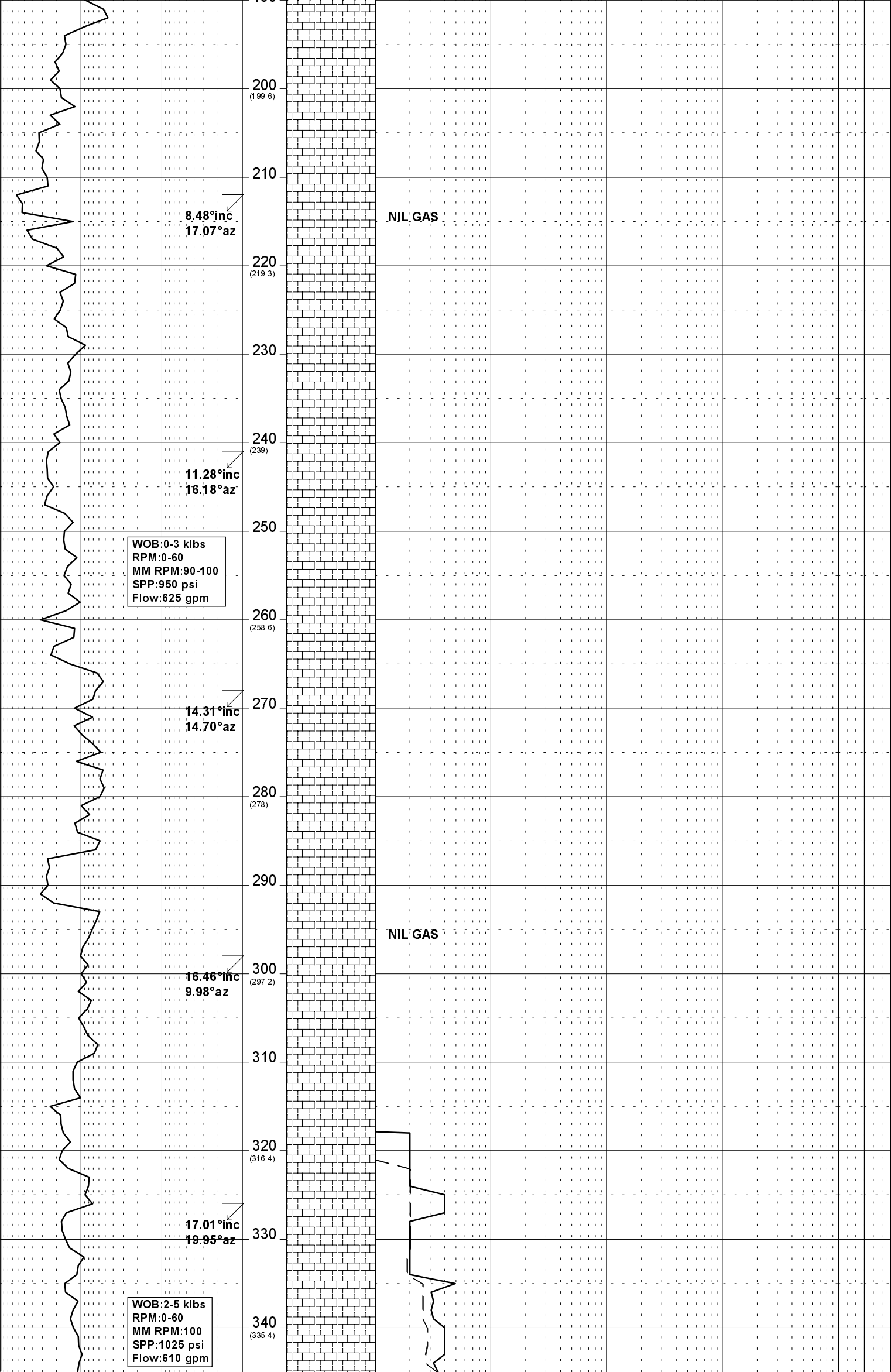




GENERAL		POSITION		HOLE / CASING INFO		DATE / DEPTH		ENGINEERS					
Country : AUSTRALIA Permit : VIC L4 Field : WEST TUNA Basin : GIPPSLAND Well Type : Development Rig Name : NABORS-453		Local Co-ord X : 49.0 mE Local Co-ord Y : 0.95 mS AMG Co-ord X : 621531.67 mE AMG Co-ord Y : 5771797.7 mN RT to MSL : 34.69 m RT to Sea Bed : 95.69 m		12-1/4" Hole to 859 m 8-1/2" Hole to 3008 m 6" Hole to 3567 m 20" Conductor @ 155 m 9-5/8" Csg Shoe @ 854.8 m 7" Csg Shoe @ 3000 m 4-1/2" Liner Set @ 3561.5 m		Spud Date : 03-12-2001 Total Depth Date : 27-12-2001 Total Depth : 3567 m True Vertical Depth : 1437.69 m Log Scale : 1/ 500 Depth From (m): 140 To: 3580		Matt Boyd Greg Fawns Phil Rady Mark Smith					
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		<div><div> CLAYSTONE</div><div> SILTSTONE</div><div> SST: F - V FINE</div><div> SST: MEDIUM</div><div> SST: COARSE</div><div> SHALE</div></div> <div><div> MARL</div><div> LIMESTONE</div><div> DOLOMITE</div><div> CHERT</div><div> CONGLOMERATE</div><div> COAL</div></div> <div><div> BRYOZOA</div><div> RADIOLARITES</div><div> ECHINOIDS</div><div> CORALS</div><div> FORAMINIFERA</div><div> LITHIC FRAGMENT</div></div> <div><div> CARB FRAGMENT</div><div> QUARTZITE</div><div> INTRUSIVES</div><div> GLAUCONITE</div><div> PYRITE</div><div> CEMENT</div></div>		<div><div> CASING SHOE</div><div> LINER HANGER</div><div> BIT CHANGE</div><div> DEVIA. SURVEY</div><div> SWC UNRECOV</div><div> SIDEWALL CORE</div><div> CORE</div></div> <div><div> WIRELINE LOGS</div><div>MDT POINTS:</div><div> PRESSURE ONLY</div><div> SAMPLE</div><div> SEAL FAILURE</div><div> TIGHT</div></div>							
RATE OF PENETRATION		DEPTH (m) (TVD)	CUTTINGS LITHOLOGY	TOTAL GAS & CHROMATOGRAPH DATA					CUT FLUOR	DIRECT FLUOR	CALCIMETRY % CALCITE DOLOMITE	LITHOLOGICAL DESCRIPTIONS and REMARKS	
metres/hour				C1 iC4 nC5	C2 nC4	C3 iC5 TG	Total Gas in Units Chromatograph in Percent						
500	50	5	.5	0	100	.5	5	50	500	5K	0	100	
						.01	.1	1	10	100			
03-12-2001				20" Conductor Set @ 155 metres									WEST TUNA W-27 SPURRED @ 01:45 HRS ON 03-12-2001
Bit #1RR2: 12.25" Hycalog DS195 Jets:5x18 In:155m Out:859m Run:704m Hrs:33.71 Cond:1-2-WT-A-X-I-CT-TC													
6.52°inc 341.72°az													
WOB:0-3 klbs RPM:0-40 MM RPM:83 SPP:600 psi Flow:520 gpm													
6.56°inc 5.75°az													
													NO H2S OR CO2 DETECTED
													CALCARENITE:yel gy,v lt gy,med dk gy,trnsl,f-med,occ crs-v,crs,



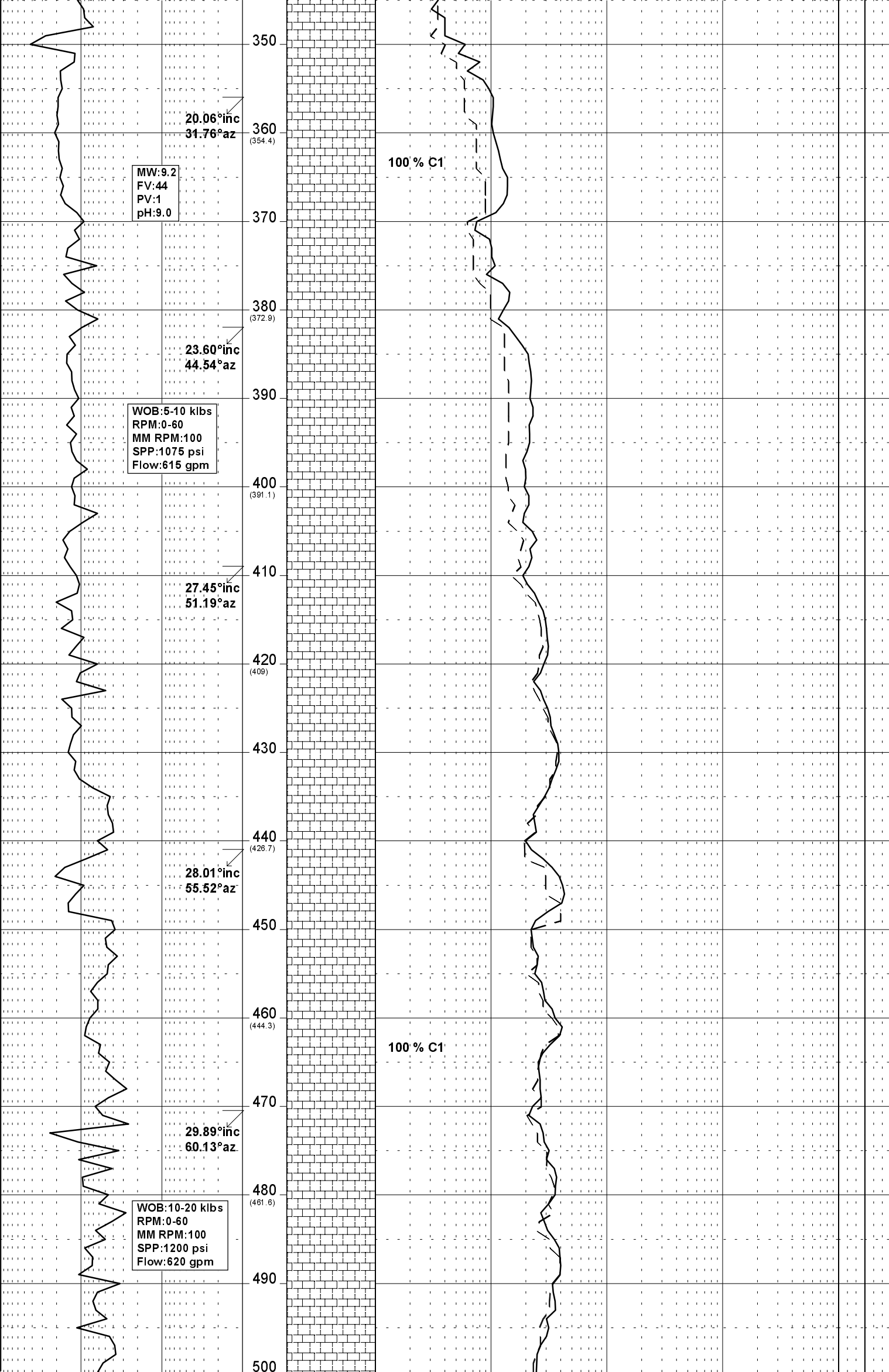
mod srt,abdt foss frag,lse-fri,
occ mod hd,v gd inf por,fr vis
por,no fluor.

