

MASTERLOG

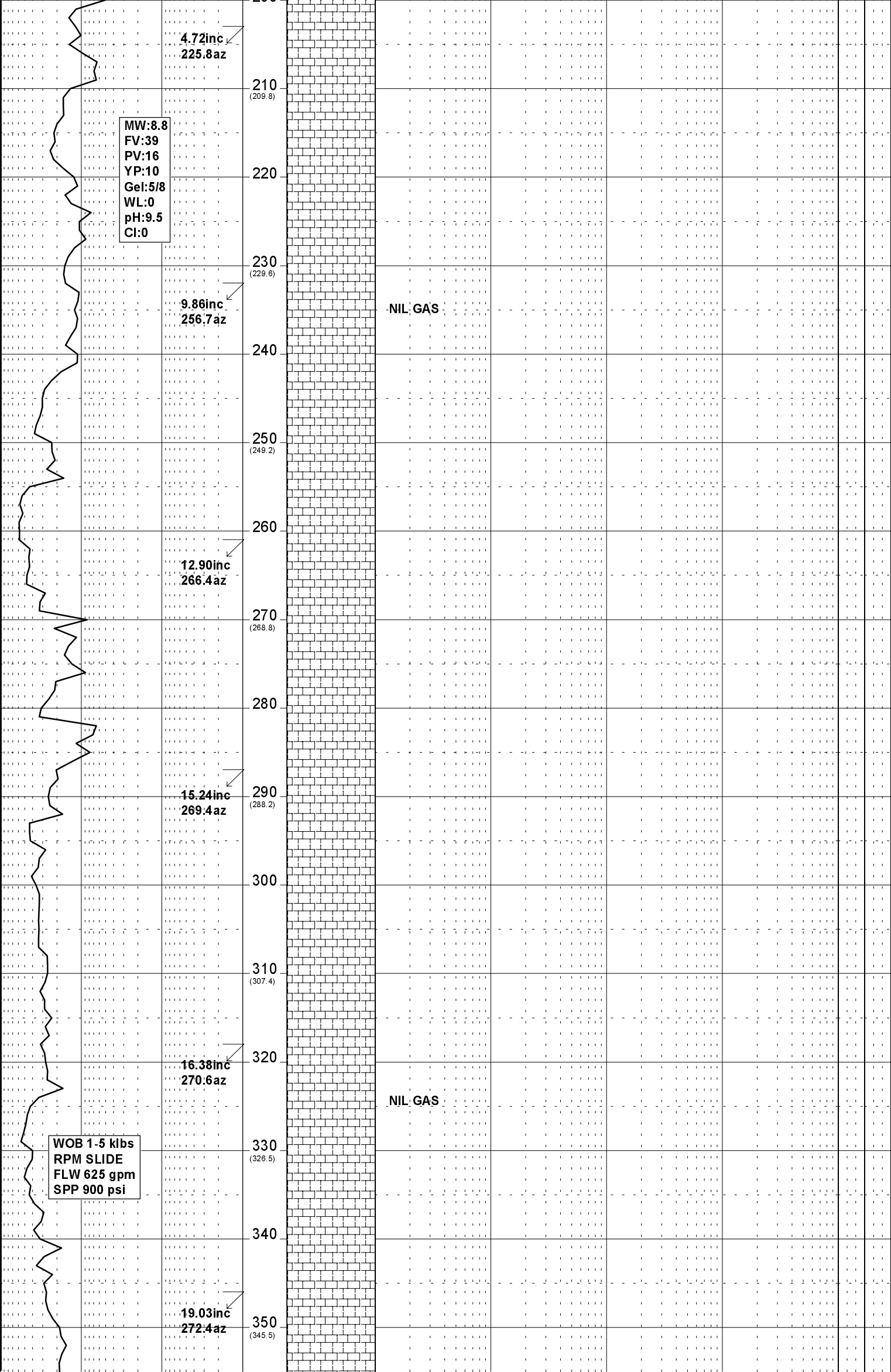
WEST TUNA W-22



GENERAL	POSITION	HOLE / CASING INFO	DATE / DEPTH	ENGINEERS
Country : AUSTRALIA Permit : VIC L4 Field : WEST TUNA Basin : GIPPSLAND Well Type : Development Rig Name : ISDL 453	Local Co-ord X : 2.18 mE Local Co-ord Y : -1.45 mN AMG Co-ord X : 621489.54 mE AMG Co-ord Y : 5771790.74 mN RT to MSL : 34.69m RT to Sea Bed : 95.69m	12-1/4" Hole to 847m 8-1/2" Hole to 2552m 20" Conductor @ 167m 9-5/8" Shoe @ 842m 7" Shoe @ 2547m	Spud Date : 05-06-2001 Total Depth Date : 20-06-2001 Total Depth : 2552m True Vertical Depth : 1451m Log Scale : 1/ 500 Depth From (m): 150 To: 210	Mark Smith Matt Boyd

ABBREVIATIONS	LITHOLOGY LEGEND	ENGINEERING LEGEND
MW Mud Weight FV Funnel Viscosity PV Plastic Viscosity YP Yield Point Gel Gel Strength WL Water Loss KCl Potassium Chloride Cl Chlorides Incl Inclination Az Azimuth WOB Weight on Bit (klbs) RPM Rotations Per Min FLW Flow Rate (gpm) SPP Pump Pressure (psi) RR Re-Run Bit TG Trip Gas CG Connection Gas BG Background Gas DGP Drilled Gas Peak MM Mud Motor	CLAYSTONE SILTSTONE SST: F - V FINE SST: MEDIUM SST: COARSE SHALE MARL LIMESTONE DOLOMITE CHERT CONGLOMERATE COAL FOSSILS SHELL FRAGMENT ECHINOIDS CORALS FORAMINIFERA LITHIC FRAGMENT CARB FRAGMENT QUARTZITE INTRUSIVES GLAUCONITE PYRITE CEMENT	CASING SHOE LINER HANGER BIT CHANGE DEVIA. SURVEY SWC UNRECOV SIDEWALL CORE CORE WIRELINE LOGS MDT POINTS: PRESSURE ONLY SAMPLE SEAL FAILURE TIGHT

RATE OF PENETRATION				DEPTH (m) (TVD)	CUTTINGS LITHOLOGY	TOTAL GAS & CHROMATOGRAPH DATA					CUT FLUOR	DIRECT FLUOR	CALCIMETRY %		LITHOLOGICAL DESCRIPTIONS and REMARKS
metres/hour						C1 iC4 nC5	C2 nC4	C3 iC5 TG	Total Gas in Units Chromatograph in Percent	CALCITE			DOLOMITE		
500	50	5	.5	150	0 100	.5 .01	5 .1	50 1	500 10	5K 100	good fair poor	good fair poor	0 100		
<div>BIT #1: 12.25" TYPE: REED DS195 JETS: 5x16 IN: 172m OUT: 597m RUN: 425m HRS: 10.2 COND: 0-1-CT-G X-IN-NO-DTF</div> <div>06-06-2001</div> <div>WOB 0-2 klbs RPM SLIDE FLW 400 gpm SPP 850psi</div>				160	WEST TUNA W-22 SPUDDED @ 23:20 HRS ON 05-06-2001									20" CASING SHOE @ 167m	
				170 (169.9)	CLAYSTONE	NIL GAS									CALCARENITE: v lt gy-lt gy, occ dk gy, crs, com foss, com shell frags, fri, abdt lse, v gd por, no fluor.
				180 (179.4)											NO H2S OR CO2 DETECTED
				190 (189.8)											DRILL WITH GEL WATER
				200											



