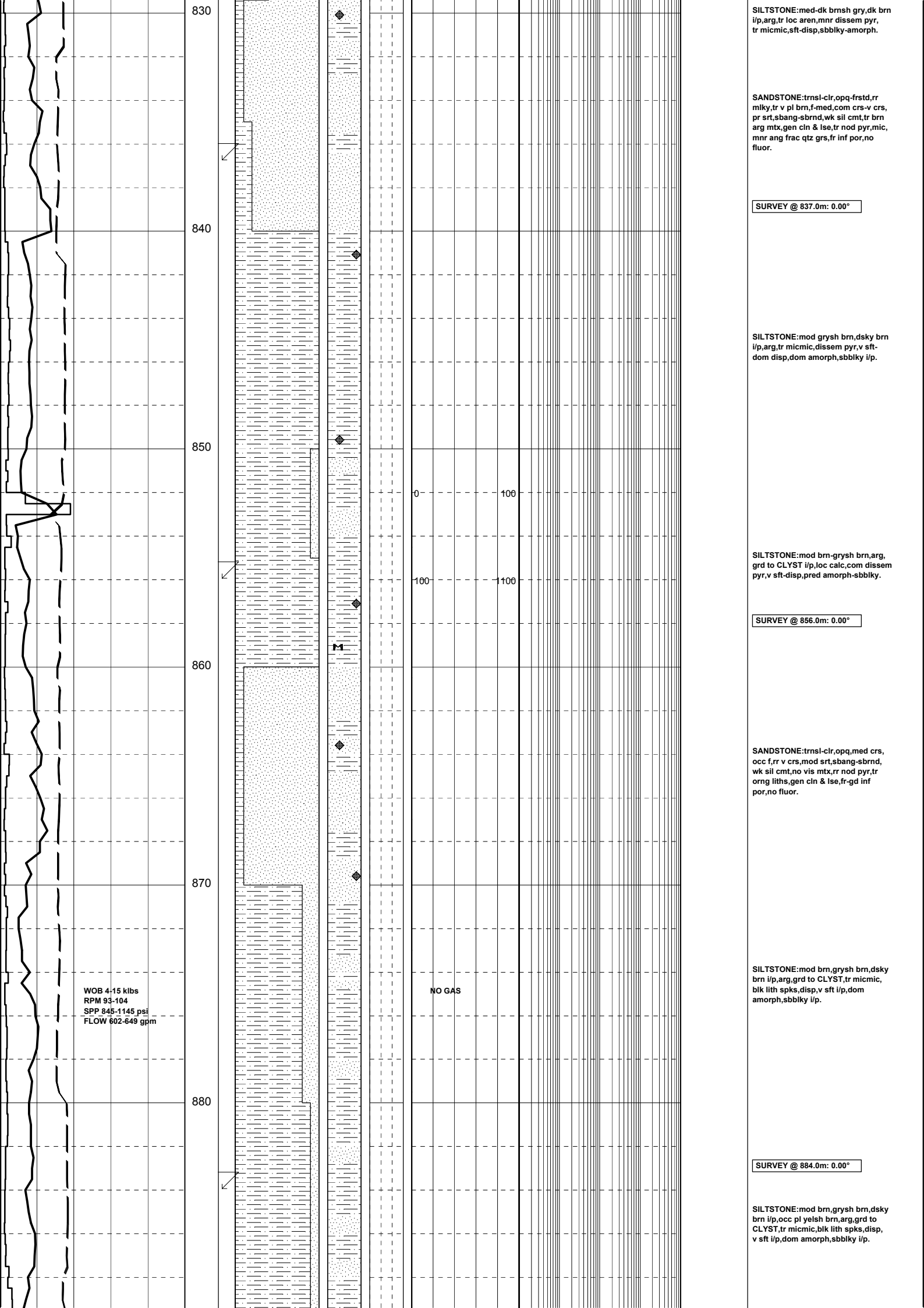
820

0

100

100

100



SILTSTONE: med-dk brnsh gry, dk brn i/p, arg, tr loc aren, mnr disse pyr, tr micmic, sft-disp, sbbkly-amorph.

SANDSTONE: trnsi-clr, opq-frstd, rr mlky, tr v pl brn, f-med, com crs-v crs, pr srt, sbang-sbrnd, wk sil cmt, tr brn arg mtb, gen cln & lse, tr nod pyr, mic, mnr ang frac qtz grs, fr inf por, no fluor.

SURVEY @ 837.0m: 0.00°

SILTSTONE: mod grysh brn, dsky brn i/p, arg, tr micmic, disse pyr, v sft-dom disp, dom amorph, sbbkly i/p.

SILTSTONE: mod brn-grysh brn, arg, grd to CLYST i/p, loc calc, com disse pyr, v sft-disp, pred amorph-sbbkly.