AQUAGEL/SEAWATER
SPUD MUD SYSTEM

CALCARENITE:lt gy-lt olv gy,com
trnsl,dom f-med,mod wl srt,abdt
foss frag,lse-occ mod hd,gd inf
por,pr vis por,no fluor.

CALCARENITE:lt gy-lt olv gy,com
trnsl,dom f,wl srt,abdt foss
frag,lse-occ fri,fr-gd inf & vis
por,no fluor.

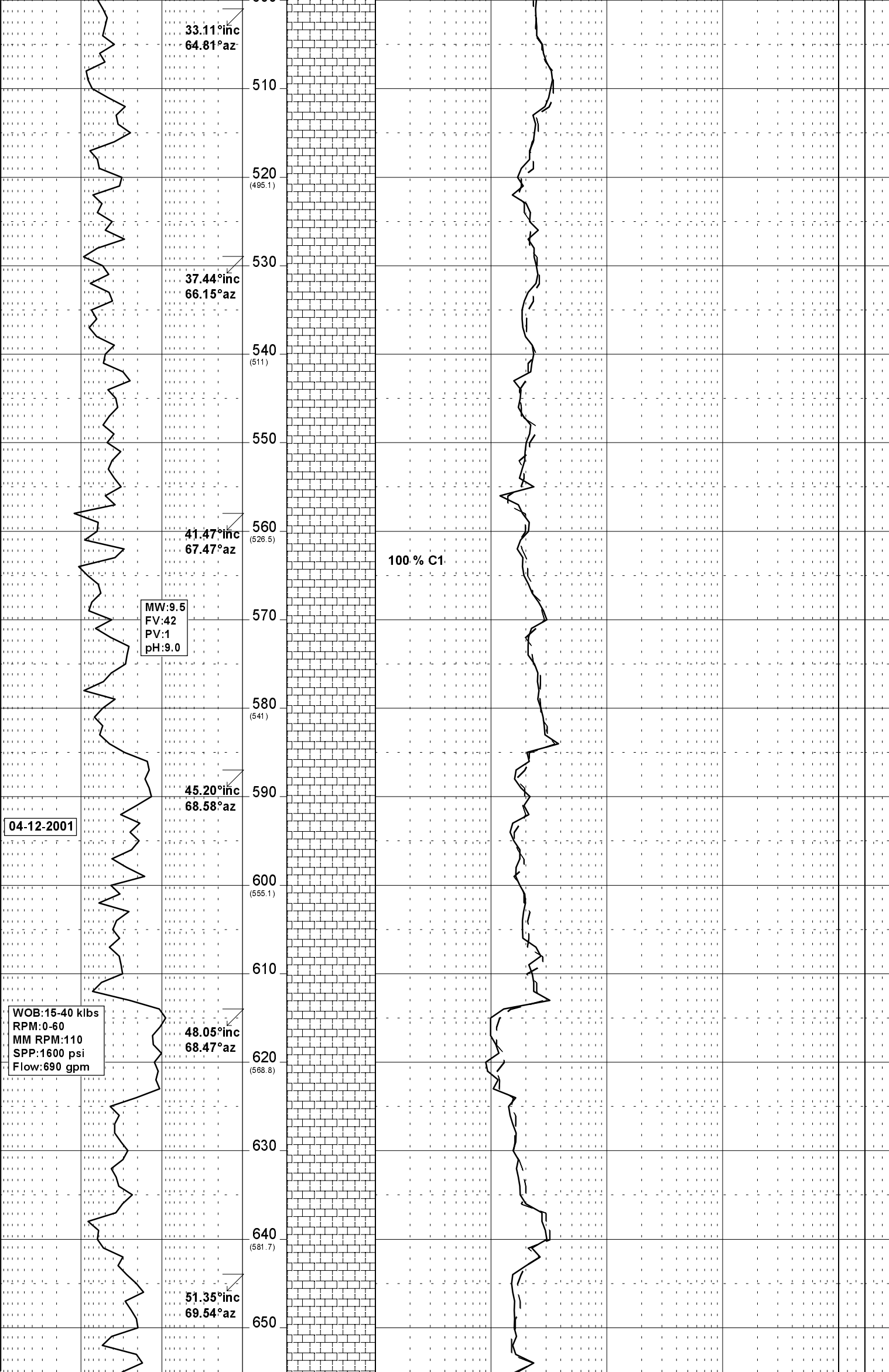
CALCARENITE:lt gy-lt olv gy,
yeish gy,com trnsl,f,sl arg,abdt
foss frag,lse-fri,fr-gd inf &
vis por,no fluor.



CALCARENITE:lt gy-lt olv gy,occ
trnsl,arg i/p,g/t Clst,com foss
frag,tr carb & lith spk,fri,pr
vis por,no fluor.

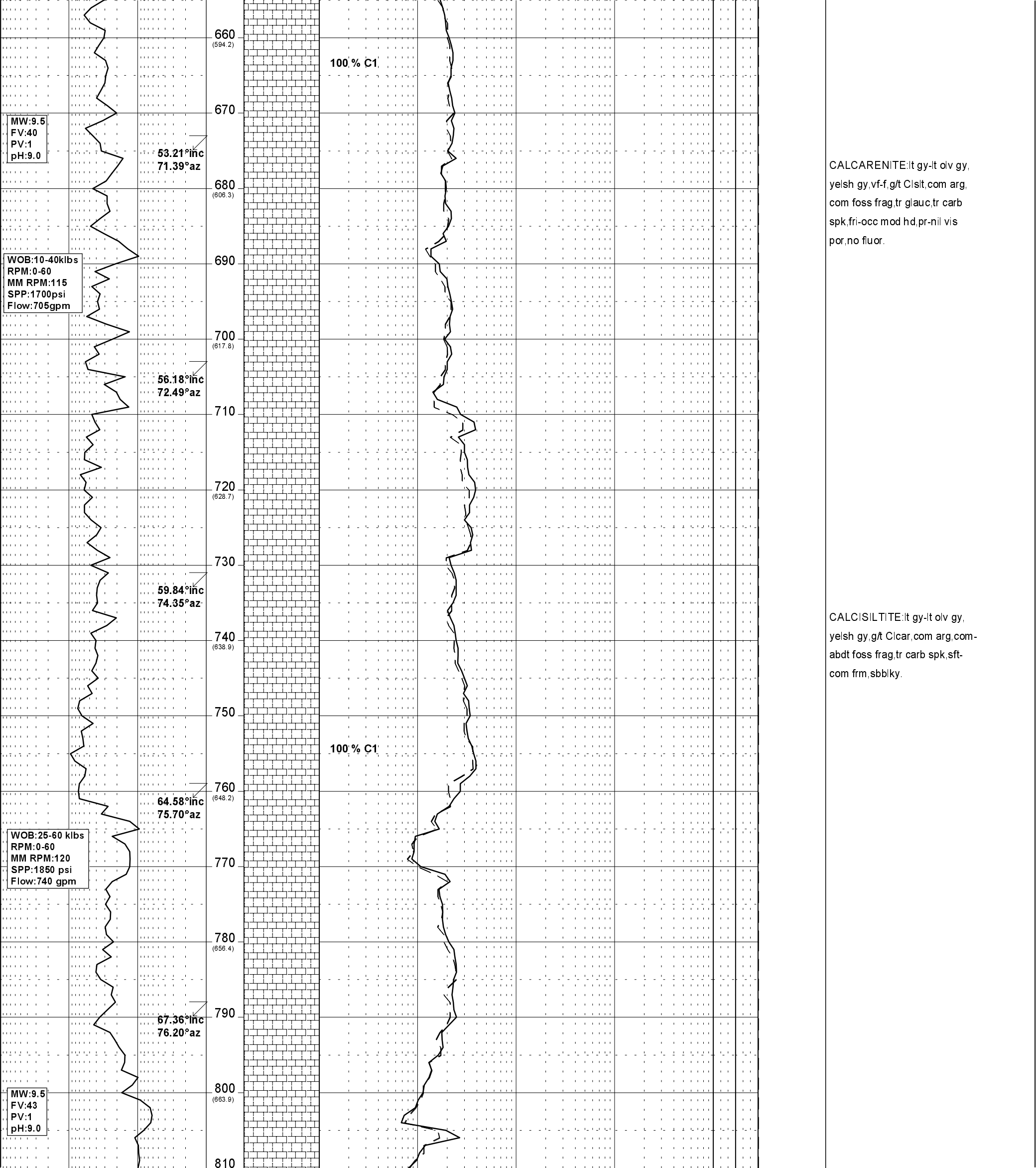
CALCARENITE:lt gy-lt olv gy,occ
trnsl,f,sl arg,com-abdt foss
frag,tr-rr carb & lith spk,fri-
occ mod hd,fr-pr vis por,no
fluor.