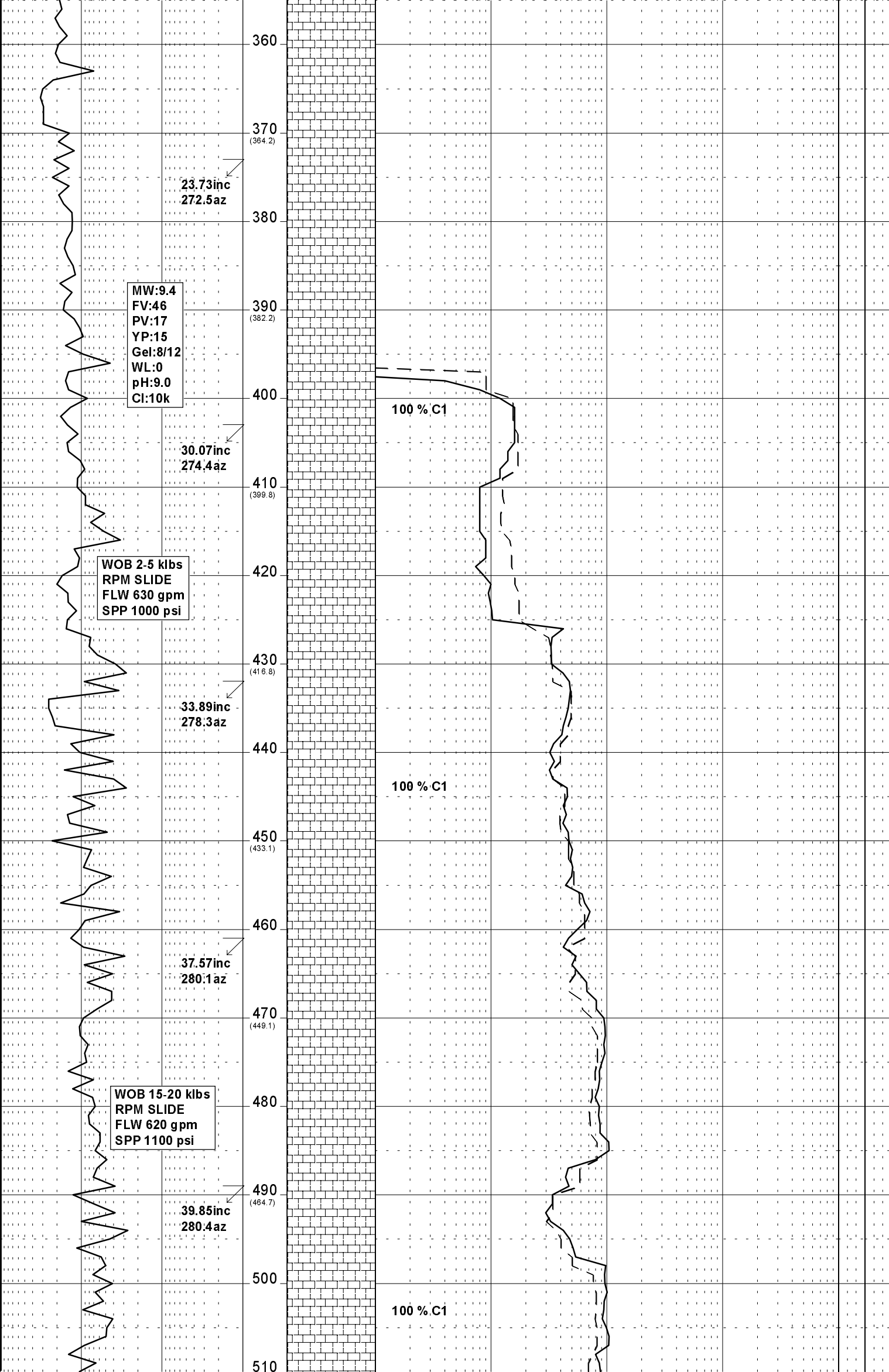
DRILL WITH GEL/WATER
MUD SYSTEM

CALCARENITE:v lt olv gy-lt gy,
med,arg i/p,mnr foss,tr shell
frags,gd inf por,no fluor.

CALCARENITE:vl t gy-lt gy,occ dk
gy,med,mnr arg i/p,rr foss,gd
vis por,no fluor.

CALCARENITE:lt gy-lt yel gy,occ
dk gy,med,occ crs,arg i/p,mnr
foss,mod hd,dom fri,fr vis por,
no fluor

CALCARENITE:lt gy-lt yel gy,
f-med,arg,ool i/p,mnr foss,frm-
mod hd,fr-pr vis por,no fluor.

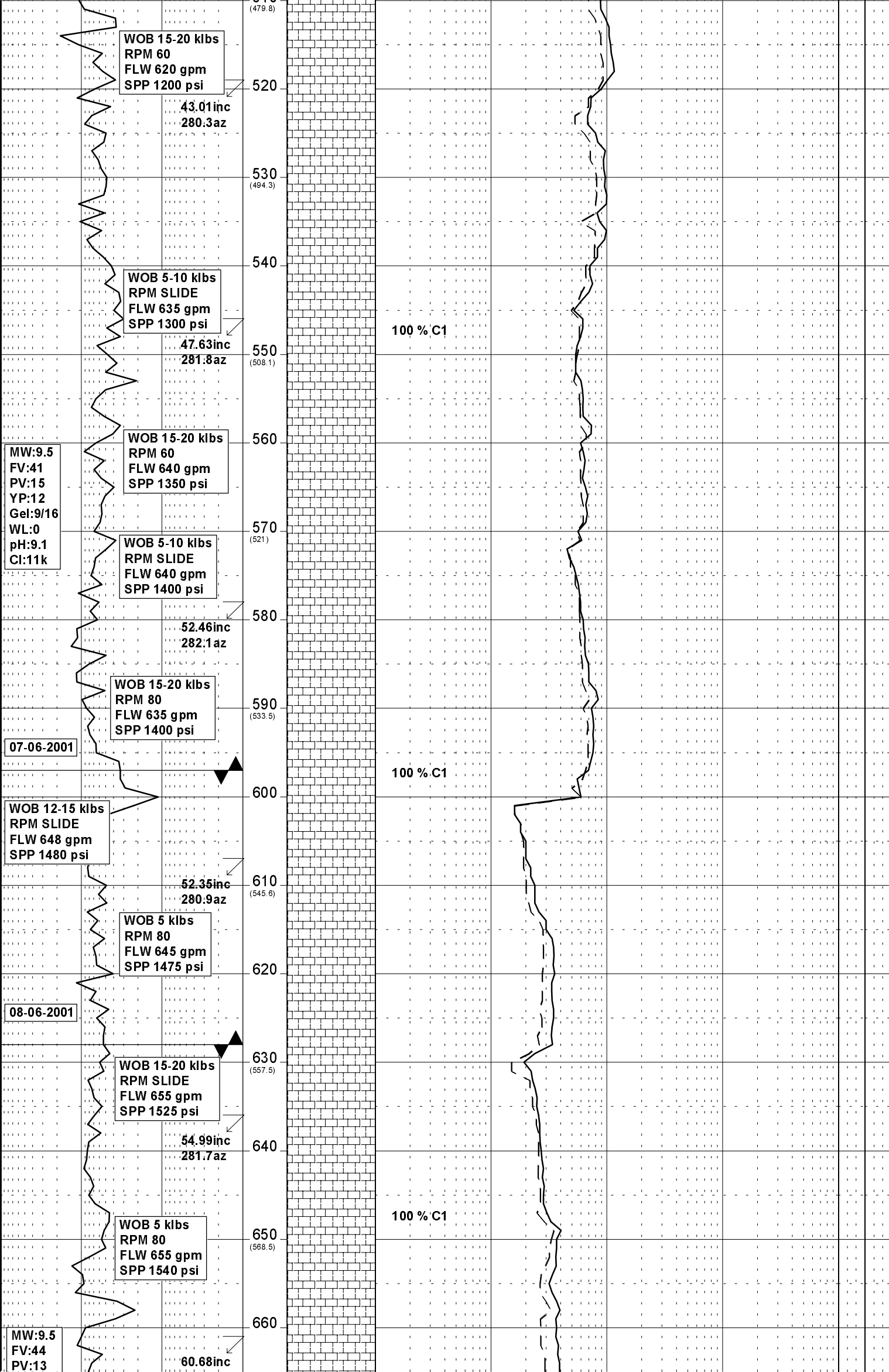


CALCARENITE:lt gy-lt yel gy,
f-med,arg i/p,mnr ooids,micrxln,
fr por,no fluor.

CALCISILTITE:lt yel gy-v lt gy,
aren,tr foss,rr ooids,mod hd-hd

CALCISILTITE:lt yel gy-lt gy,
aren i/p,rr foss,mnr dk gy liths
frm-mod hd.

CALCARENITE:lt yel gy-lt gy,f-
med,arg i/p,tr ooids,mod hd,occ
lse,pr-fr inf por,no fluor.



CALCARENITE:lt yel gy-v lt gy,
f-med,dom f,arg i/p,tr dk gy
liths,calc grns i/p,com-abdt
foss frags,fri-mod hd,pr-fr vis
por,no fluor.

CALCARENITE:yel gy-lt gy,pred
f-med,occ-com arg,com-abdt foss
frags,tr liths & glauc,calc grns
i/p,fri-mod hd,pr-fr i/p vis por
no fluor.