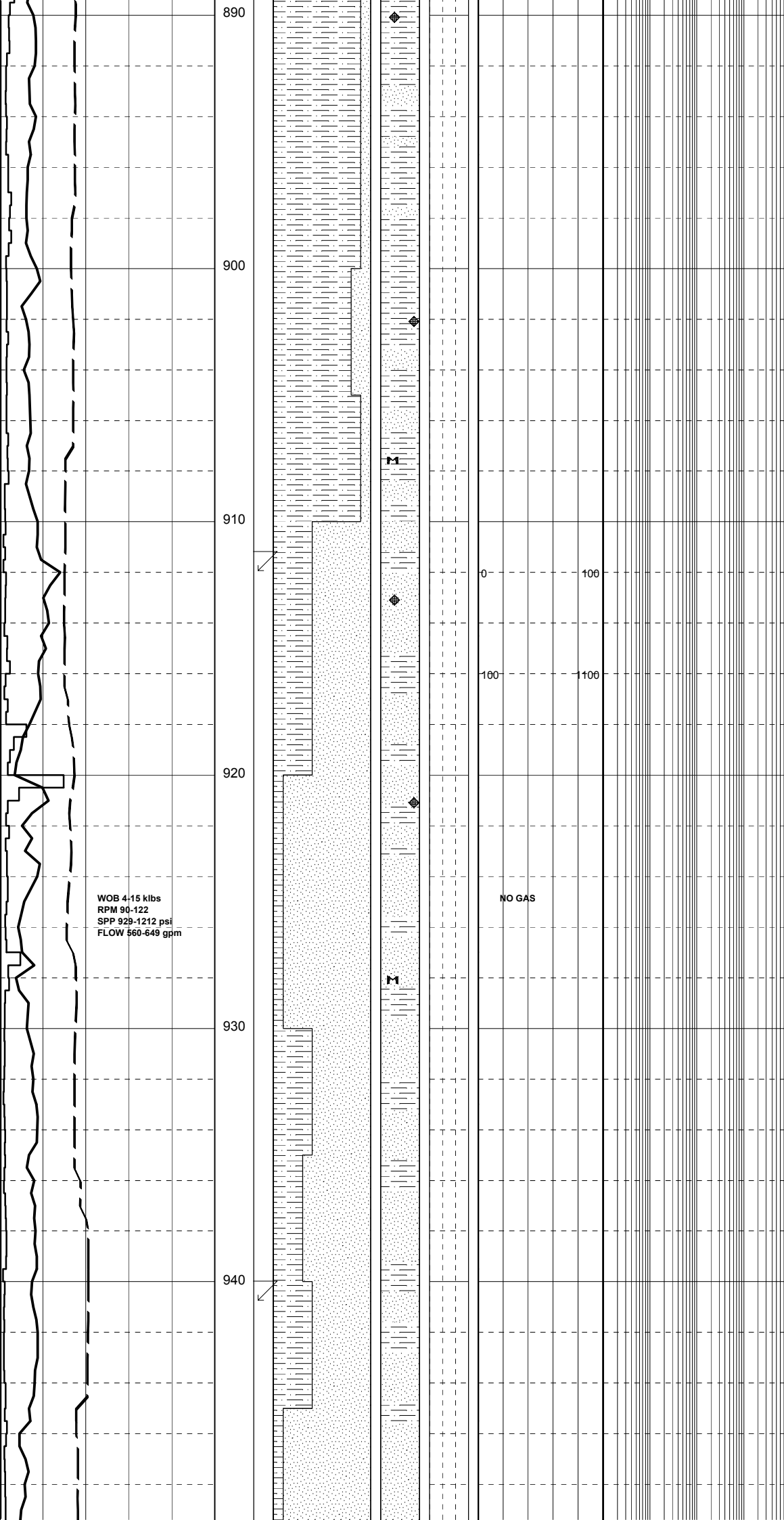
SURVEY @ 856.0m: 0.00°

SANDSTONE: trnsi-clr, opq, med crs, occ f, rr v crs, mod srt, sbang-sbrnd, wk sil cmt, no vis mtb, rr nod pyr, tr org liths, gen cln & lse, fr-gd inf por, no fluor.

SILTSTONE: mod brn, grysh brn, dsky brn i/p, arg, grd to CLYST, tr micmic, blk lith spks, disp, v sft i/p, dom amorph, sbbkly i/p.

SURVEY @ 884.0m: 0.00°

SILTSTONE: mod brn, grysh brn, dsky brn i/p, occ pl yelsh brn, arg, grd to CLYST, tr micmic, blk lith spks, disp, v sft i/p, dom amorph, sbbkly i/p.



SANDSTONE:trnsi-clr,pl gry i/p,  
dom f-med,tr crs,mod srt,sbang-  
sbrnd,wk-mod loc calc cmt,tr sil  
cmt,no vis mtx,tr nod pyr,crm &  
blk liths,rr org liths,dom lse &  
cln,rr fri aggs,pr vis & inf por,  
no fluor.

SILTSTONE:grysh brn-dsky brn,dk  
yelsh brn,com mic flks,rr dissem  
pyr,v sft-disp,amorph,rr sbbiky.

SURVEY @ 912.0m: 0.00°

SANDSTONE:trnsi-clr,opq-frstd,rr  
v pl brn,dom med-crs,occ f & v crs,  
pr srt,sbang-sbrnd,wk sil cmt,mnr-  
loc v strg pyr cmt,no vis mtx,dom  
lse & cln,occ nod pyr,rr mic flks,  
tr org & crm liths,fr-gd inf por,  
no fluor.

SILTSTONE:grysh brn,pl-dk yelsh,  
arg,com dissem pyr,sft-disp,frm i/p,  
sbbiky-amorph.