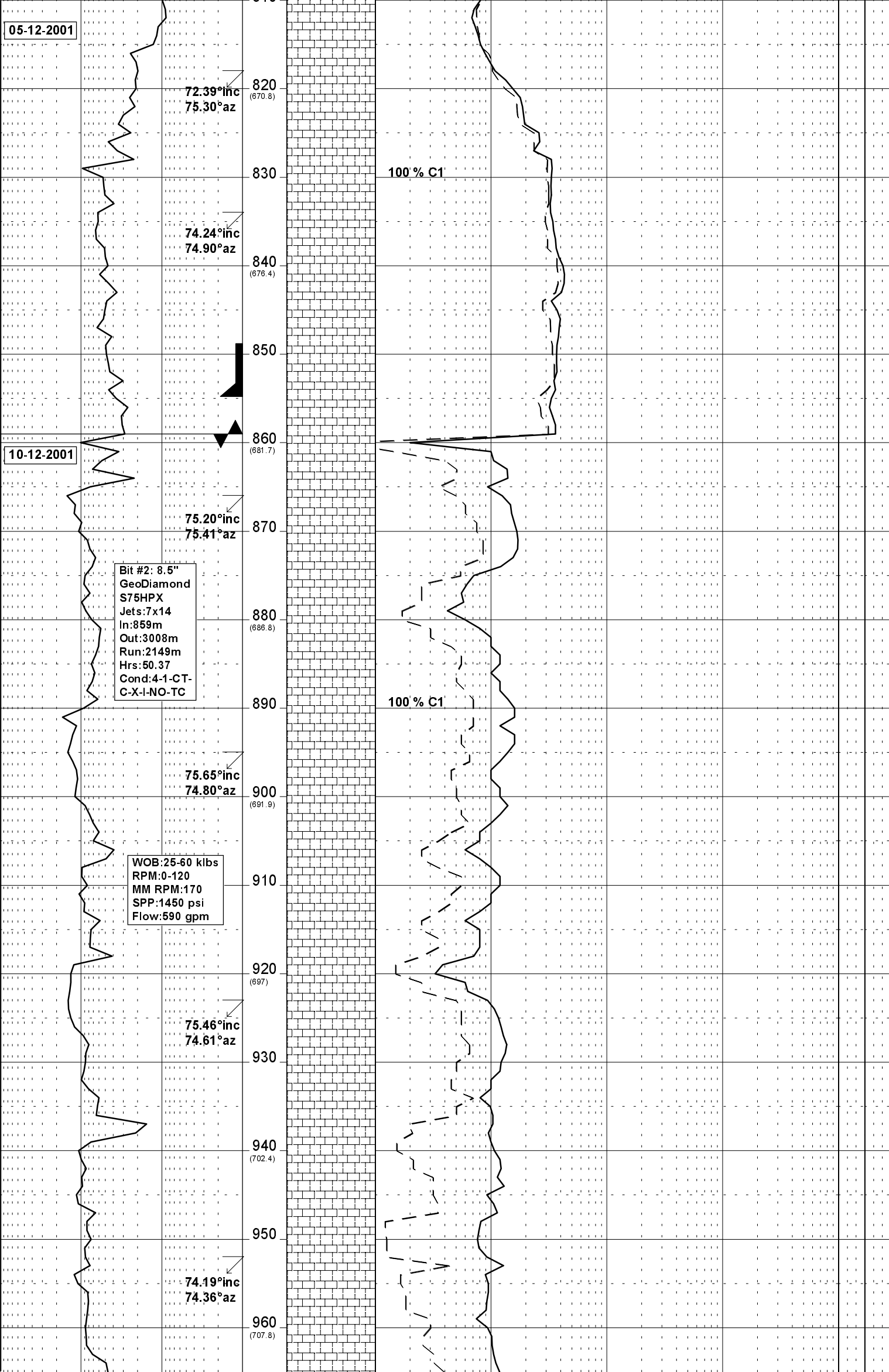
CALCARENITE:lt gy-lt olv gy,vf-f
rr med,com-abdt foss frag,occ
carb spk,tr glauc,tr nod pyr,
fri-mod hd i/p,pr vis por,no
fluor.



CALCARENITE:lt gy-lt olv gy,vf-f
com-abdt foss frag,tr carb spk,
occ glauc,fri-mod hd i/p,pr vis
por,no fluor.

CALCARENITE:lt gy,olv gy,vf-f,
g/t Clst,com v arg,com foss
frag,tr pyr & glauc,stky,disp
i/p,pr vis por,no fluor.





CALCISILTITE:lt gy-lt olv gy,
yelsh gy,g/t Cclear,com arg,com-
abdt foss frag,tr carb spk,sft-
com frm,stky,disp i/p,sbbiky.

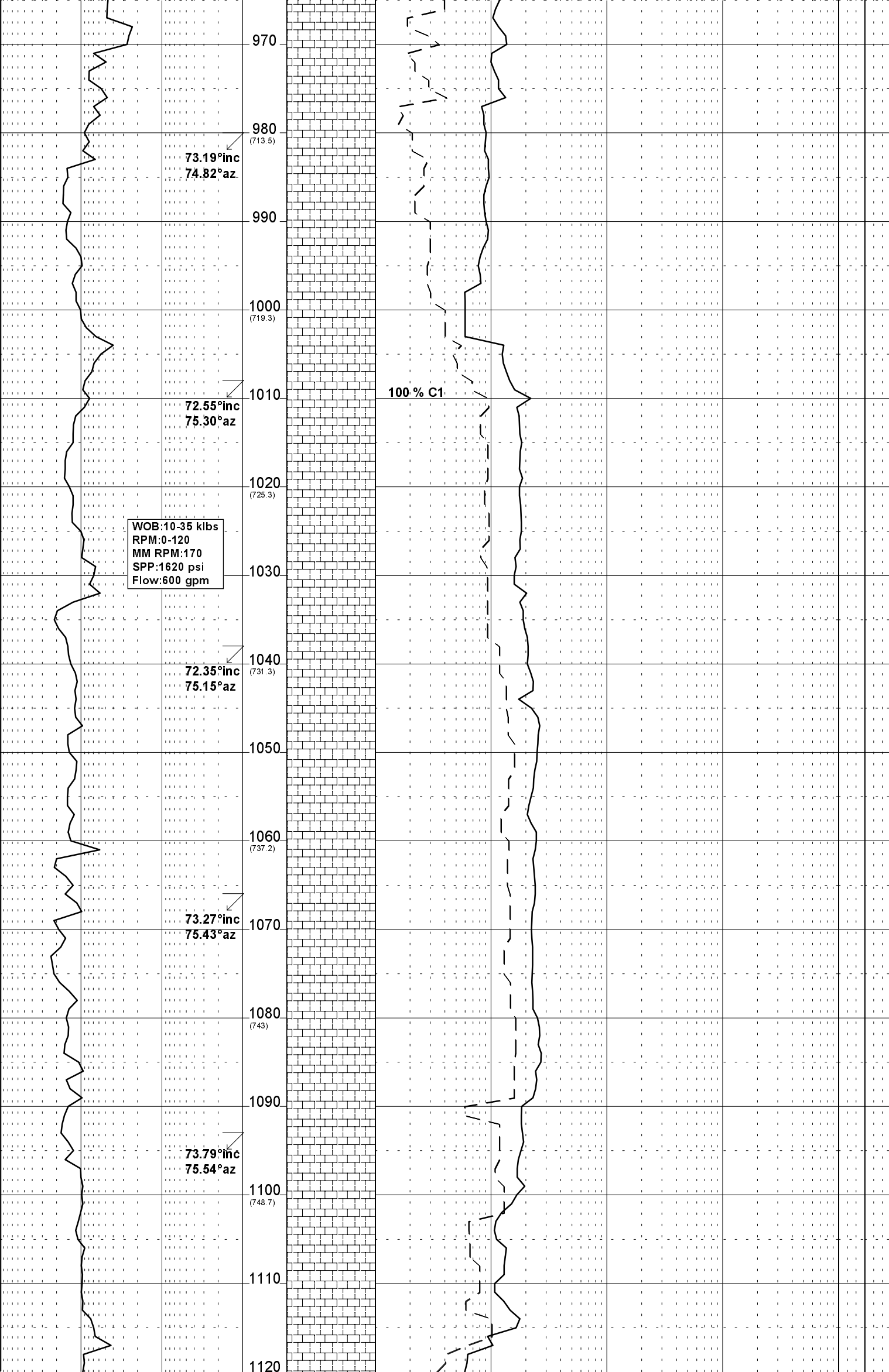
9-5/8" Casing Set @ 854.8 metres

Total Depth 12-1/4" Phase @ 859m

CALCILUTITE:v pl olv gy-olv gy,
com sity mat,g/t CIsit,com foss
frag,occ carb spk,sft-frm,sbbiky

KCI/PHPA/POLYMER
MUD SYSTEM

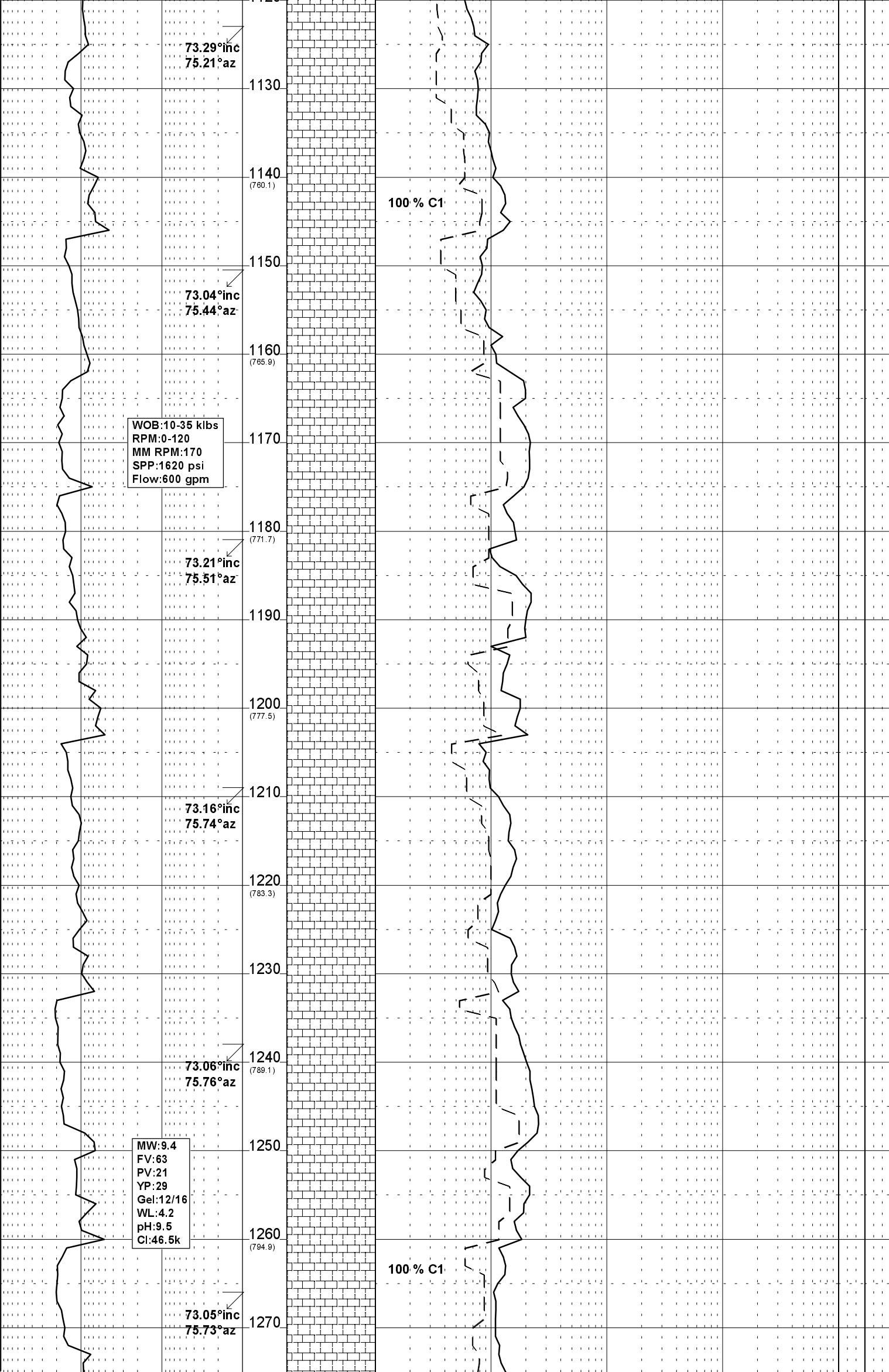
CALCILUTITE:pl olv gy-olv gy,com
sity mat,tr dissem pyr,com foss
frag,sft-frm,sbbiky.