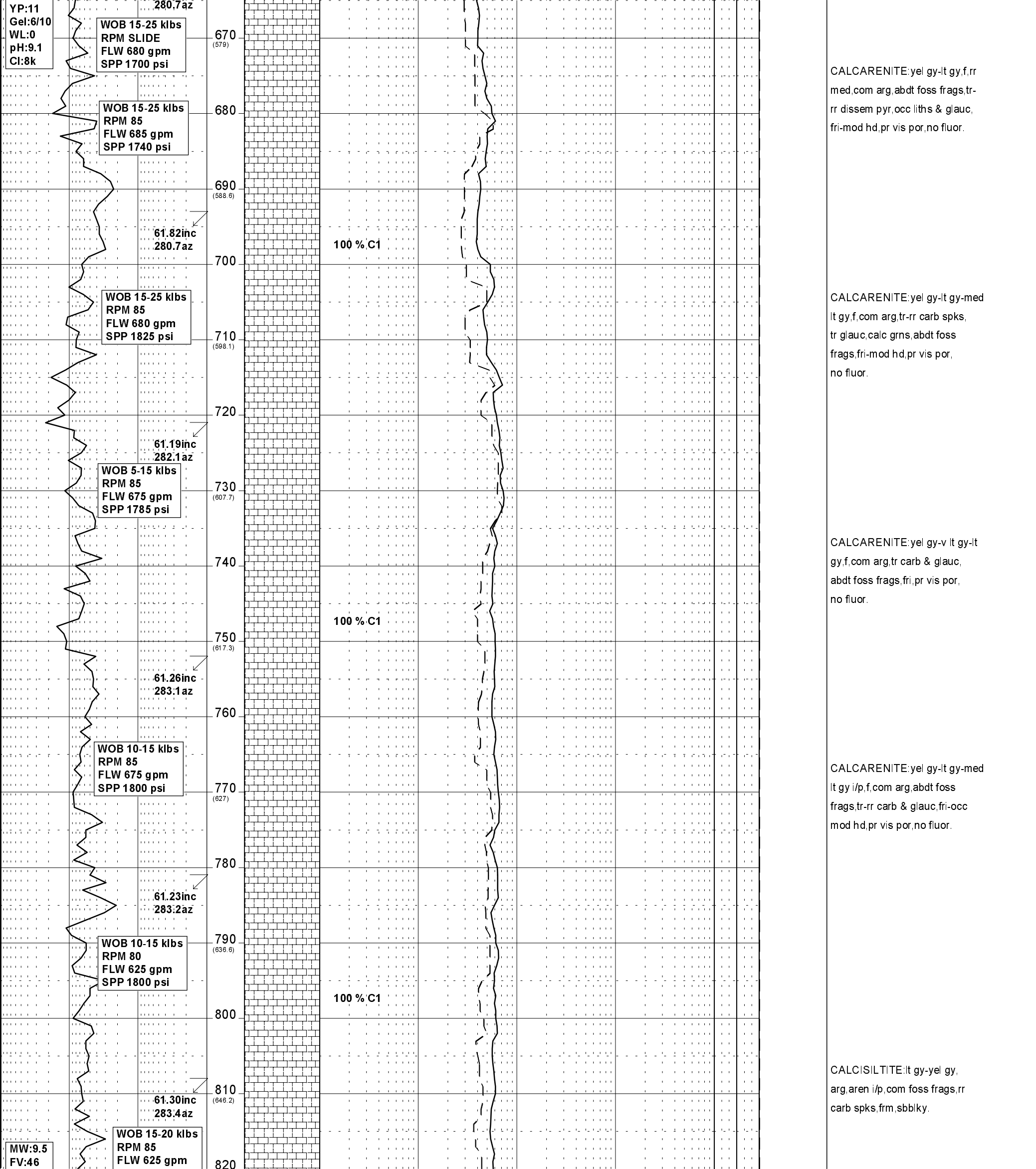
BIT #1RR: 12.25"
TYPE: REED DS195
JETS: 5x16
IN: 597m
OUT: 847m
RUN: 250m
HRS: 8.4
COND: 0-1-CT-G
X-IN-NO-TD

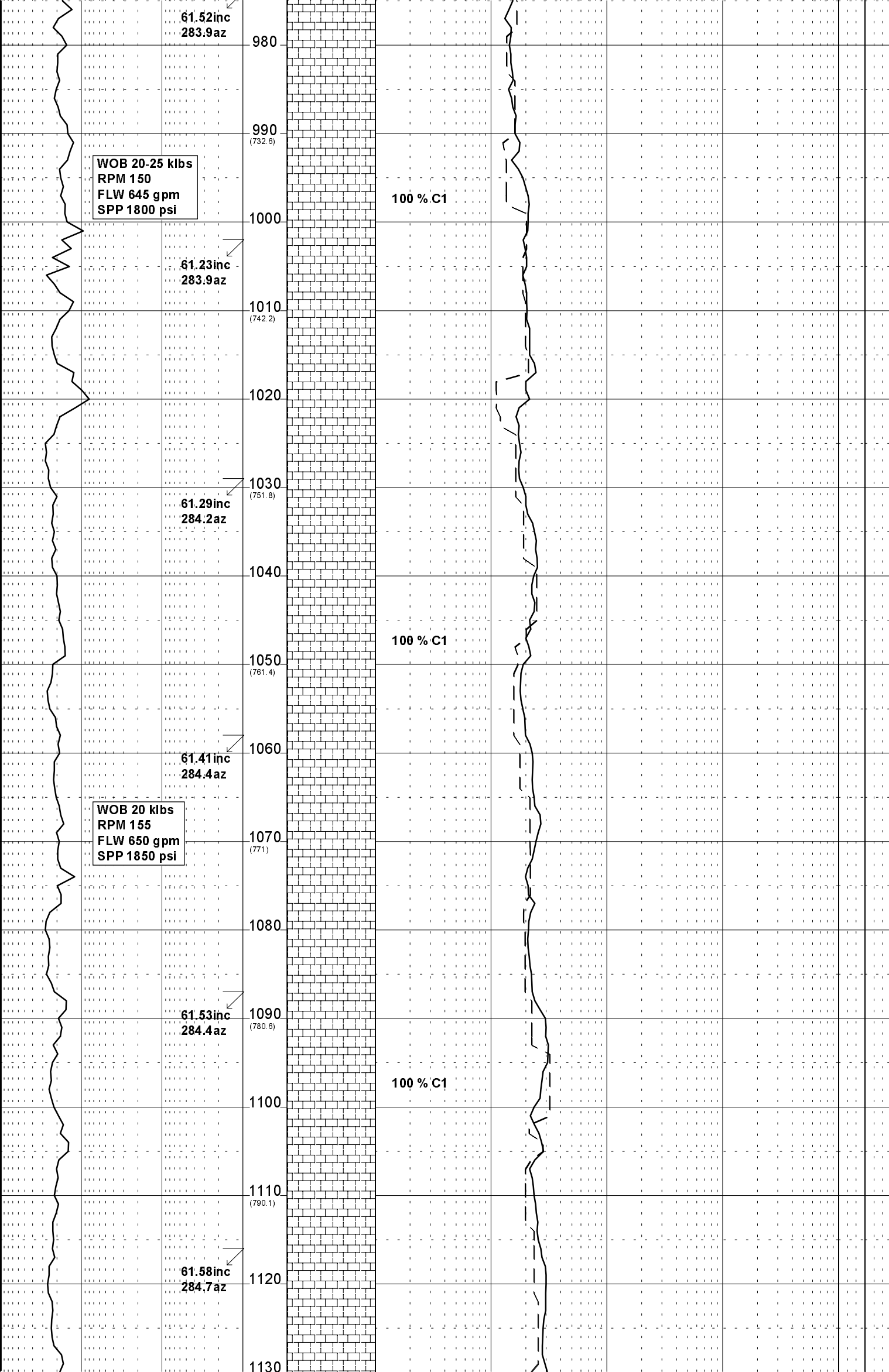
CALCARENITE:yel gy-lt gy,pred
f-med,arg i/p,abdt foss frags,
rr-occ liths,occ calc grns,fri-
mod hd,pr-fr i/p vis por,no
fluor.

SIGNAL LOSS FROM MWD TOOL
TRIP OUT OF HOLE @ 597m

CHANGE ANGLE OF STEERABLE
BHA TRIP OUT OF HOLE @ 628m

CALCARENITE:yel gy-lt gy,f-
occ med,com arg,abdt foss frags,
occ liths,tr glauc,rr-occ dissem
pyr,fri-mod hd i/p,pr-fr vis por
no fluor.





CALCILUTITE:lt olv gy,occ olv gy
tr pl yel bn xin LMST,v arg,tr
micrcarb spk & flk,tr foss frag,
sft,occ mod hd,sbblky.