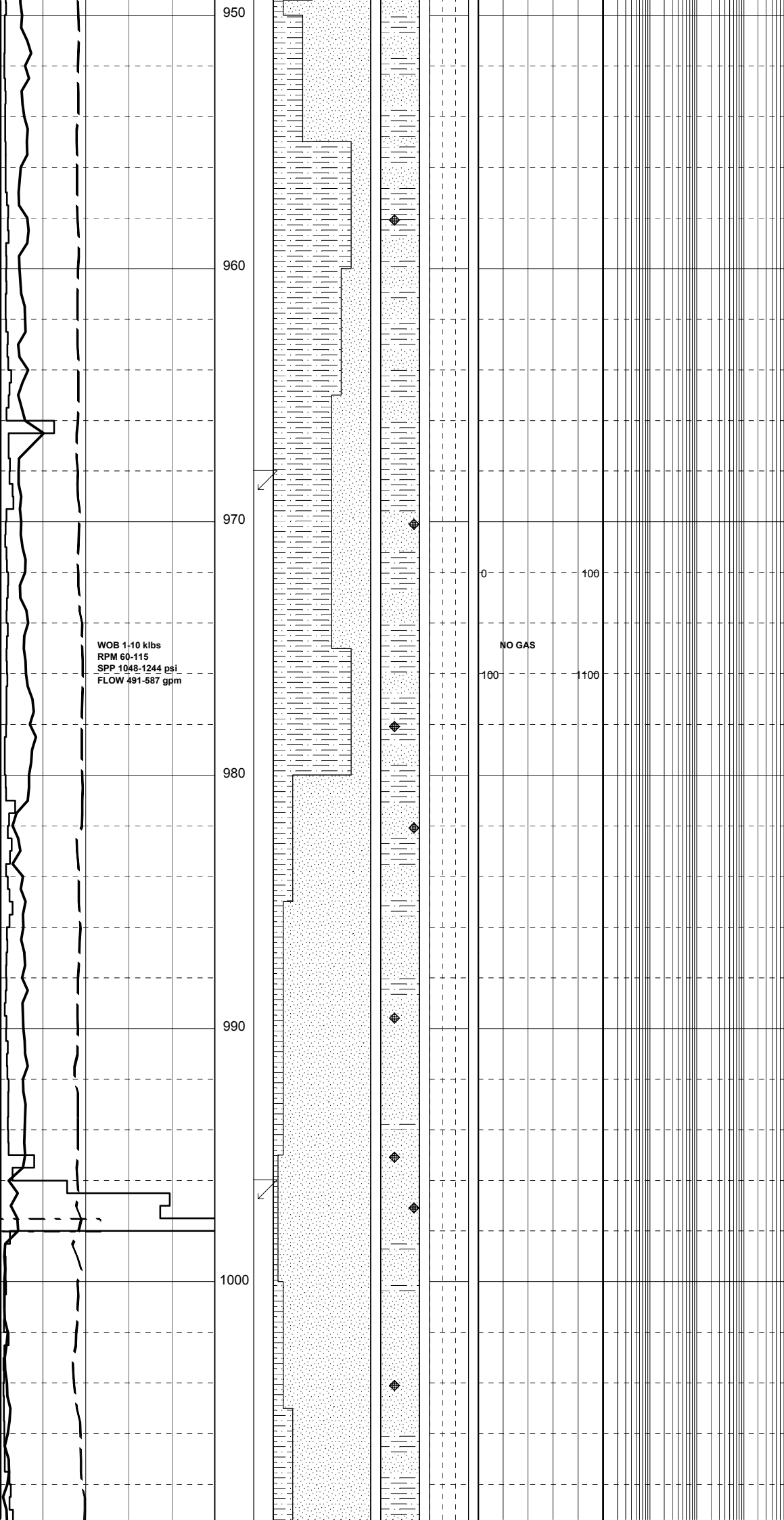
SANDSTONE:trnsi-clr,frstd-opq,v  
pl yel,med-crs,occ v crs,rr f,pr srt  
sbang-sbrnd,wk sil cmt,loc strg pyr  
cmt,tr pl brn arg mtx,com nod pyr,  
tr org liths,gen cln & lse,fr-gd  
inf por,no fluor.

SURVEY @ 941.0m: 0.00°

SILTSTONE:grysh brn,pl-dk yelsh,  
arg,com dissem pyr,sft-disp,frm i/p,  
sbbiky-amorph.

WOB 4-15 klbs  
RPM 90-122  
SPP 929-1212 psi  
FLOW 560-649 gpm

NO GAS



SILTSTONE:mod brn-grydh brn,dsky  
brn i/p,arg,grd to CLYST i/p,com  
dissem pyr,micmic,disp,rr v sft-sft,  
pred amorph,mnr sbbiky.

SANDSTONE:trnsi-clr,frstd-opq,v  
pl yel,med-crs,occ v crs,rr f,pr srt  
sbang-sbrnd,wk sil cmt,loc strg pyr  
cmt,tr pl brn arg mtx,com nod pyr,  
tr omg liths,gen cln & lse,fr-gd  
inf por,no fluor.

SURVEY @ 969.0m: 0.00°

SANDSTONE:trnsi-clr,mly-opq,dom  
med-crs,com f,rr v crs,sbang-sbrnd,  
tr wk sil cmt,rr loc pl yelsh brn  
arg mtx,com nod pyr,pred lse,rr fri  
aggs,pr vis por,fr inf por,no fluor.

SILTSTONE:pl-mod yelsh brn,occ  
dsky brn,grysh brn,arg,sli calc,  
com dissem pyr,rr micmic,mnr blk  
& dk brn liths,dom sft-disp,occ loc  
hd,sbbiky-blky,amorph i/p.

SANDSTONE:trnsi-clr,pl brn,frstd-  
miky i/p,pl yel i/p,dom cr crs-v crs,  
mnr med grs,pr-loc mod srt,sband-rnd,  
sbang,wk sil cmt,no vis mtx,nod pyr,  
gen lse & cln,fr-gd por,no fluor.

SURVEY @ 997.0m: 0.00°

SANDSTONE:trnsi-clr,pl brn,frstd-  
miky i/p,dom v crs-crs,mnr med,mod  
wl srt,sbrnd-rnd,sbang,wk sil cmt,  
no vis mtx,nod pyr,gen lse & cln,fr-  
gd por,no fluor.