CALCILUTITE:pl olv gy,olv gy
i/p,com slty mat,mnr dissem pyr,
occ calcite grn,sft-frm,occ mod
hd,sbblky-amorph.

CALCILUTITE:pl olv gy-olv gy,v
pl olv gy i/p,g/t Clslt i/p,
com foss frag,mnr dissem pyr,mnr
calcite grn,occ carb spk,pred
sft-frm,occ frm-mod hd,sbblky-
blky.

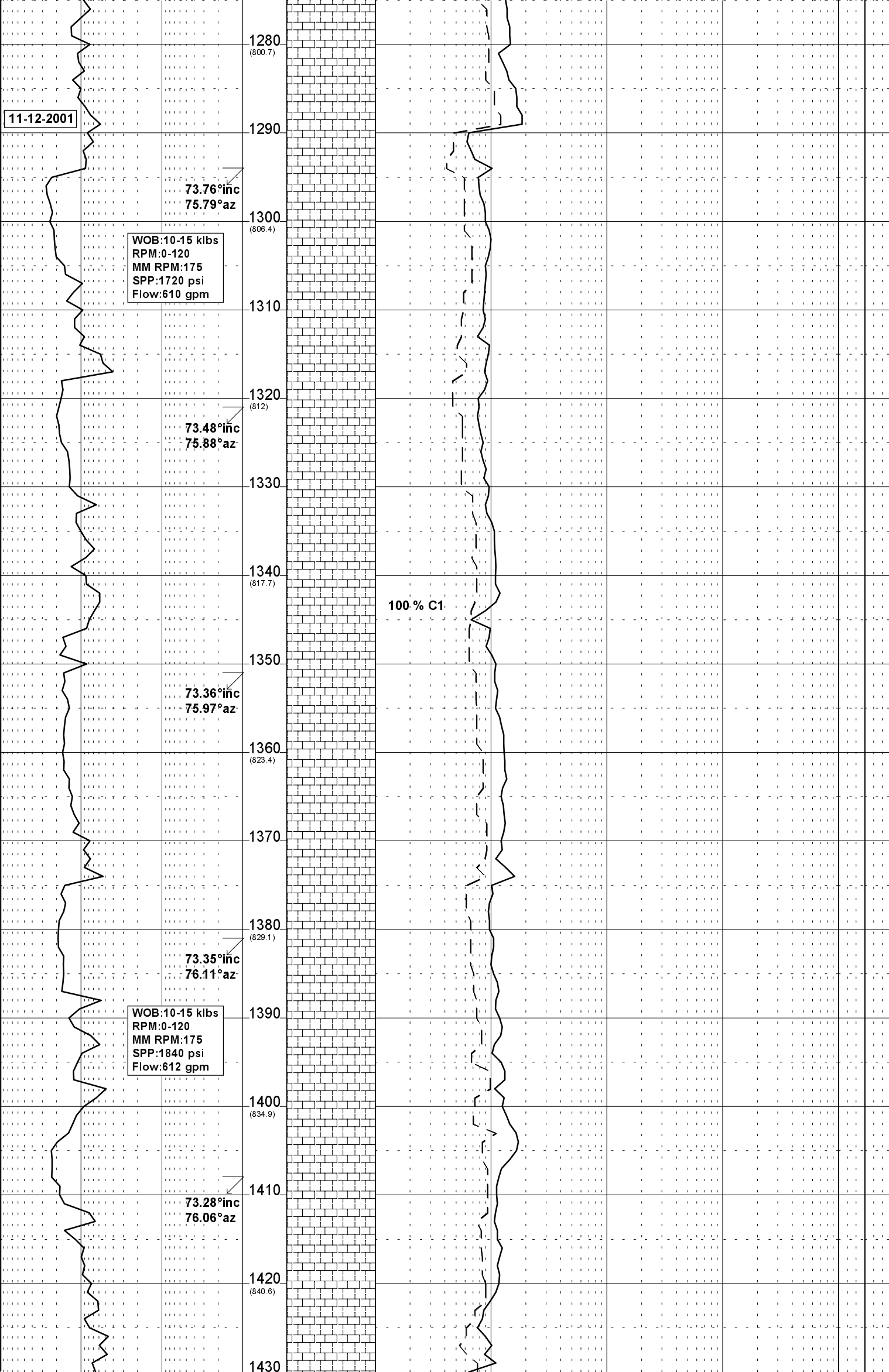
CALCILUTITE:lt olv gy,olv gy i/p
tr Clslt,mnr foss frag,tr dissem
pyr,tr carb spk,sft-frm,sbblky.



CALCILUTITE:lt olv gy-lt gy,olv
gy i/p,g/t tr Clslt i/p,tr foss
frag,rr calcite grn,tr carb spk,
frm-occ mod hd,sbbiky-blky.

CALCILUTITE:lt gy-lt olv gy,
tr carb spk,tr disse pyr,sft-
frm,sbbiky,occ sbfiss.

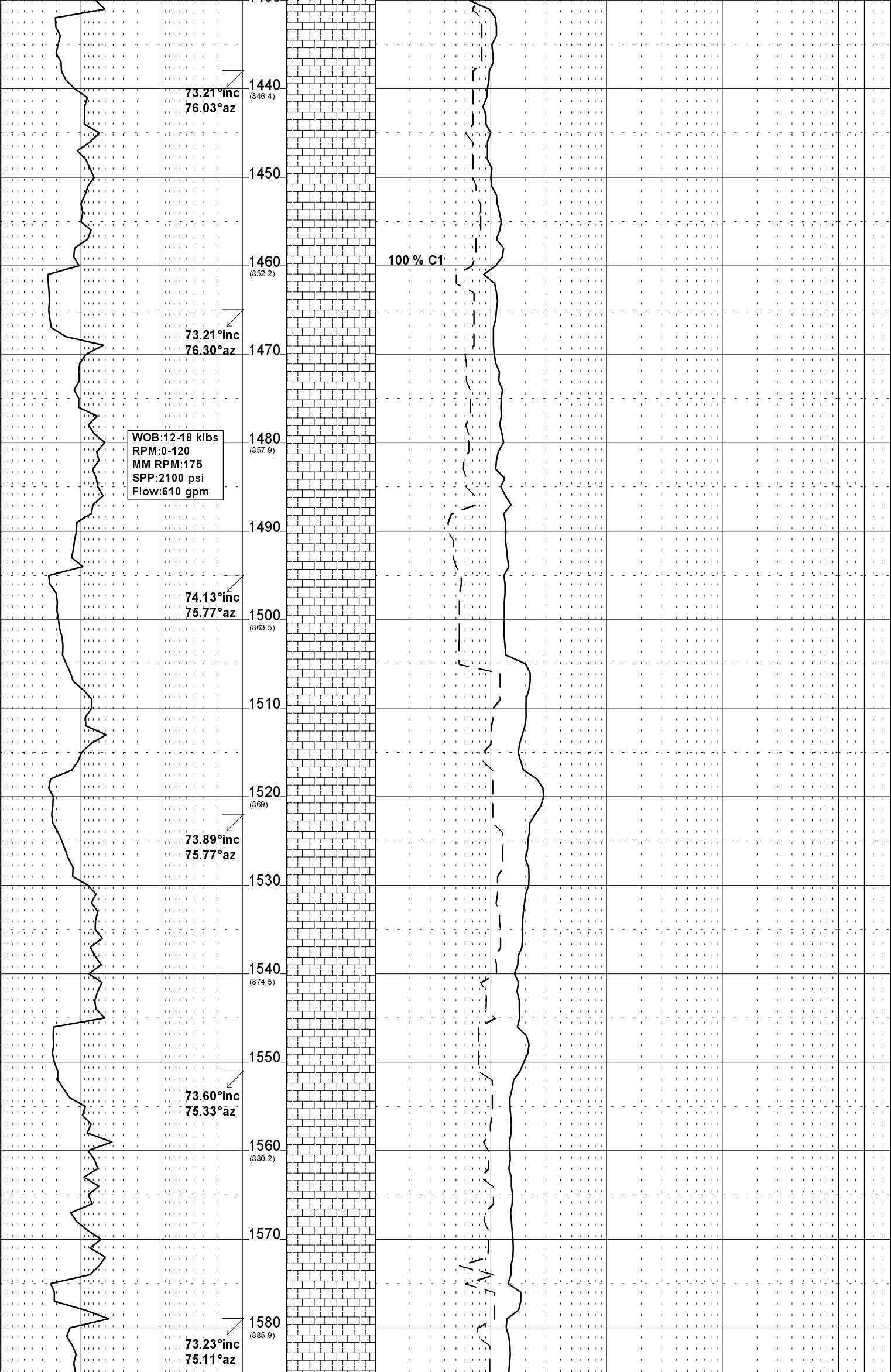
CALCILUTITE:v lt gy-lt olv gy
i/p,tr carb spk,rr disse pyr,
sft,com frm,sbbiky-blky.



CALCILUTITE:v lt gy-lt olv gy,
mnr foss frag,occ calcite,rr
dissem pyr,sft,com frm,sbblky-
sbfiss.