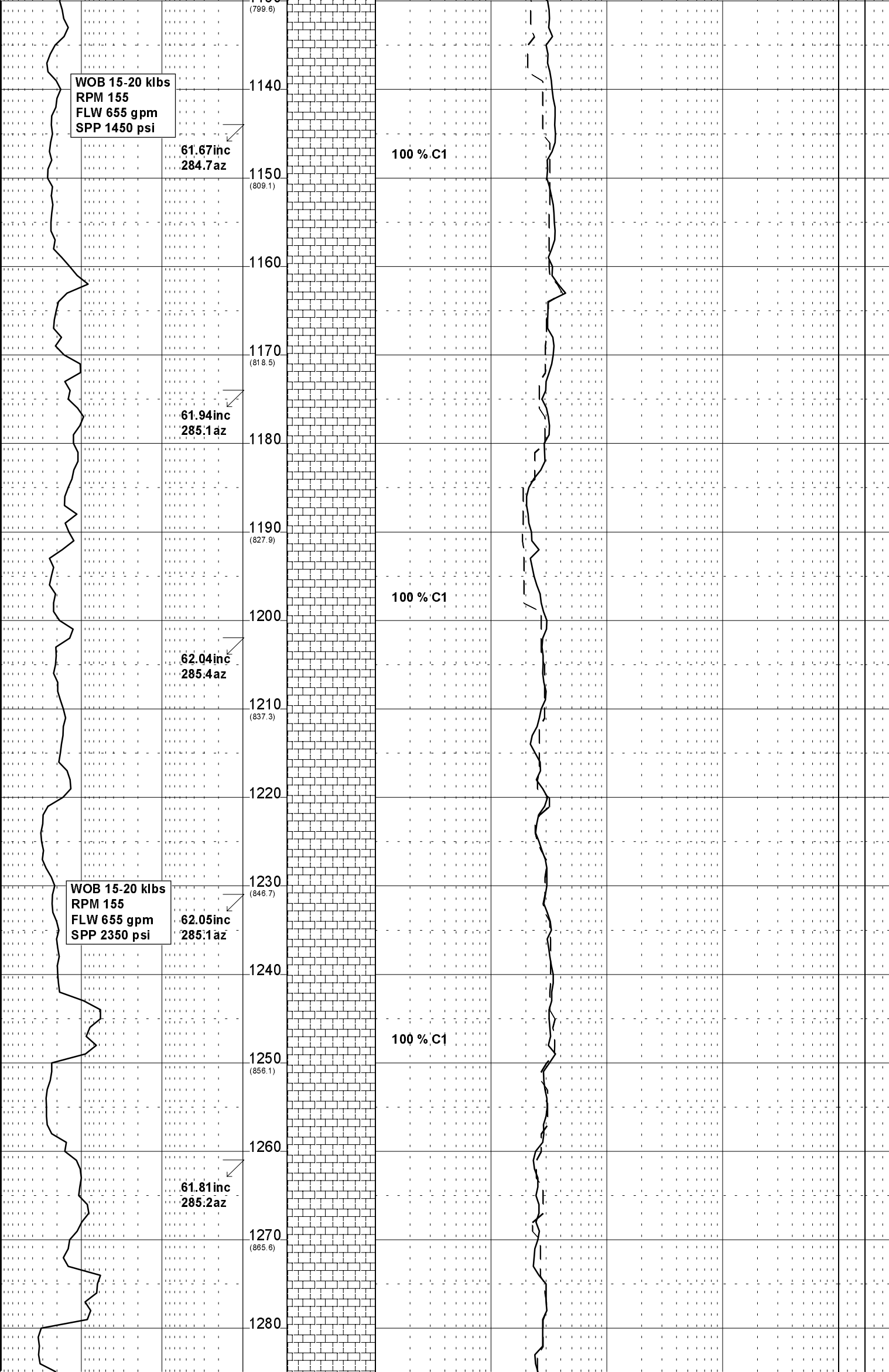
CALCILUTITE:olv gy-lt olv gy,v
arg,tr micrcarb spk,tr dissem
pyr,sft,occ frm,sbblky.

CALCILUTITE:lt olv gy-olv gy,tr
micrcarb spk,tr pl yel bn xin
LMST,v arg,sft,occ frm,sbblky.

CALCILUTITE:lt olv gy-olv gy i/p
v arg,tr micrcarb spk,tr ooid,
sft,occ frm,sbblky.

CALCILUTITE:lt olv gy,occ lt gy,
v arg,sly loc g/t clst,tr ooid
sft,mnr mod hd i/p,sbblky.

CALCILUTITE:lt olv gy,lt-med lt
gy,v arg,sly loc g/t clst,tr



foss, tr Foram, tr loc dissem pyr,
tr microcarb spk, sft-occ mod hd,
sbbiky.

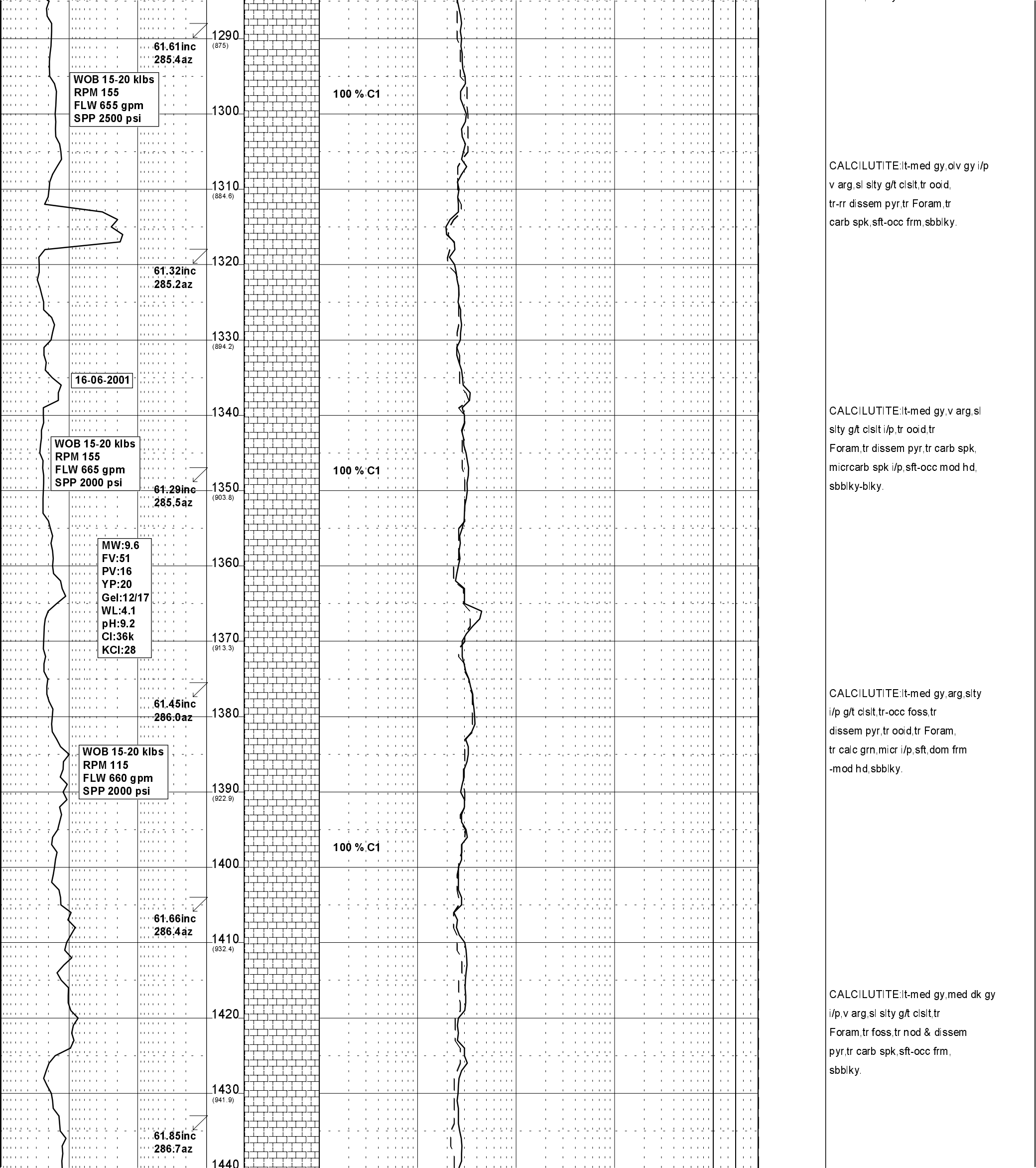
CALCILUTITE: med dk gy, med lt gy,
lt olv gy, v arg, loc tr dissem
pyr, tr microcarb spk, pred sft, occ
frm, sbbiky.