WOB 1-10 klbs  
RPM 60-115  
SPP 1048-1244 psi  
FLOW 491-587 gpm

NO GAS

950

960

970

980

990

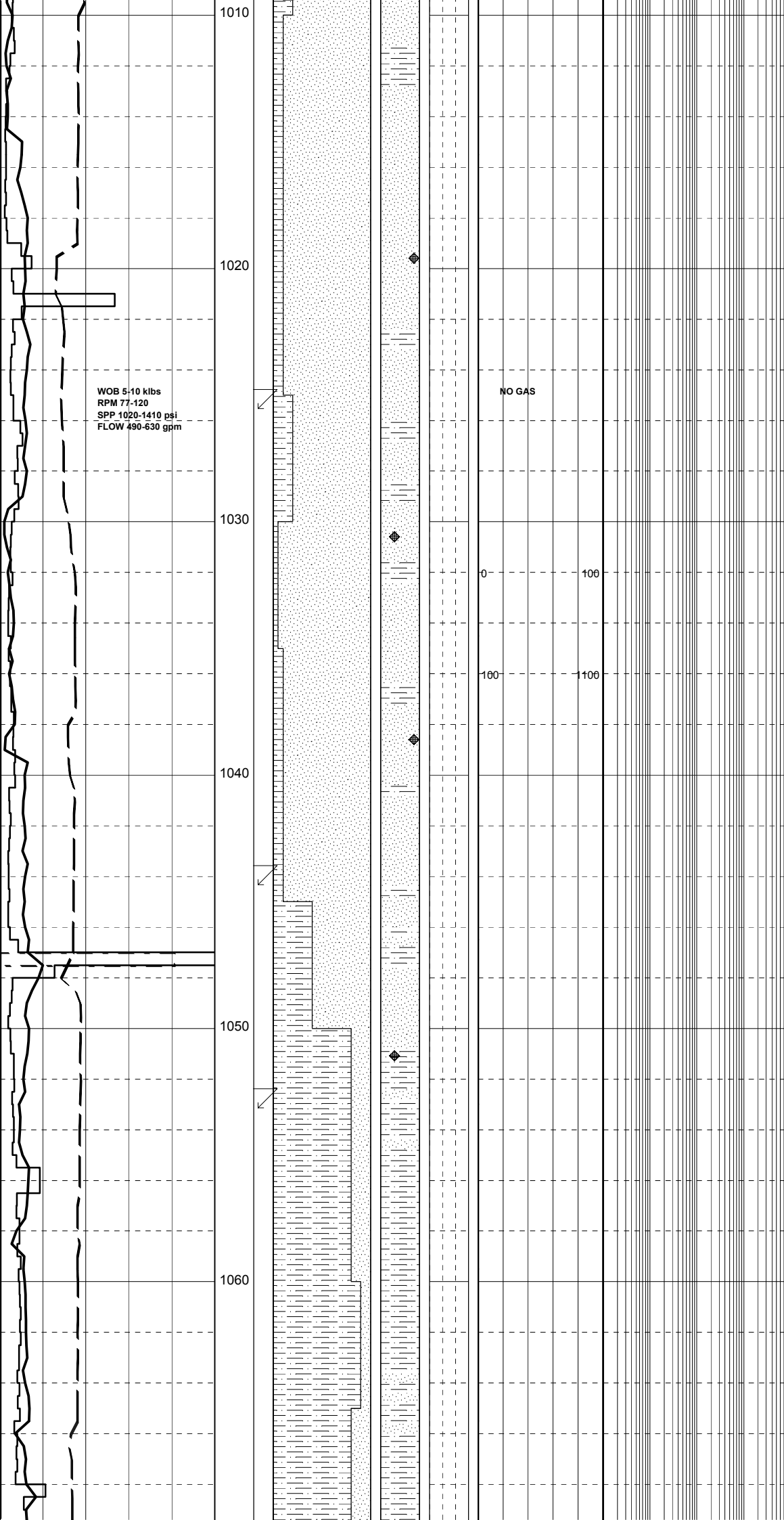
1000

0

100

100

100



SILTSTONE:pl-mod yelsh brn,occ grysh brn,arg.com lith spks,tr dissem pyr,v sft-disp,frm i/p, sbbiky-amorph i/p.

SANDSTONE:trnsi-clr,opq-frstd, dom med-crs,com v crs,sbang-sbrnd, rr ang,pr srt,wk sil cmt,tr nod pyr gen cln & lse,gd por,no fluor.

SURVEY @ 1025.0m: 0.00°

SILTSTONE:pl-dk yelsh brn,brnsh gry,arg.com nod & dissem pyr,tr blk micolams,pred sft-disp,loc frm-mod hd,sbbiky-blk,amorph i/p.

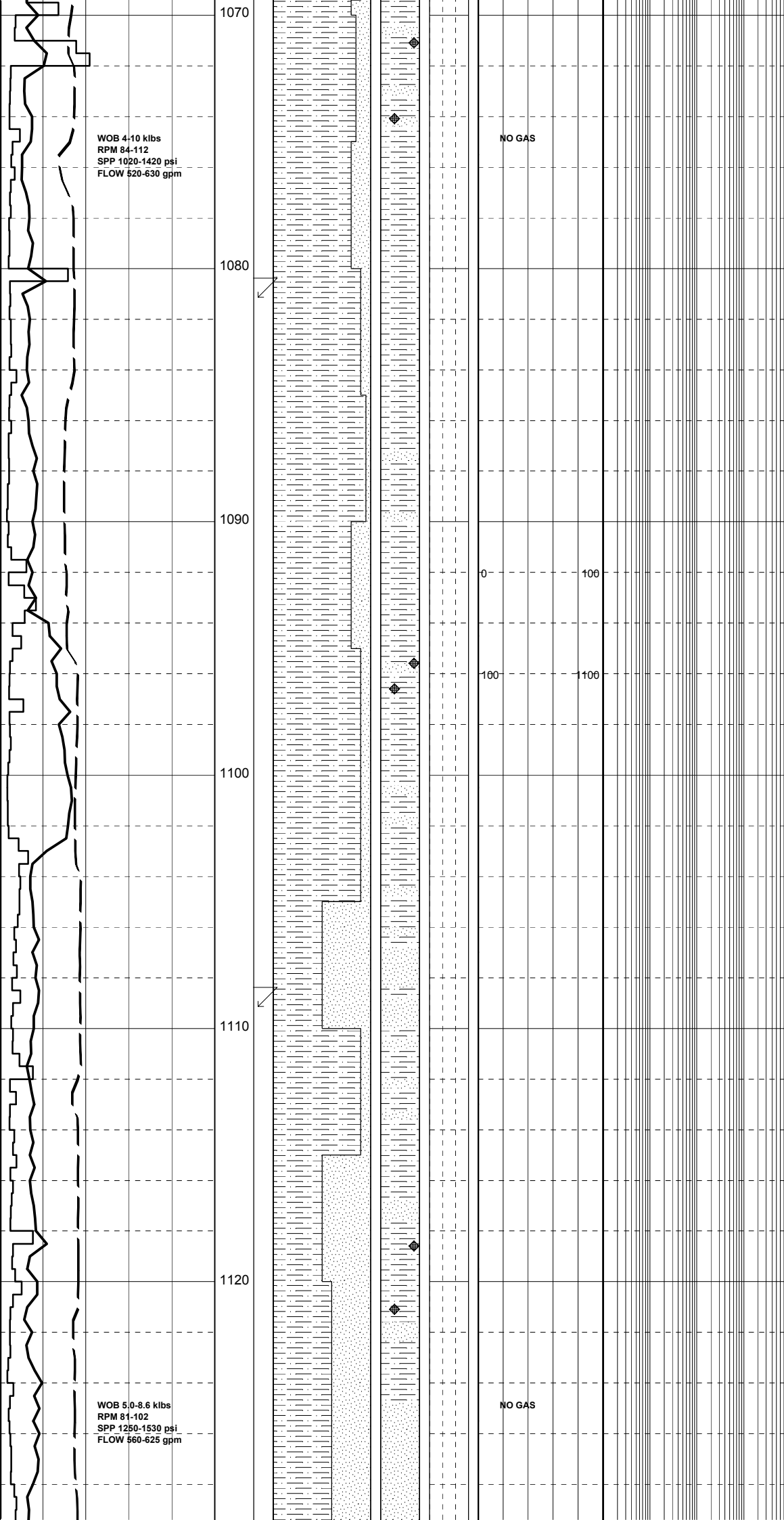
CARBIDE LAG CHECK @ 1037m  
THEOR. STKS: 3213  
ACTUAL STKS: 3428  
HOLE IS 6.0% O.G