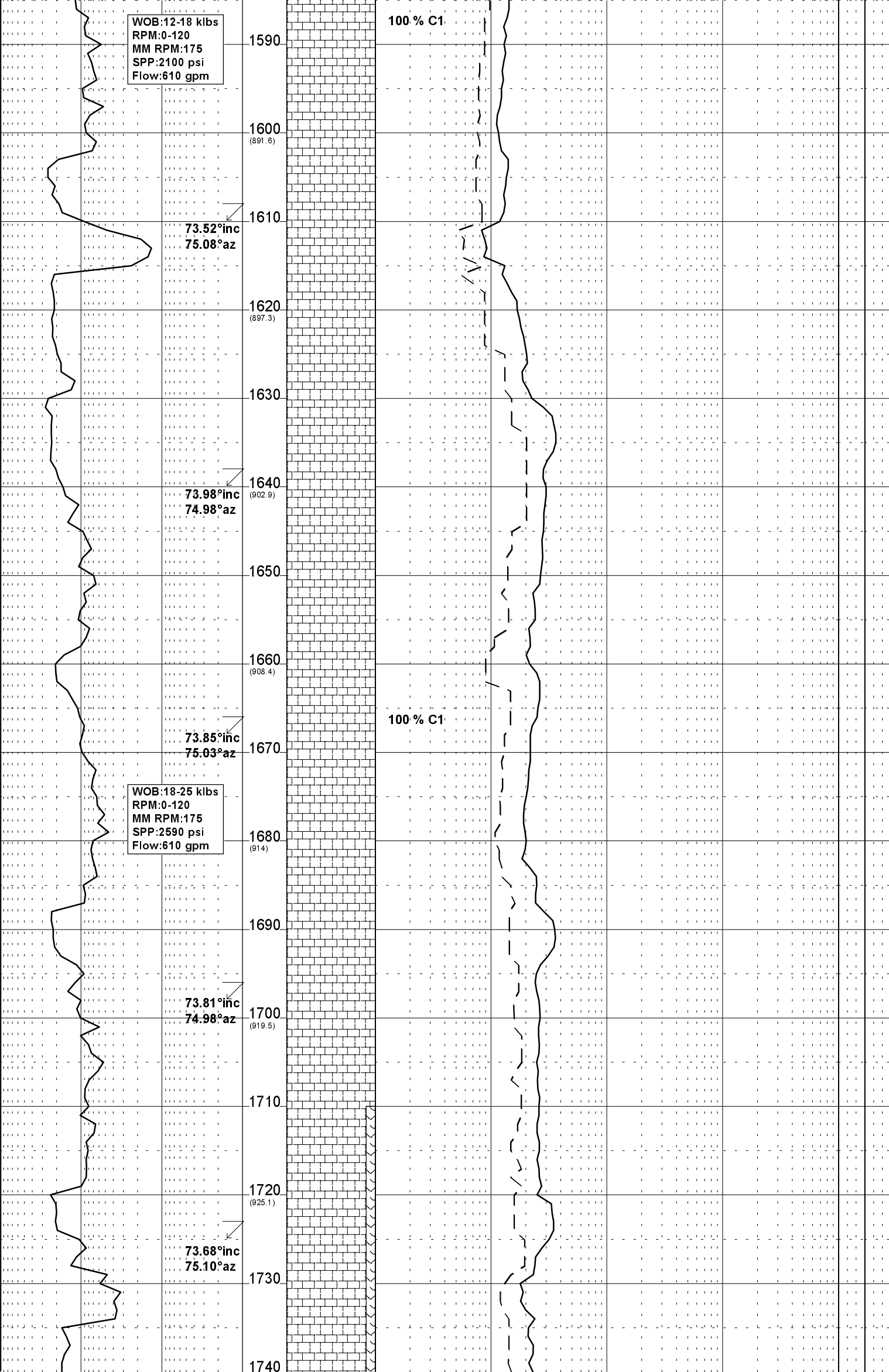
CALCILUTITE:lt gy-lt olv gy,occ
gn gy,rr foss,tr carb spk,sft,
occ frm,sbblky-blky,occ amorph.

CALCILUTITE:lt olv gy-olv gy,tr
foss,mnr dissem pyr,sft,amorph-
sbblky.



CALCILUTITE:pl olv gy-olv gy,occ
med gy,g/t Clsit,com calcite grn
tr-mnr disseminated pyr,sft-frn,occ hd
-v hd,amorph,sbbiky.

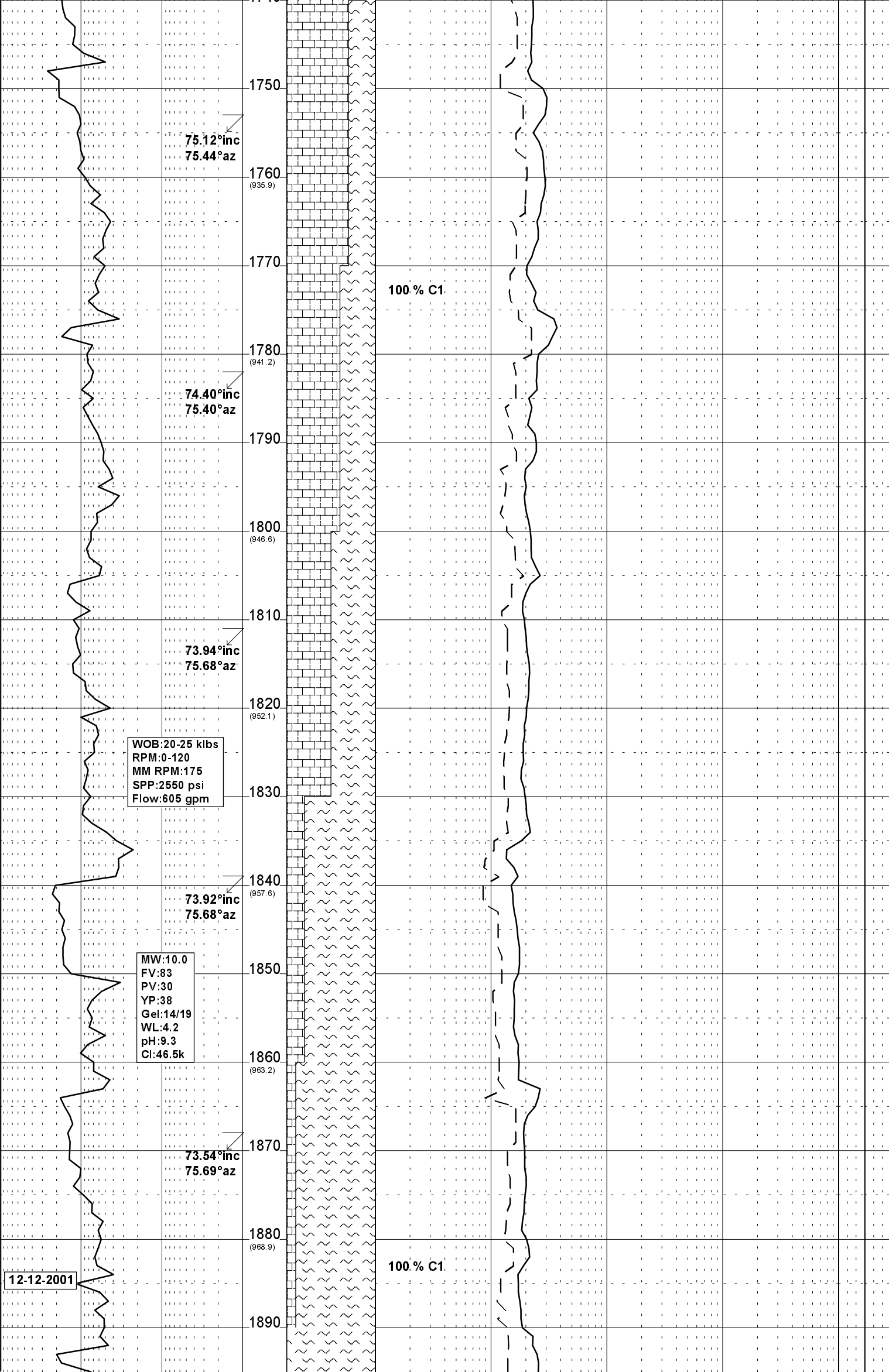
CALCILUTITE:olv gy-pl olv gy,g/t
Clslt,occ ooid,com disseminated pyr,
loc abdt fossil frag,tr glauc,pred
sft-disp,rr frn,rr hd,pred
amorph,rr sbbiky.



CALCILUTITE:olv gy-dk olv gy,g/t
Clslt,com-loc abdt disseminated pyr, tr
disseminated glauc,com calcite grn,
sft,rr frm,amorph-sbbiky.

CALCILUTITE:pl olv gy-olv gy,com
arg mtx,g/t Clslt i/p,mnr disseminated
pyr,sft-frm,disp i/p,amorph-
sbbiky.

CALCILUTITE:lt olv gy-olv gy,
g/t Clslt i/p,mnr disseminated pyr.

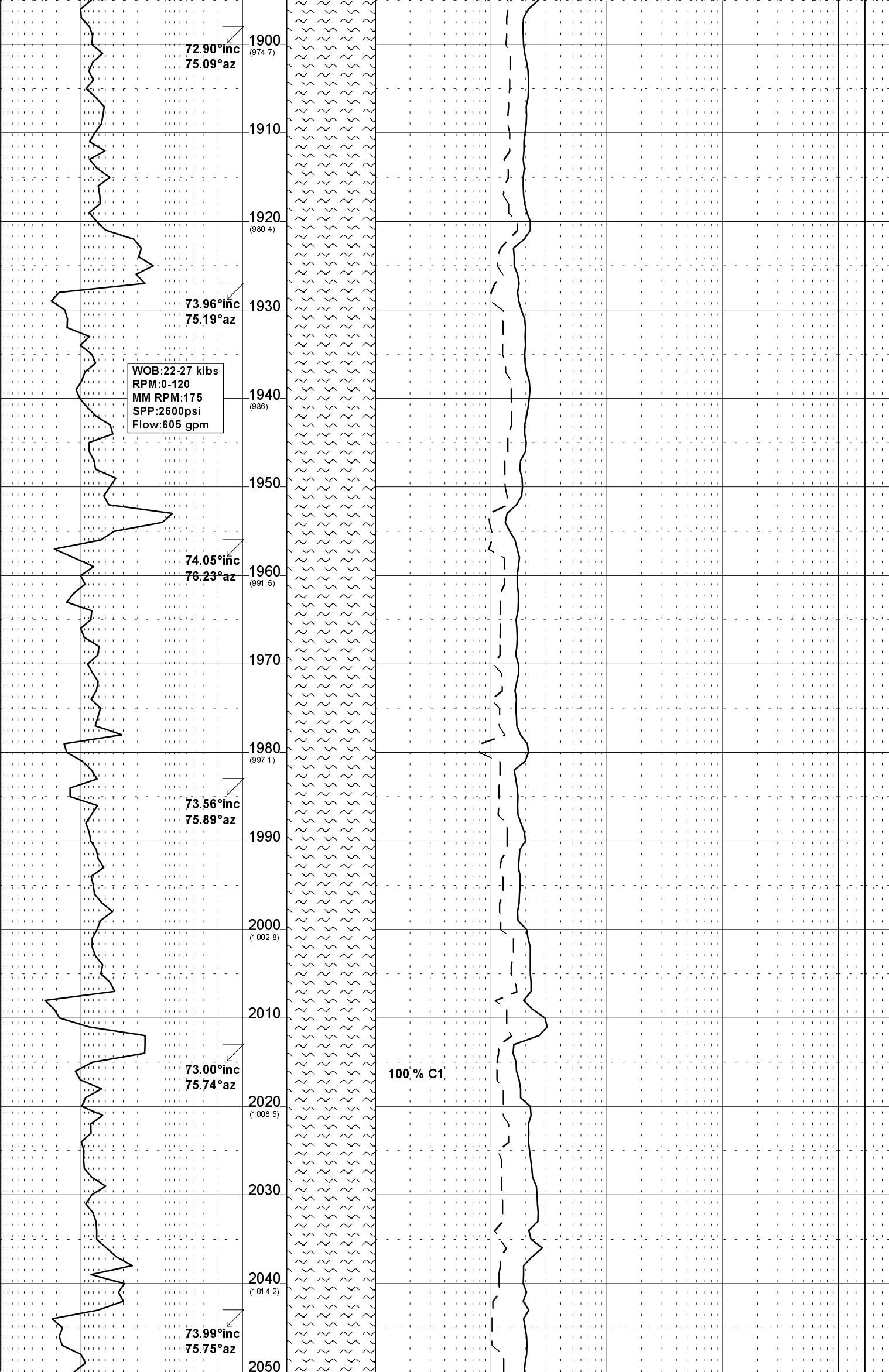


com foss, occ calcite grn, frm-sft
sbbiky, occ amorph.