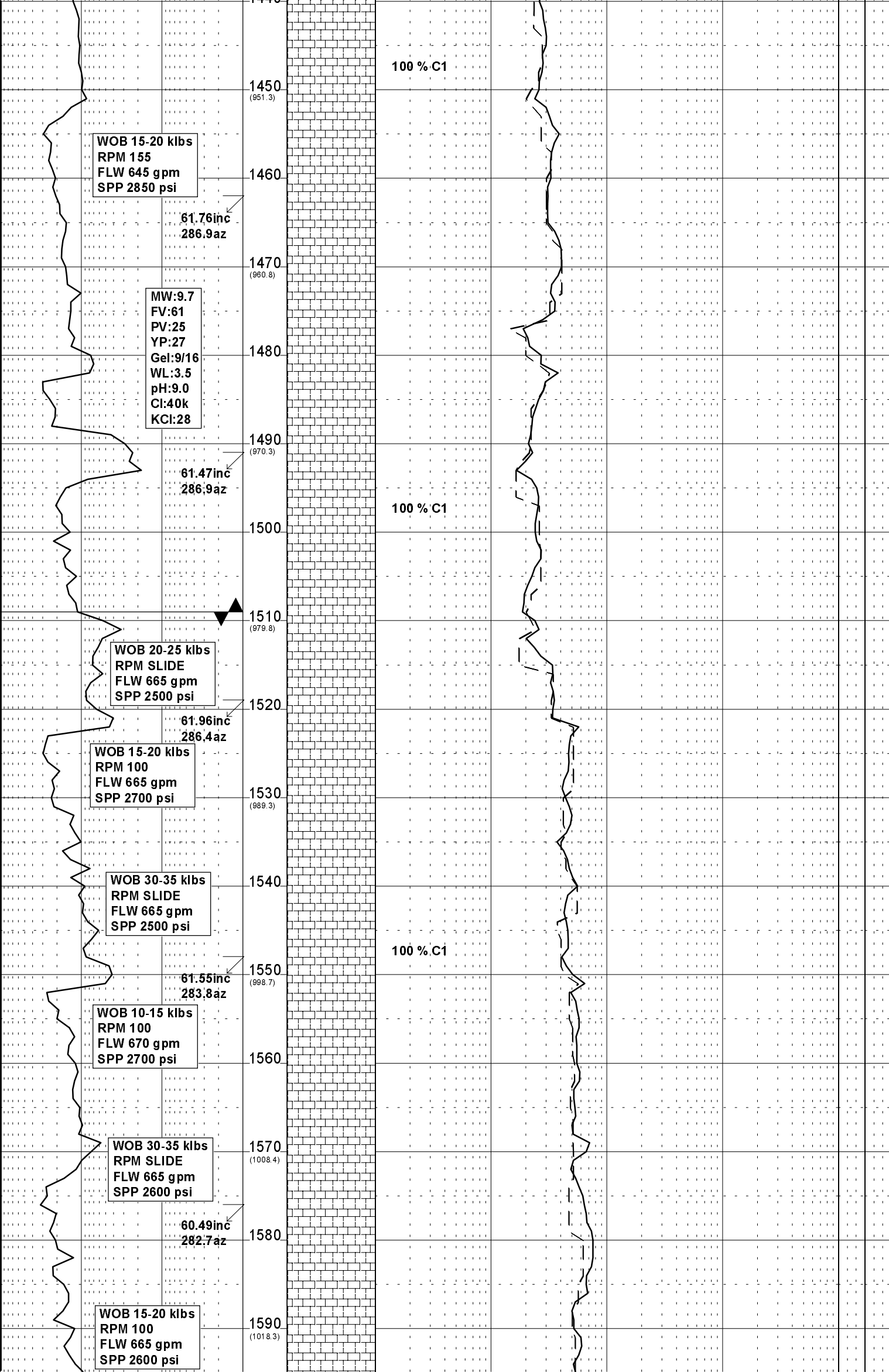
CALCILUTITE: lt-med lt gy, olv gy,
v arg, slty-aren i/p, occ clsit &
clcar, tr foss, tr Foram, tr dissem
pyr, tr carb spk, sft, occ frm,
sbbiky.

CALCILUTITE: lt-med lt gy, olv gy,
v arg, sl slty g/t clsit, tr carb
spk, tr dissem pyr, sft, occ frm,
sbbiky.

CALCILUTITE: lt-med gy, olv gy, v
arg, sl slty g/t clsit, tr ooid,
tr dissem pyr, tr carb spk, sft,
occ frm, sbbiky.

CALCILUTITE: lt-med gy, olv gy i/p
v arg, sl slty g/t clsit, tr foss,
tr dissem pyr, tr-rr carb spk, sft
occ frm, sbbiky.





CALCILUTITE:lt-med gy,lt olv gy,
v arg,sl slty,tr Foram,tr foss,
tr calc grn,tr dissemin pyr,tr
carb spk,sft-occ frm,sbbiky.

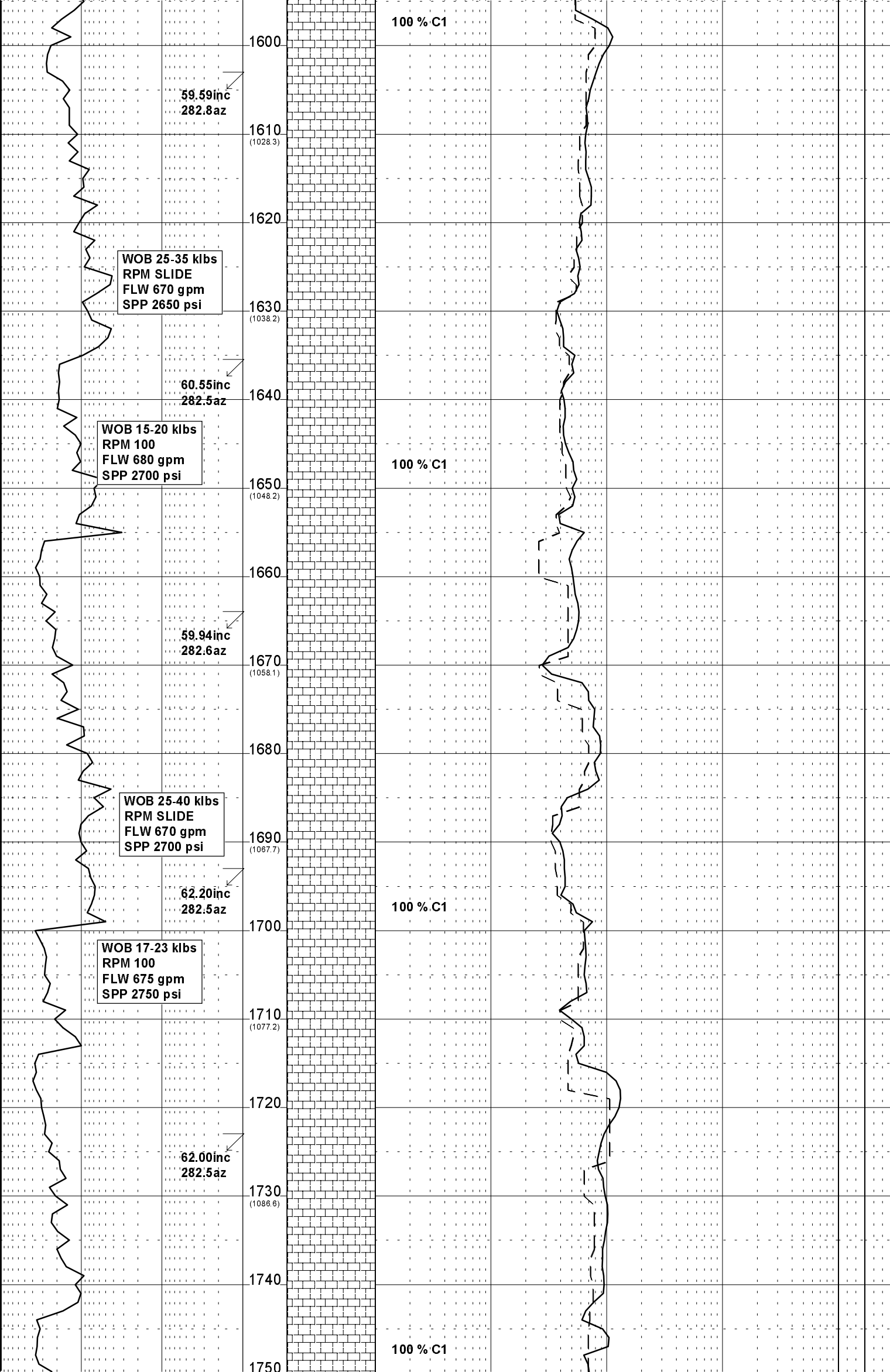
CALCILUTITE:lt-med gy,lt olv gy,
arg,mnr slty i/p,mnr foss,tr gy
org calc grn,tr microcarb spk,
sft,occ frm,sbbiky.

BIT #2RR2: 8.5"
TYPE: GEOD S75HPX
JETS: 7x14
IN: 1509m
OUT: 2245m
RUN: 736m
HRS: 11.93
COND: 1-1-WT-A-IN
NO-BHA

CALCILUTITE:lt-occ med gy,rr bl
gy,v arg,sl slty,g/t clst i/p,
tr dissemin pyr,tr carb & lith spk
sft-rr frm,sbbiky.

CALCILUTITE:med-med dk gy,v arg,
sl slty,g/t clst i/p,tr dissemin
pyr,tr foss frag,tr carb spk,
sft-occ frm,sbbiky.

CALCILUTITE:lt-med gy,med dk gy,
v arg,rr slty,rr clst,tr lt bn
gy micr LMST,tr dissemin pyr,tr
carb spk,sft-occ frm,rr hd,
sbbiky.