TOTCO SURVEY @ 1044m: 0.00°

SILTSTONE:pl brnsh gry-med gry,grnsh gry, arg,com dissem pyr,disp-sft,pred sbbiky-sbfiss,rr blk,grd to CLYST, amorph

SURVEY @ 1053m: 0.00°

SILTSTONE:pl brnsh gry-lt olv gry,grnsh gry,arg.com dissem pyr,disp-sft,pred sbbiky-blky,rr sbfiss,grd to CLYST, amorph



SANDSTONE:trnsi-trnsp,frstd,dom med grs,  
l/p f grs,mod wl srt,sbang-sbrnd,strg  
sil cmt,no vis mtx,mod hd-v hd,pred lse  
& cin grs,fr inf por,no fluor.

SURVEY @ 1081m: 0.00°

SANDSTONE:trnsi-trnsp,rr opq,occ pl yel-  
lt org,dom med grs,rr f grs,mod wl srt,  
pred sbrnd,stg sil cmt,no vis mtx,tr pyr,  
lse & cin grs,mod hd-v hd,fr inf por,no  
fluor.

SURVEY @ 1109m: 0.00°

SILTSTONE:med gry-dk gry,lt olv gry,  
aren,tr pyr,dom mod hd-hd,rr sft,pred  
sbbky,rr sbfiss,grd to CLYST.

SANDSTONE:pl yel,trnsi,yelsh brn,sli  
frstd clr med-v crs mnr f pred crs grs



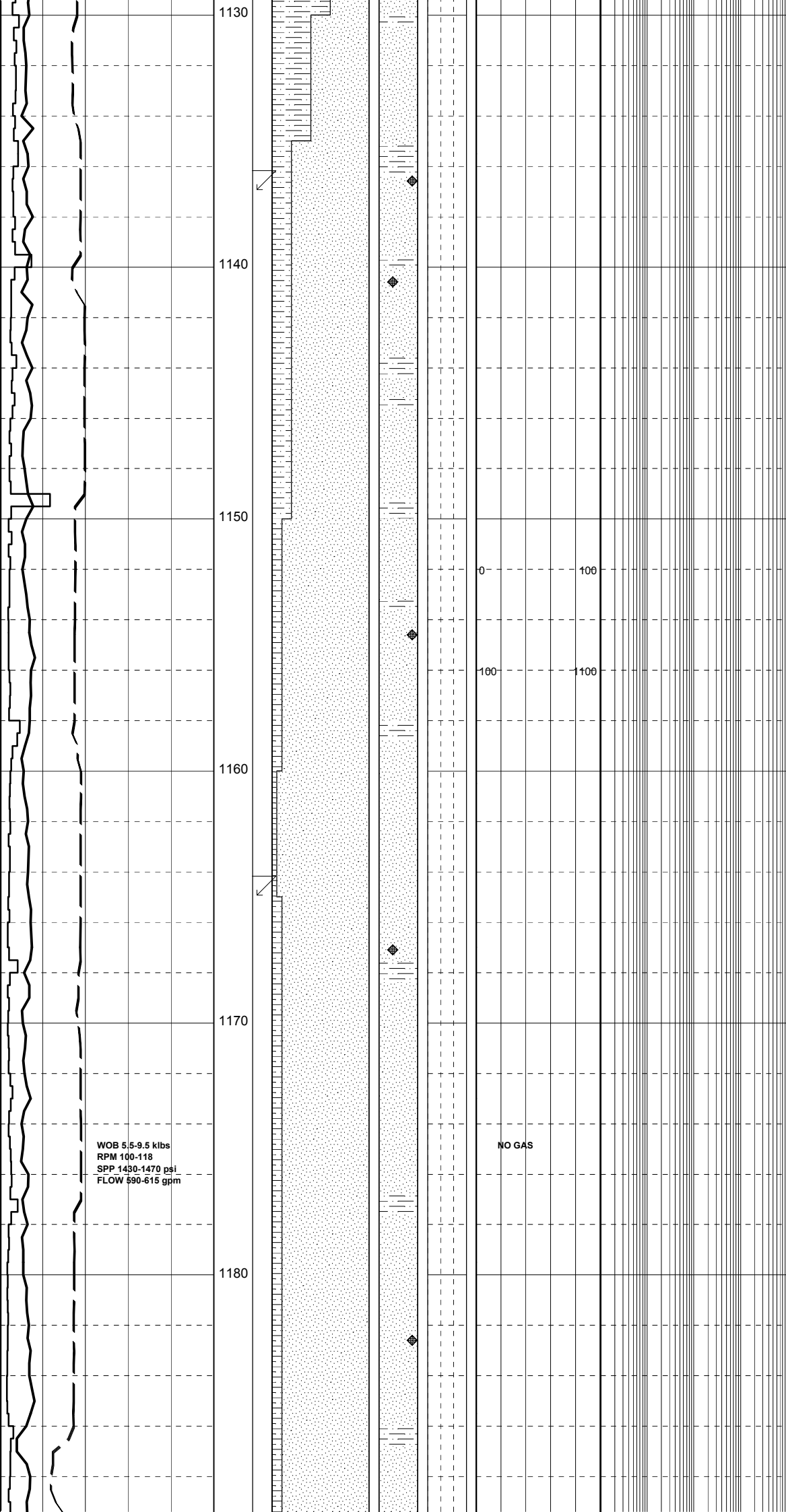
mod wl srt,sbang-sbrnd,mnr sil cmt,tr  
mnr brn & wh arg mtx,lse,no fluor.