MARL: lt olv gy-olv gy, occ med gy
tr slty i/p, rr dissem pyr, tr
carb spk, sft-frm, sbbiky-blky.

MARL: olv gy-med gy, slty i/p, tr
carb spk, occ bn gy lith, sft,
sbbiky-occ amorph.

MARL: lt-med gy, occ olv gy, slty
i/p, tr carb spk, tr xln LMST,
tr dissem pyr, sft-frm, sbbiky-

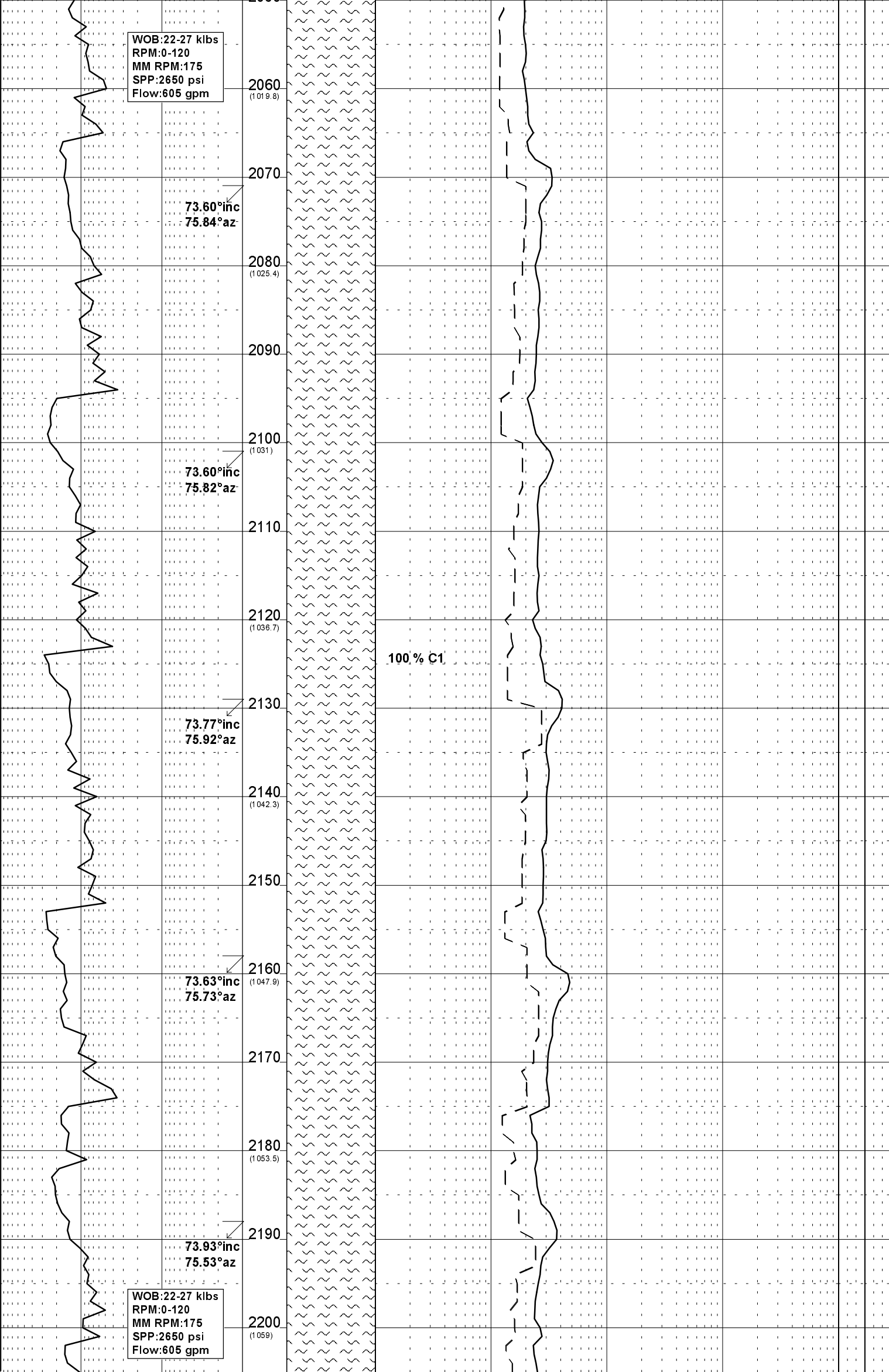


blk.

MARL:lt gy-med gy,occ olv gy,
silty,rr carb spk,tr dk bn lith,
rr dissem pyr,frm,com sft,blk.

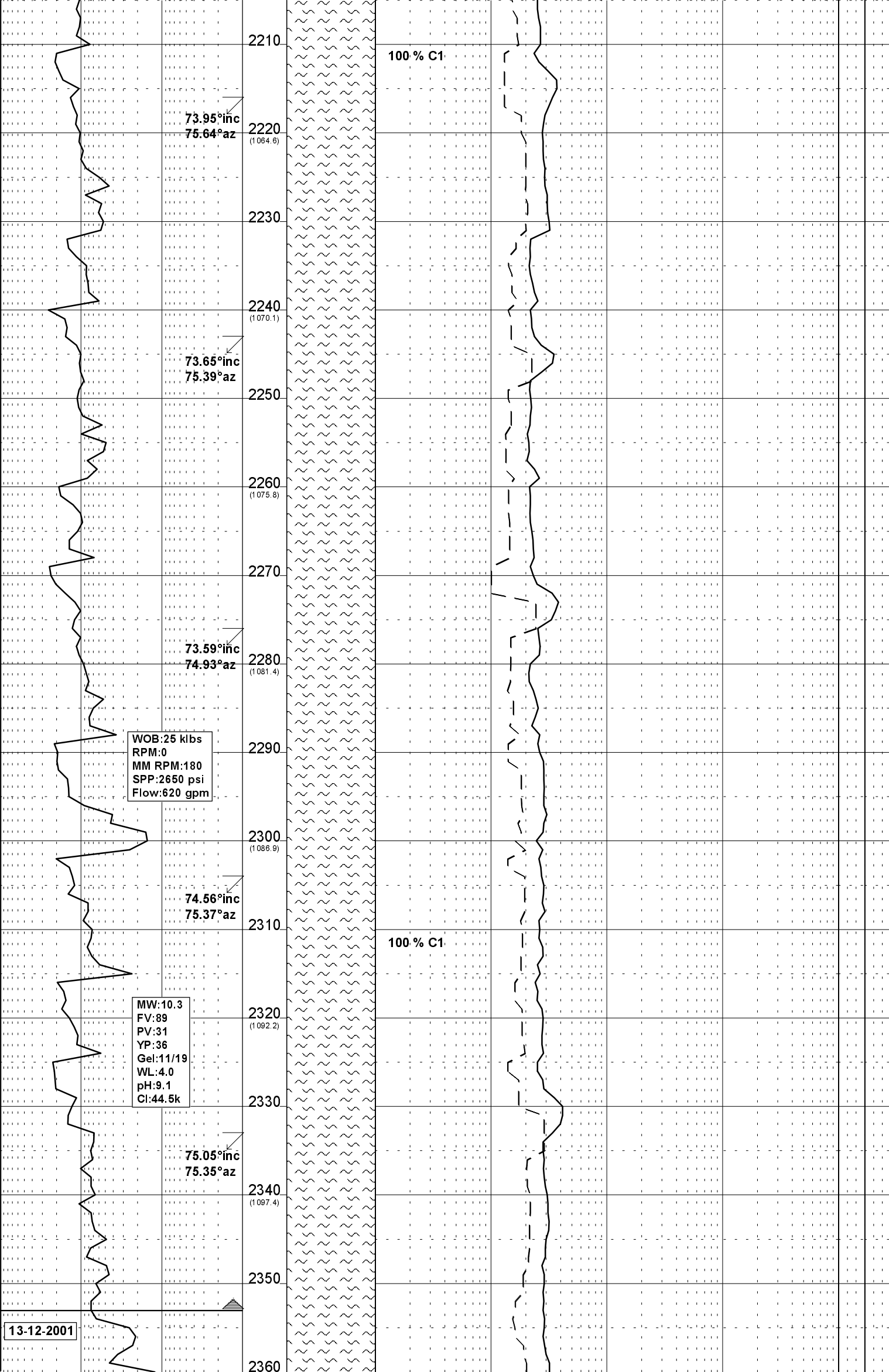
MARL:olv gy,dk olv gy i/p,silty
i/p,tr carb spk,com pyr,occ
Ooid,sft,occ frm,sbbkly,amorph
i/p.

MARL:olv gy,silty,tr Ooid,tr
dissem pyr,tr LMST,sft-disp,mnr
frm,amorph-sbbkly.



MARL:olv gy,med dk gy i/p,occ
dissem pyr,tr foss,tr Ooid,sft-
frm,sbbiky-amorph.