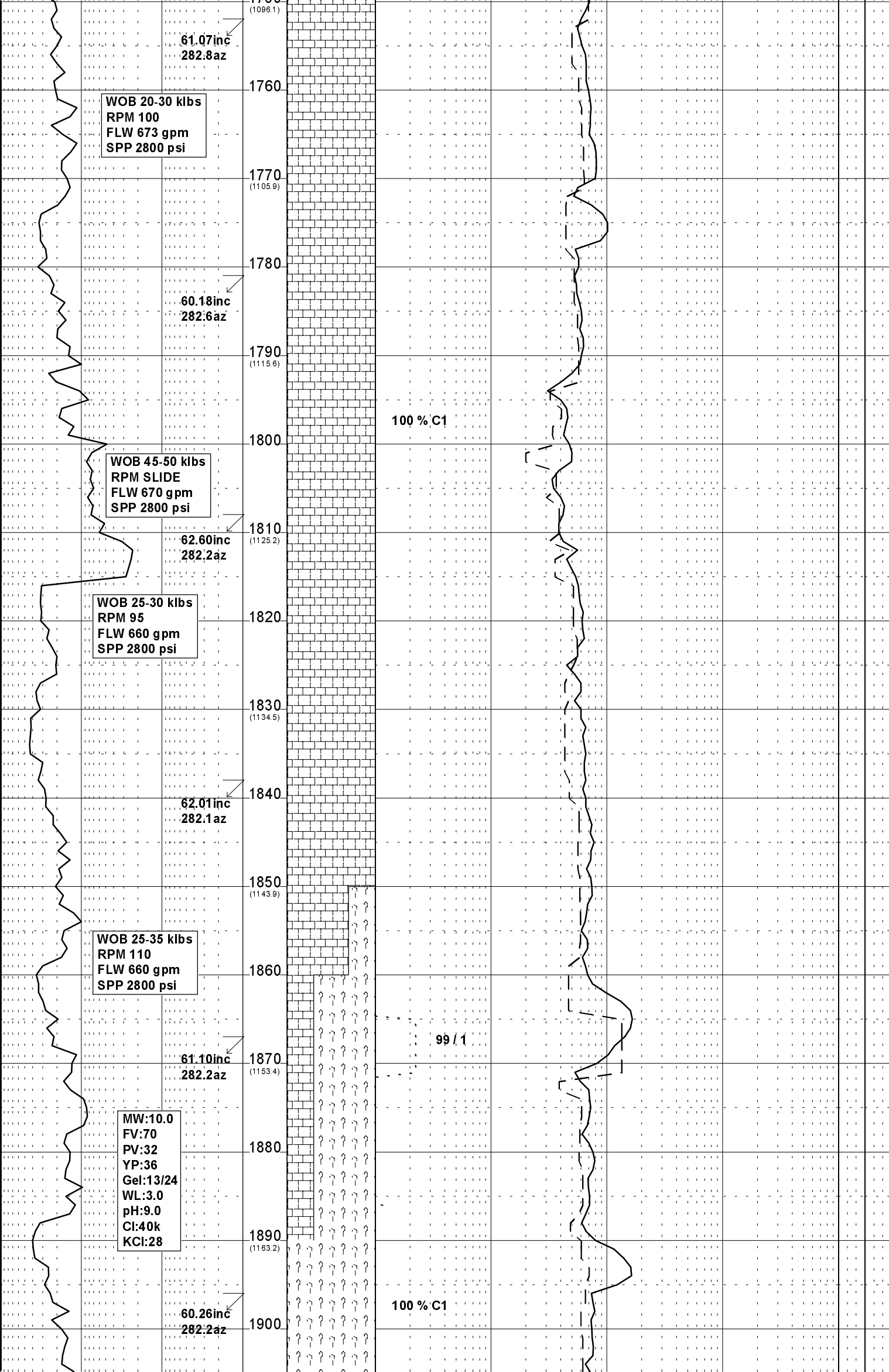
CALCILUTITE:lt-med gy,med dk gy,
v arg,rr slty,rr clst,tr
dissem pyr,tr-occ carb spk,sft-
occ frm,sbbiky.

CALCILUTITE:lt-med gy,med dk gy,
v arg,rr slty,rr clst,tr foss
frag,tr dissem pyr,tr carb spk,
sft-rr frm,sbbiky.

CALCILUTITE:lt-med gy,v arg,mnr
slty i/p,rr dissem pyr,tr carb
spk,sft-frm,sbbiky.

CALCILUTITE:lt gy,olv gy i/p,arg
rr calc,tr dissem pyr,tr carb
spk,tr foss,tr glauc,sft,com frm
sbbiky-blky.

CALCILUTITE:med lt gy,olv gy,arg
tr calc,tr dissem pyr,rr foss
frag,tr Foram,tr glauc,sft-occ
frm,rr mod hd,sbbiky.



CALCILUTITE:med lt gy,olv gy,arg
rr calc,tr disseminated pyr,rr fossil
Foram,tr glauconite i/p,silt,occ fine-
mod hard,loc amorph,sbbly.

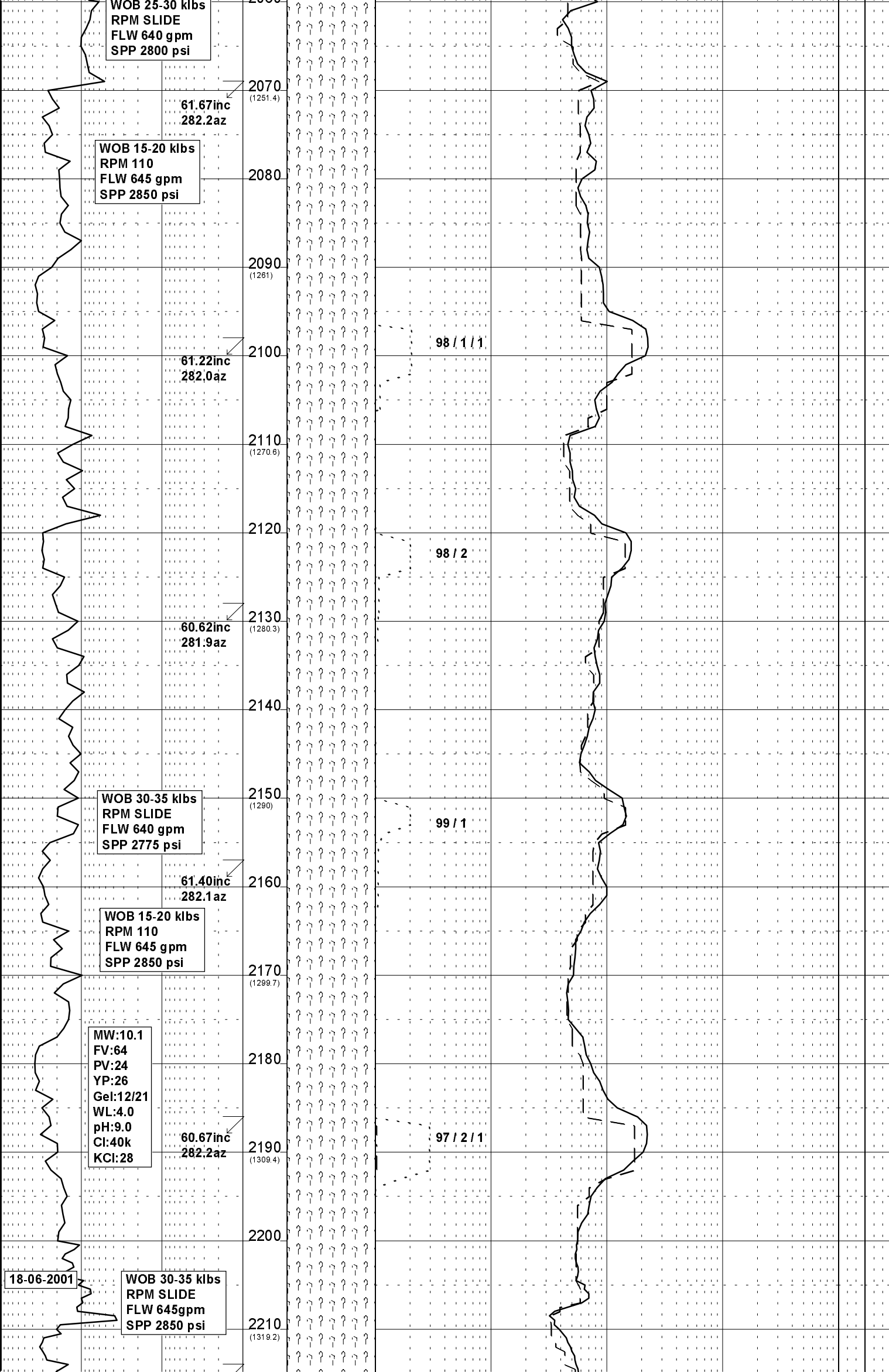
CALCILUTITE:med lt gy,olv gy,arg
rr calc,tr glauconite,rr fossil,tr
Foram,silt,occ fine,loc amorph i/p

CARBIDE LAG CHECK @ 1830m
THEOR STKS : 5290
ACTUAL STKS: 5300
HOLE IN GAUGE

CALCILUTITE:med lt gy,occ olv gy
i/p,arg,rr calc,rr disseminated pyr,rr
fossil,rr Foram,silt,occ fine,sbbly
-bly.

CLAYSTONE:lt olv gy-olv gy,mod
calc,tr carb spks,v silt,amorph.

CLAYSTONE:lt olv gy-olv gy,mod
calc,tr silty i/p,tr carb spk,
v silt-silt,occ fine,sbbly-bly.



tr ooid, tr carb spk, v sft-sft,
occ frm, sbbiky.