SURVEY @ 1137m: 0.00°

SANDSTONE:pl yelsh gry,grysh yel,trnsl,  
med-crs grs,f grs i/p,mod wl srt,mod strg  
sil cmt,no vis mtx,mnr pyr,pred lse grs,  
fr inf por,no fluor.

SURVEY @ 1165m: 0.00°

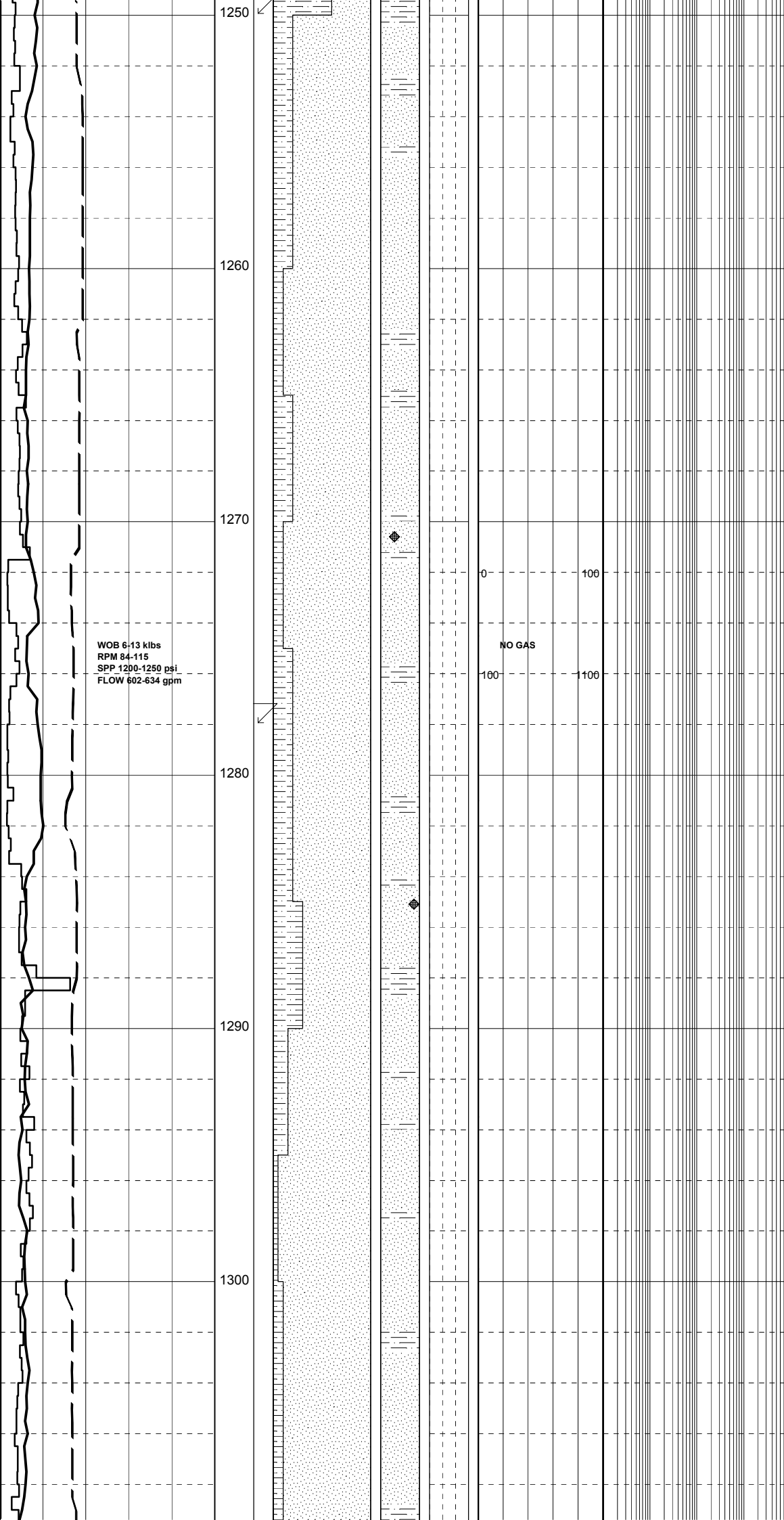
SANDSTONE:pl yelsh gry-lt yelsh gry,  
trnsl,pred med-f grs,crs grs i/p,mod  
wl srt,wk sil cmt,no vis mtx,tr pyr,  
lse & cln grs,mod hd-hd,fr-gd inf por,  
no fluor.



WOB 5.5-9.5 klbs  
RPM 100-118  
SPP 1430-1470 psi  
FLOW 590-615 gpm

NO GAS





SURVEY @ 1250m: 0.00°

SANDSTONE:clr-trmsl,frstd,pl gry,tr yelsh gry,vf-med,mnr crs grs,dom f grs,mod wl-loc wl srt,sbang-sbrnd,tr ang,v crs frag grs,tr wk calc & sil cmt,tr grysh brn arg mtx,com muscovite flks,lse & pred cln,fr por, no fluor.

SILTSTONE:lt-med gry,sli brnsh gry, arg,aren,grd to vf SST i/p,com micmic, sft-mnr frm,com disp-sft,blky-sbbiky, tr sbfiss i/p,com amorph.