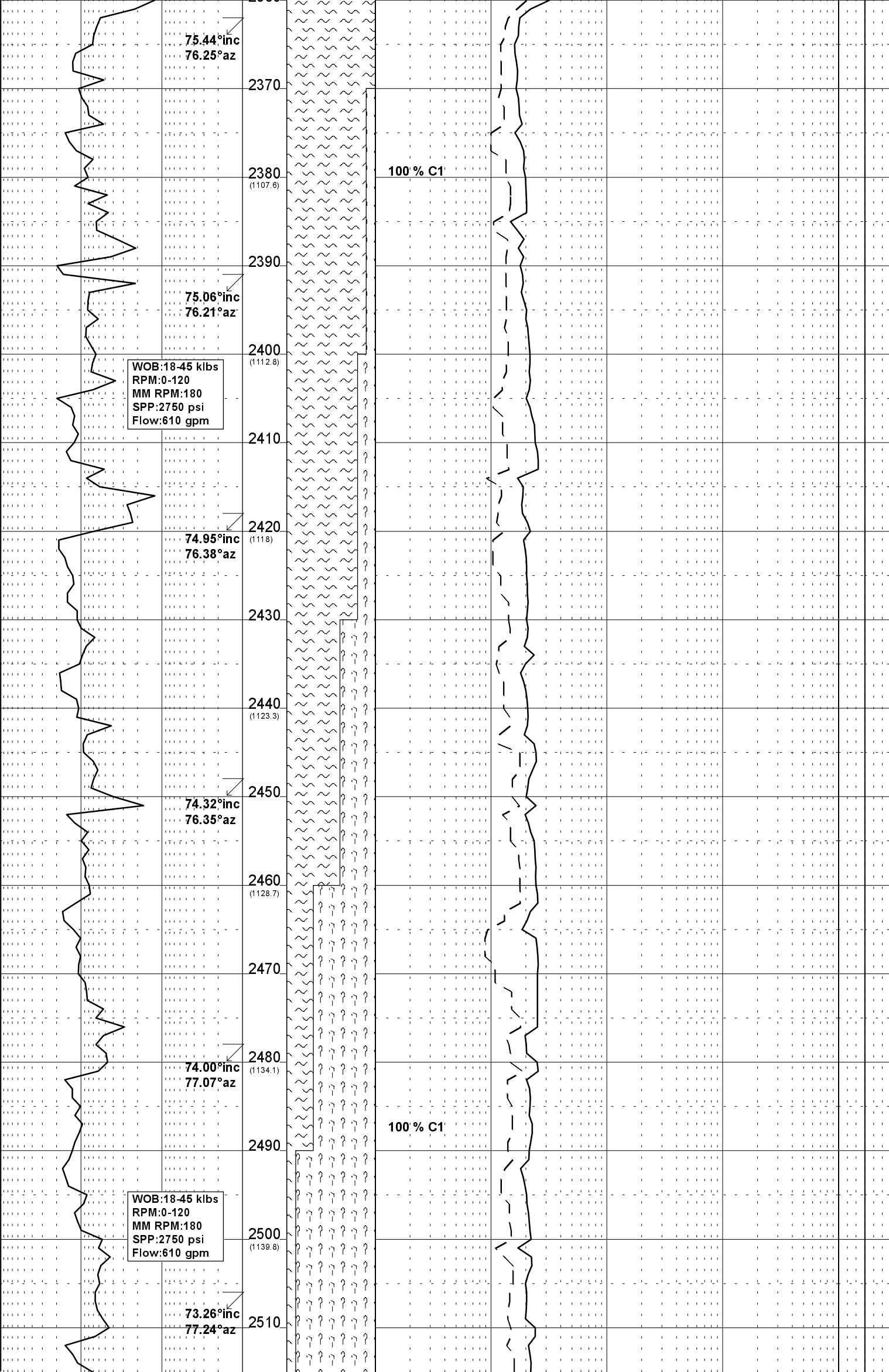
MARL:olv gy,med dk gy i/p,sity,
com Ooid,tr foss,tr dissem pyr,
sft-disp,mnr hd-v hd,sbbiky-
amorph.



MARL: olv gy-med dk gy, occ foss,
tr dissem pyr, sft-frm, occ mod hd
sbbiky-blky.

MARL: olv gy, med dk gy, occ foss
frag, tr dissem pyr, sft-frm, tr
mod hd, sbbiky-blky.

MARL: olv gy-med gy, tr calcite
grn, tr dissem pyr, sft, com frm,
blky.

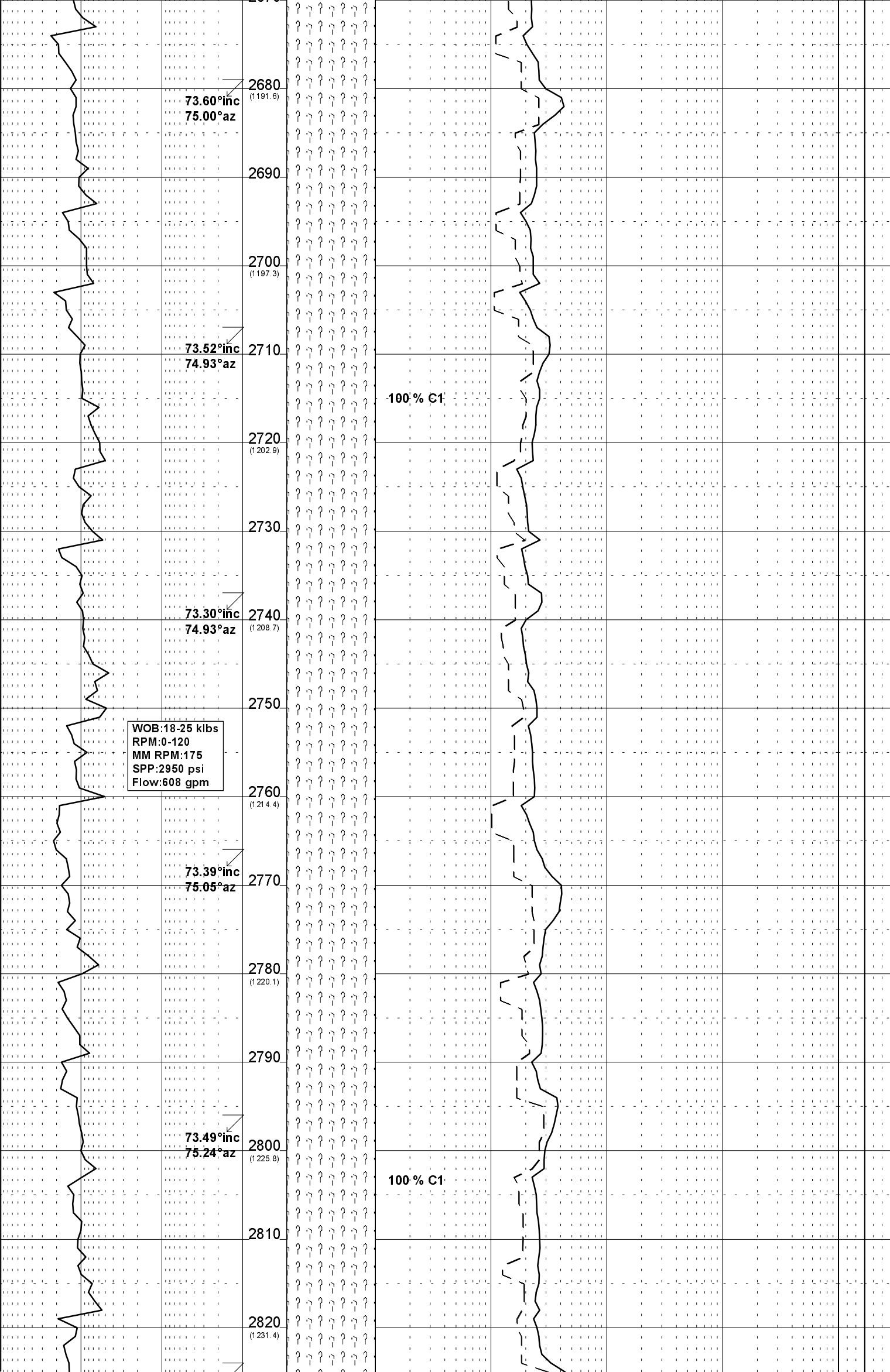


MARL:olv gy,dk olv gy i/p,mnr-com foss,tr dissem pyr,tr calcite,sft-frm,mod hd i/p, sbblky-blky.

CLAYSTONE:dk olv gy,occ olv gy, calc,occ dissem pyr,occ nod pyr, frm-sft,mod hd i/p,blky-sbblky.

MARL:olv gy-dk olv gy,tr foss,tr dissem pyr,com calcite grn,gft Clst i/p,sft,frm i/p,sbblky.

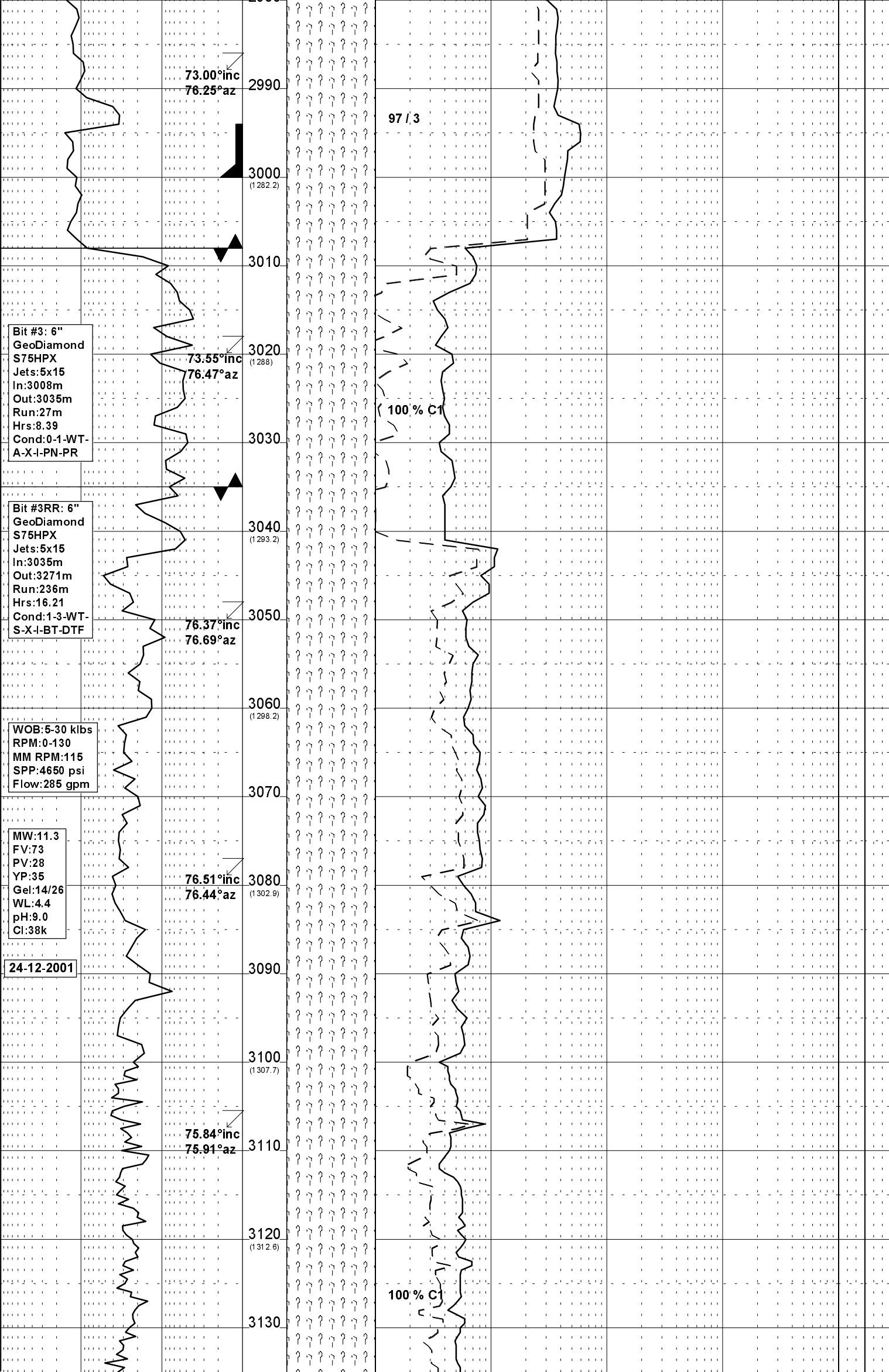
CLAYSTONE:med gy-med dk gy,tr olv gy,calc,tr dissem pyr,rr calcite grn,frm-occ mod hd, blky.