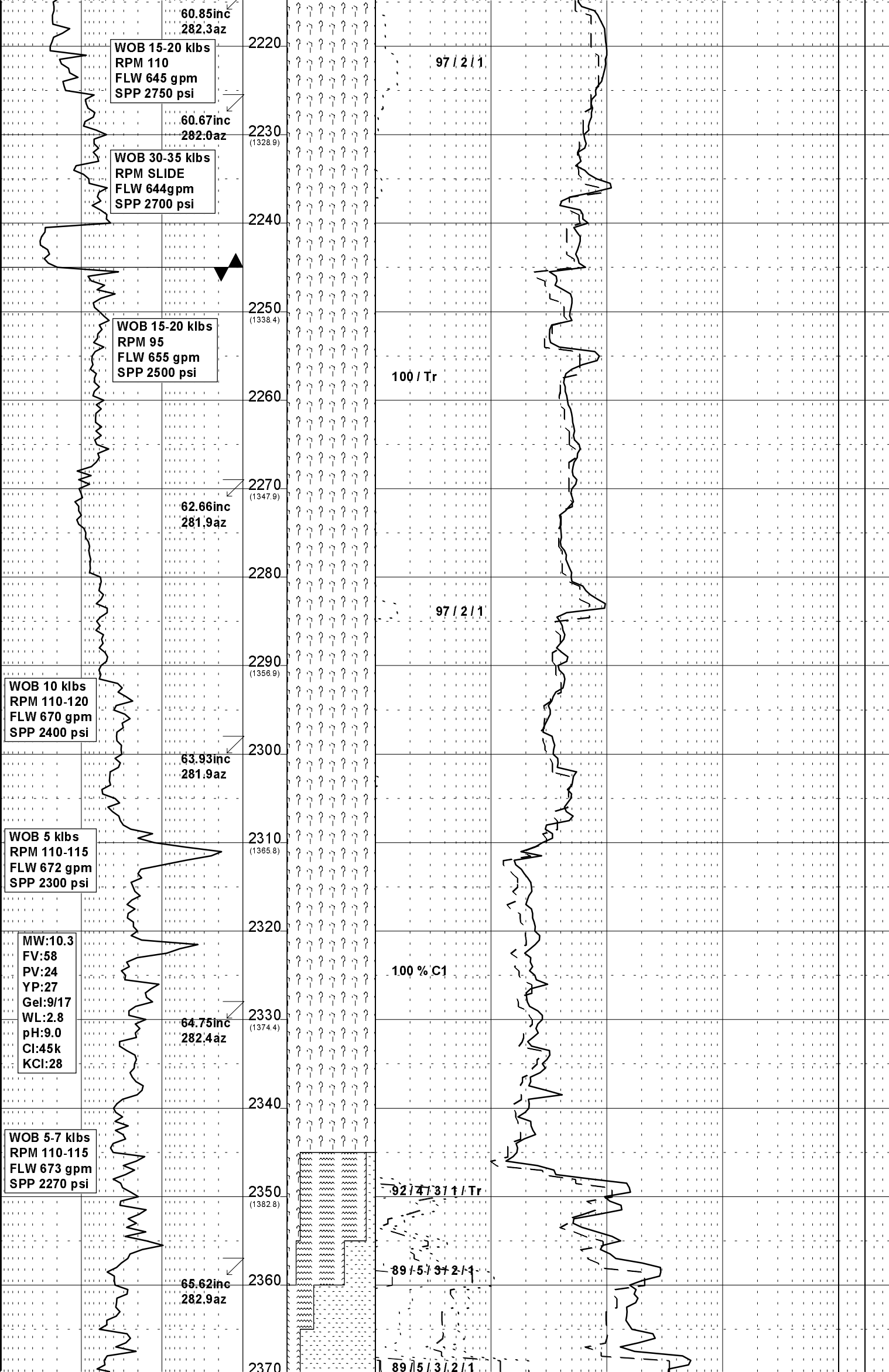
CLAYSTONE:lt olv gy-olv gy, mod
calc, tr-rr dissem pyr, tr foss
frag, tr ooid, tr Foram, tr carb
spk, v sft-sft, rr frm, sbbiky.

CLAYSTONE:lt olv gy-ol gy, mod
calc, tr foss frag, tr ooid, tr
Foram, tr dissem pyr, tr glauc, v
sft-sft, occ frm, sbbiky.

CLAYSTONE:lt olv gy-olv gy, lt bl
gy, lt gn gy, mod calc, rr foss
frag, tr ooid, rr dissem pyr, tr
glauc, sft-occ frm, sbbiky.

CLAYSTONE:olv gy, lt-med bl gy,
med gy, mod calc, tr foss frag, rr
ooid, tr dissem pyr, tr carb spk,
sft-occ frm, sbbiky.

CLAYSTONE:olv gy, med gy, lt bl gy
mod calc, tr foss frag, tr dissem
pyr, tr carb spk, tr glauc, sft-occ
frm, sbbiky.



CLAYSTONE: olv gy, med gy, lt bl gy
lt gn gy, mod calc, tr foss frag,
tr dissem pyr, tr COALY frag, tr
glauc, tr carb spk, sft-occ frm,
sbbiky.

BIT #2RR3: 8.5"
TYPE: GEOD S75HPX
JETS: 7x14
IN: 2245m
OUT: 2552m
RUN: 307m
HRS: 21.39
COND: 1-2-CT-NT-X-1-TD

CLAYSTONE: olv gy, med-med dk gy,
lt bl gy, gn gy, mod calc, tr glauc
tr dissem pyr, tr ooid, tr Foram,
tr carb spk & flk, sft-frm, sbbiky

CLAYSTONE: olv gy, med-med dk gy,
lt bl gy, gn gy, mod calc, loc slty
tr micmic, tr glauc, tr dissem pyr
tr carb spk, tr-rr ooid, sft-frm,
sbbiky.

CLAYSTONE: olv gy, lt olv gy, med
dk gy, tr dk gn gy, mod calc, loc
sli slty i/p, loc micmic i/p, tr
carb spk, rr dissem pyr, tr foss,
sft-frm, sbbiky.

CLAYSTONE: lt olv gy, olv gy, occ
med dk gy, mod calc, slty i/p, tr
loc micmic, rr carb spk, mnr
dissem pyr, rr foss, tr glauc, frm,
com sft, sbbiky.

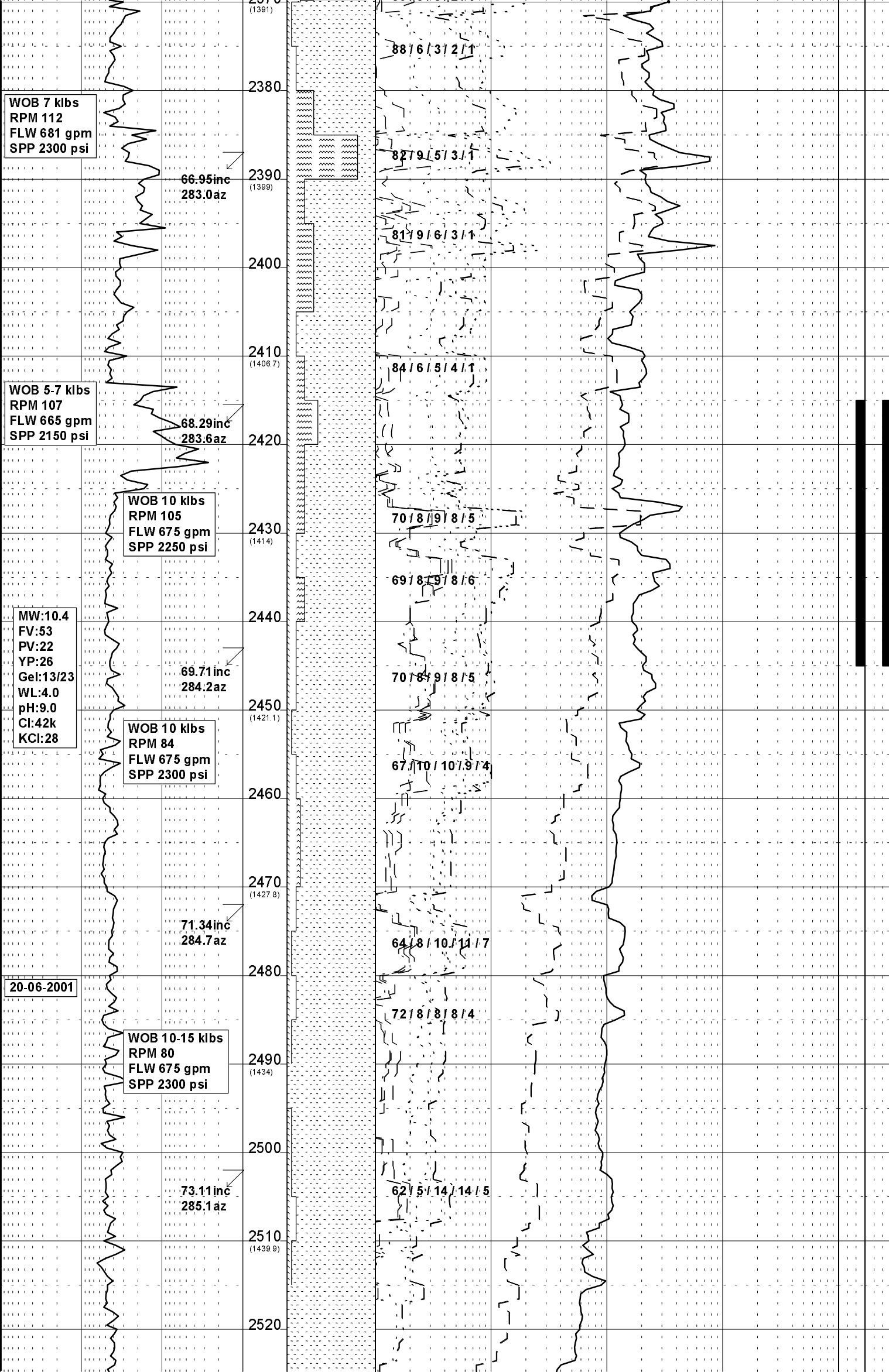
CLAYSTONE: lt olv gy, olv gy, bn gy
loc slty, g/t SLST, mnr micmic
i/p, tr dissem pyr, mnr glauc,
v sft-sft, loc frm, sbbiky, loc
amorph.