SANDSTONE:trnsi-trnsp,clr,mnr yelsh gry,pred med-f grs,crs grs i/p,mod wl srt,strg sil cmt,no vis mtx,tr carb spks,tr pyr nods,lse,mod hd-hd aggs,fr inf and pr vis por,no fluor.

WOB 6-13 klbs  
RPM 84-115  
SPP 1200-1250 psi  
FLOW 602-634 gpm

NO GAS

SURVEY @ 1278m: 0.00°

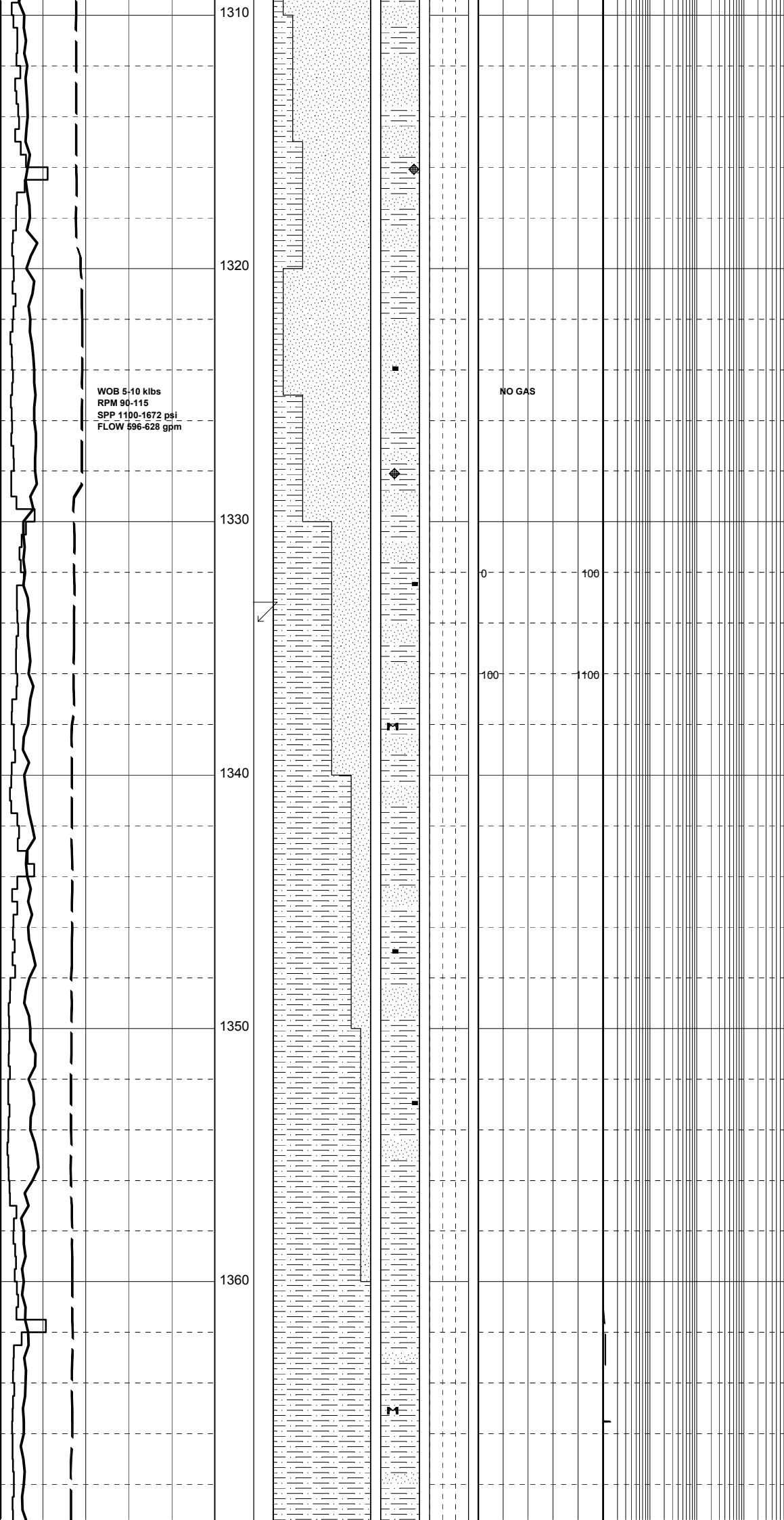
SANDSTONE:trnsi,frstd,mnr clr,sl yelsh gry,vf-v crs,dom med-crs,mod wl srt, sbang-sbrnd,wk sil cmt,rr off wh mtrx, tr blk & pnksh liths, lse & cln,fr por, no fluor.

SILTSTONE:lt-occ dk gry,aren,arg i/p, sft-frm,blky-sbbiky,amorph.

SANDSTONE:clr-trmsl,pl gry,pl yel, f-v crs,pred med-crs,mod wl srt,sbang-sbrnd,wk sil cmt,no vis mtx,nod pyr, lse & cln,fr-gd por,no fluor.

CARBIDE LAG CHECK @ 1300m  
THEOR. STKS: 3977  
ACTUAL STKS: 4200  
HOLE IS 5.6% O.G

SANDSTONE:trnsi-clr,tr pl yelsh brn,dom med-f,crs i/p,mod wl srt,wk sil cmt,no vis mtx,wk sil cmt,tr pyr, rr carb spks,lse & cln grs,hd-v hd,fr inf por,no fluor.



SILTSTONE:dk gry,grysh blk,occ med-dk gry,arg,sl calc,occ micmic,mnr dissep 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 dissep 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.