SILTSTONE: dk yell org, dk yel bn,
v arg, g/t CLST, com lim std, abdt
dissem glauc, v disp-v sft &
amorph.

SILTSTONE: gy bn, aren g/t f sst,
mod hd, sbbiky.

SANDSTONE: lt gy, trns, opq, mnr
clr, tr mod yel bn, med-pred v crs
mod srt, sa-sr, lse, fr inf por, no
fluor.

SANDSTONE: lt gy, trns, opq, mnr
clr, abdt mod bn stn i/p, med-v
crs, pr srt, sa-sr, loc and i/p, lse



loc tr disse pyr, gd inf por, no fluor.

SILTSTONE: bn blk, carb g/t COAL

i/p, loc tr disse pyr, micmic, frm sbiky.

SANDSTONE: pred pl yel bn, trnsi, opq, mn r, cl, med-v crs, pred med, mod srt, sa-pred sr, loc rnd i/p, lse, gd inf por.

FLUOR: 2395m-2400m, Tr in arg mtx, pl yel wh sptd fluor, wk pl yel crsh cut, v thn rng res.

SANDSTONE: cl, trnsi, opq, lt gy, mn r mky & med gy, tr pnk qtz, med-v crs, pr srt, sa-pred sr, loc tr disse pyr i/p, lse, pred cin, gd inf por, no fluor.

SILTSTONE: olv gy, arg, sli calc, mn r micmic i/p, tr carb spk & flk frm-mod hd, sbiky-biky.

SANDSTONE: cl, trnsi, opq, lt gy, mky, med-v crs, pred med, mod srt, sr, loc sa, tr pyr, lse, pred cin, gd inf por.

FLUOR: 2415m-2430m, Tr-5% dim pl yel gn sptd fluor, wk crsh cut, thn rng res.

SANDSTONE: cl, trnsi, opq, lt gy, med-v crs, pred v crs, mod srt, sa-loc sr, tr frac grn, rr pyr nod, lse, cin, gd inf por.

FLUOR: 2430m-2445m, 10%-Tr dll bl wh sptd fluor, wk crsh cut, thn rng res.

SILTSTONE: olv gy, arg, sli-mod calc, tr carb spk, frm-mod hd, sbiky-biky.

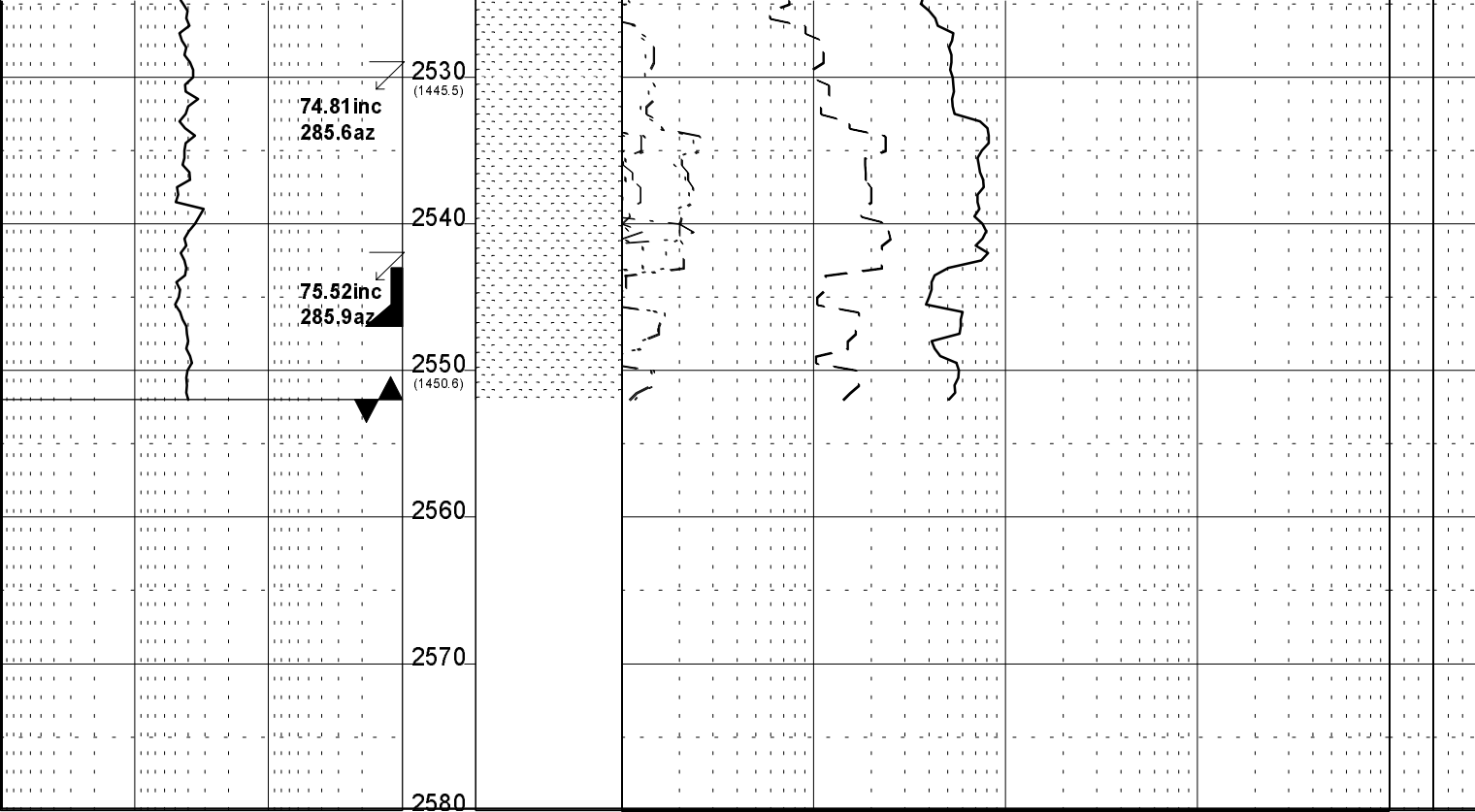
SANDSTONE: cl, trnsi, opq, lt gy, mky, med-v crs, pred v crs, mod srt, sr-loc sa, rr rnd, tr pyr nod tr frac grn, lse, cin, gd inf por, no fluor.

SANDSTONE: cl, trnsi, opq, med-v crs, pred crs, mod srt, sr-loc sa, tr frac grn, lse, cin, gd inf por, no fluor.

SILTSTONE: olv gy, arg, sli calc, tr carb spk, frm-mod hd, sbiky-biky.

SANDSTONE: cl, trnsi, opq, lt gy, med-v crs, pred med-crs, pr srt, sr-loc sa, tr pyr, tr frac grn, lse, pred cin, gd inf por, no fluor

SILTSTONE: olv gy, dk gy i/p, sli calc, tr pyr, tr carb spk, frm-mod hd, v hd i/p, sbiky-biky.



SANDSTONE:clr.trnsl.opq.lt gy
i/p.med-v crs.pr srt,sr-loc sa,
tr dissem pyr,tr frac qtz grn,
lse,pred cln,gd inf por,no fluor

SANDSTONE:clr.trnsl.opq.lt gy
i/p.tr milky,med-v crs,pred v
crs,mod srt,sr-loc sa,tr-rr
dissem pyr,frac qtz grn i/p,lse,
cln,gd inf por,no fluor.

7" CASING SHOE @ 2547m

WEST TUNA W-22 TOTAL DEPTH
2552m MDRT (1451m TVDRT)
05:00 HRS ON 20-06-2001

SCHLUMBERGER ANADRILL
RUN 1) RAB & ADN
2245m - 2552m