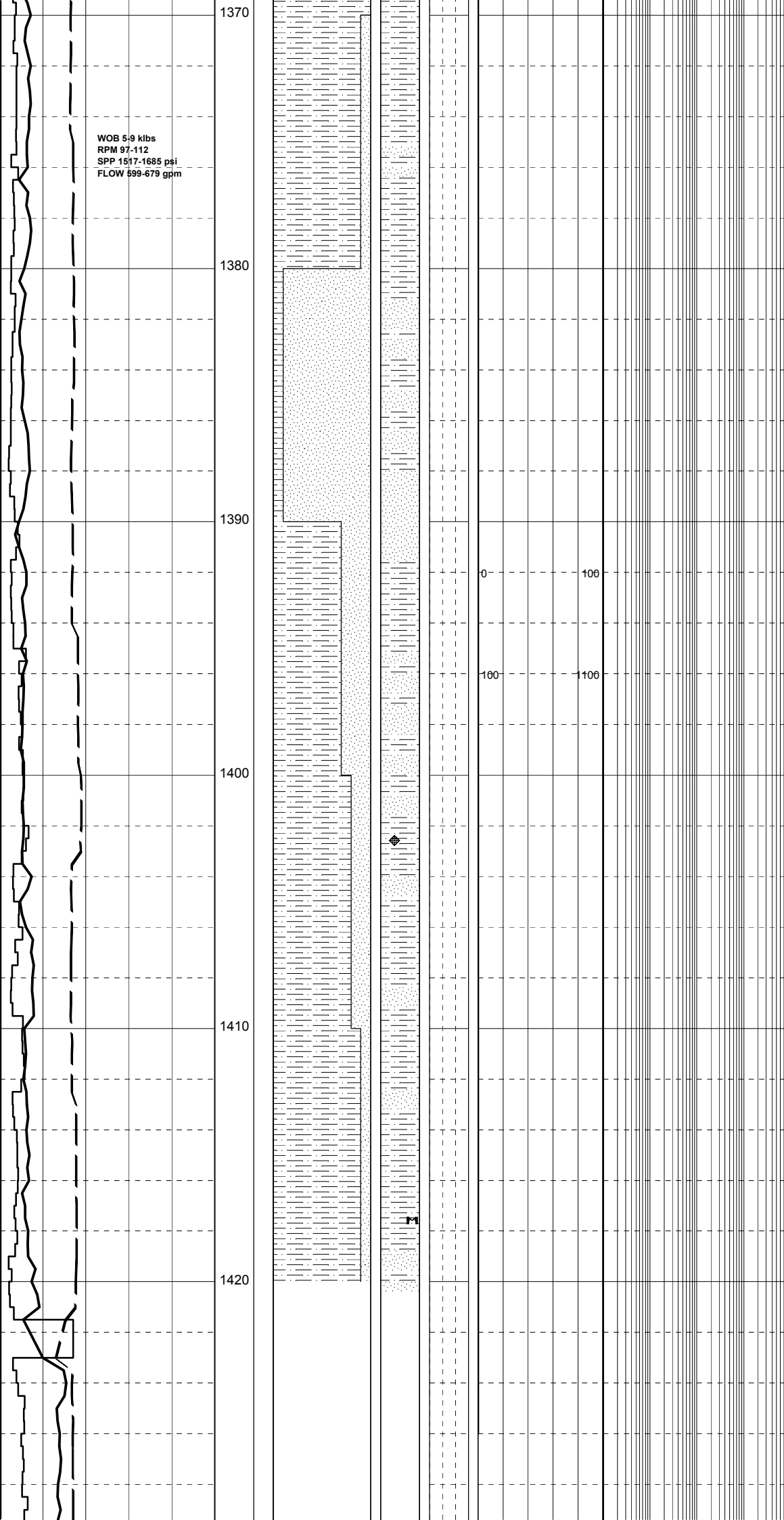
SILTSTONE: med gry, med-dk gry, arg,  
aren i/p, occ micmic, tr carb spks, tr  
glauc, v sft-disp, amorph-sbbiky.

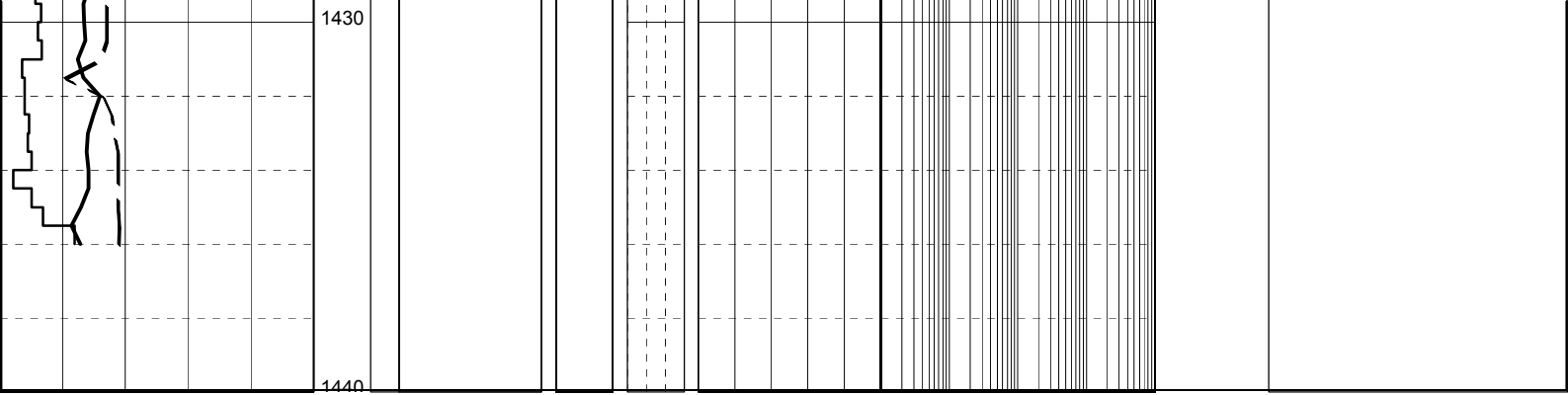
SANDSTONE: trnsi-clr, frstd, opq-  
miky, i/p, med-crs, com v crs, occ f,  
sa-sr, occ ang, mod srt, tr wk  
sil cmt, tr nod pyr, carb frags  
cln & lse, gd inf por, no fluor.

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

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

WOB 5.9 klbs  
RPM 97-112  
SPP 1517-1685 psi  
FLOW 599-679 gpm





1430

1440