CLAYSTONE:lt gy-lt gy bn,med gy
i/p,calc,tr dissem pyr,tr slty
i/p,tr Ooid,frm-com sft,sbbiky.

CLAYSTONE:lt gy-lt bn gy,med gy,
occ dk gy,tr foss frag,tr Ooid,
tr dissem pyr,frm,sbbiky-blky.

CLAYSTONE:lt gy-med dk gy,pl gn
gy,calc,sity i/p,occ foss frag,
occ Ooid,tr dissem pyr,frm-mod
hd,blky.



CLAYSTONE: olv gy-med dk gy, calc
com foss, com disseminated pyrite, frim,
blky-sbbly.

7" Casing Set @ 3000 metres

Total Depth 8-1/2" Phase @ 3008m

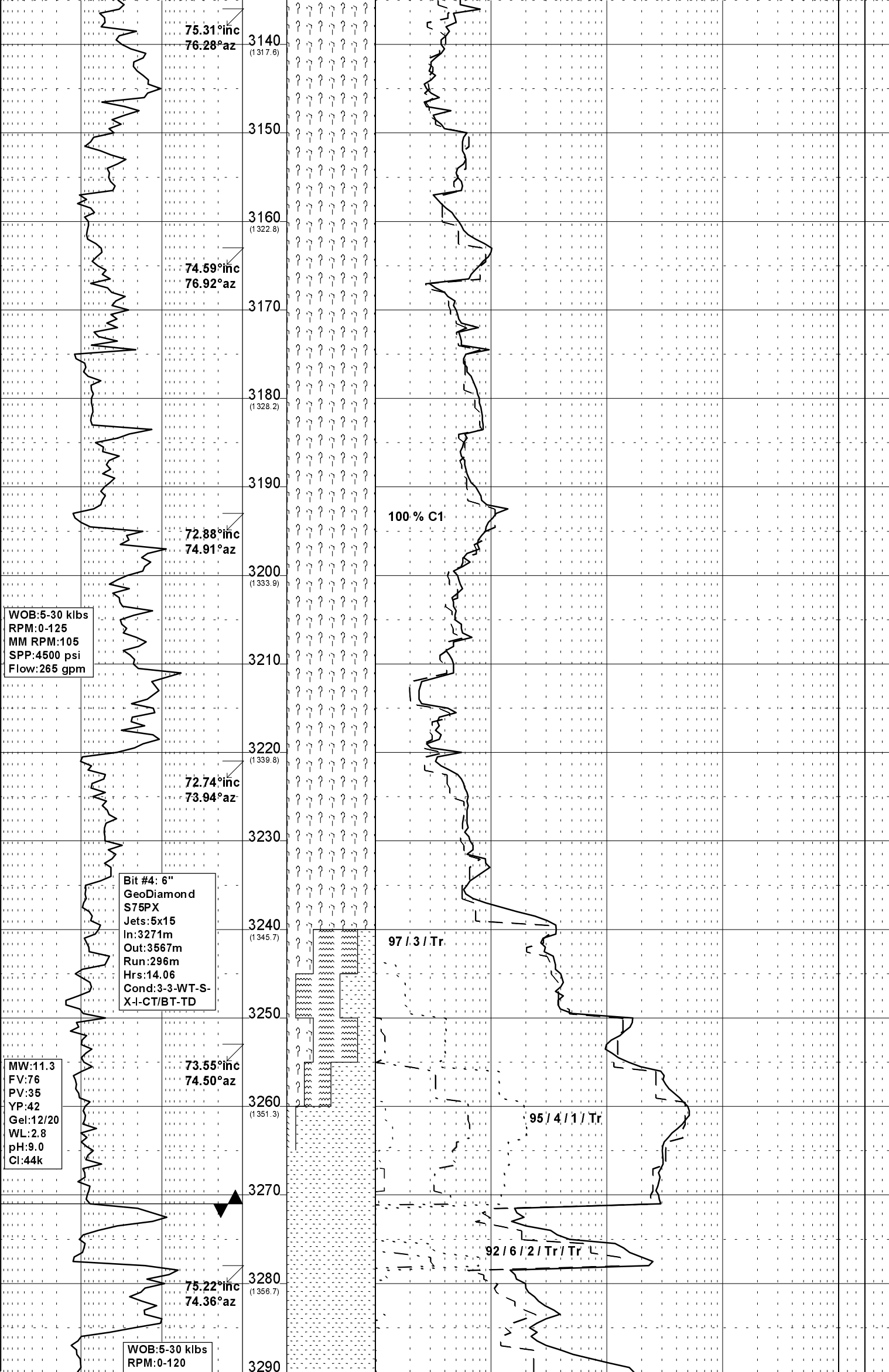
PIT @ 3012m : 16 ppg EMW

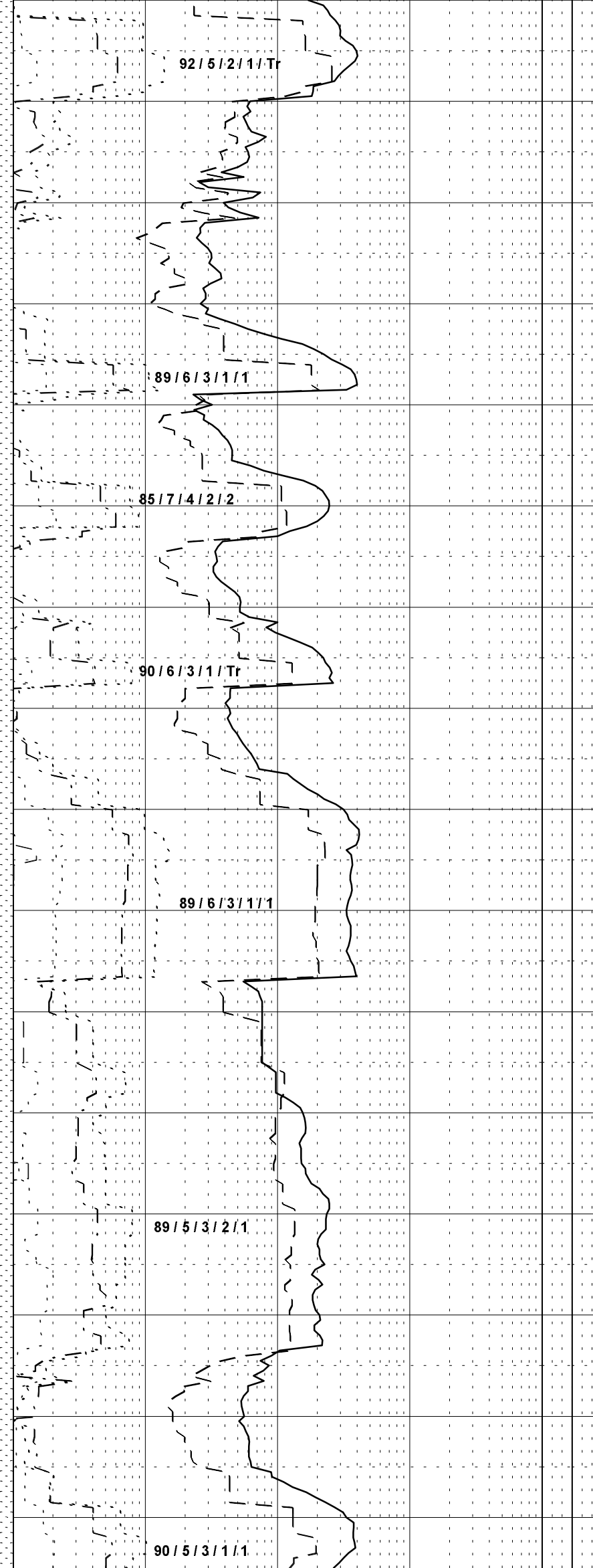
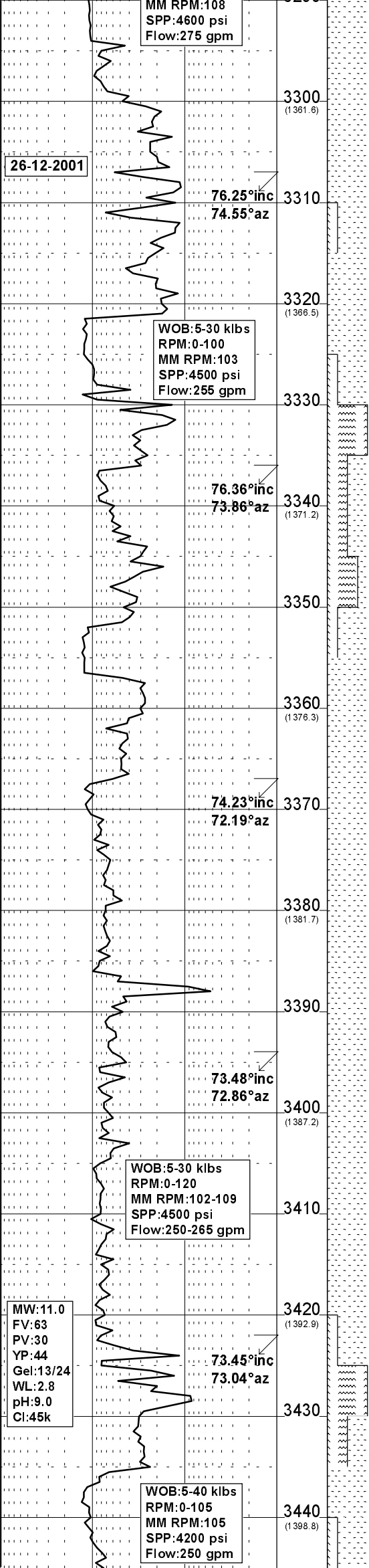
DRILL WITH KCL/PHPA
POLYMER MUD SYSTEM

CLAYSTONE: olv gy, lt-med gy, calc,
com foss, occ Ooid, sft-frim,
amorph-sbbly.

CLAYSTONE: lt-med gy, gn gy, calc,
silty i/p, occ foss, occ Ooid, tr
disseminated pyrite, tr lith & glauc, sft-
frim, sbbly.

CLAYSTONE: lt olv gy, lt-med gy,
calc, silty, com foss, rr-occ
disseminated pyrite, sft-frim, sbbly.





fluor.

SILTSTONE: med-dk bn, bn gy, lt gy,
arg, carb, micmic, disseminated pyr, sft-v
sft, frm i/p, disp, amor, sbbiky-
blky.

SANDSTONE: clr-trns, opq, f-v crs,
dom med-crs, pr srt, ang-sr i/p,
tr pyr cmt, occ-com nod pyr, pred
cln, lse, fr-gd inf por.

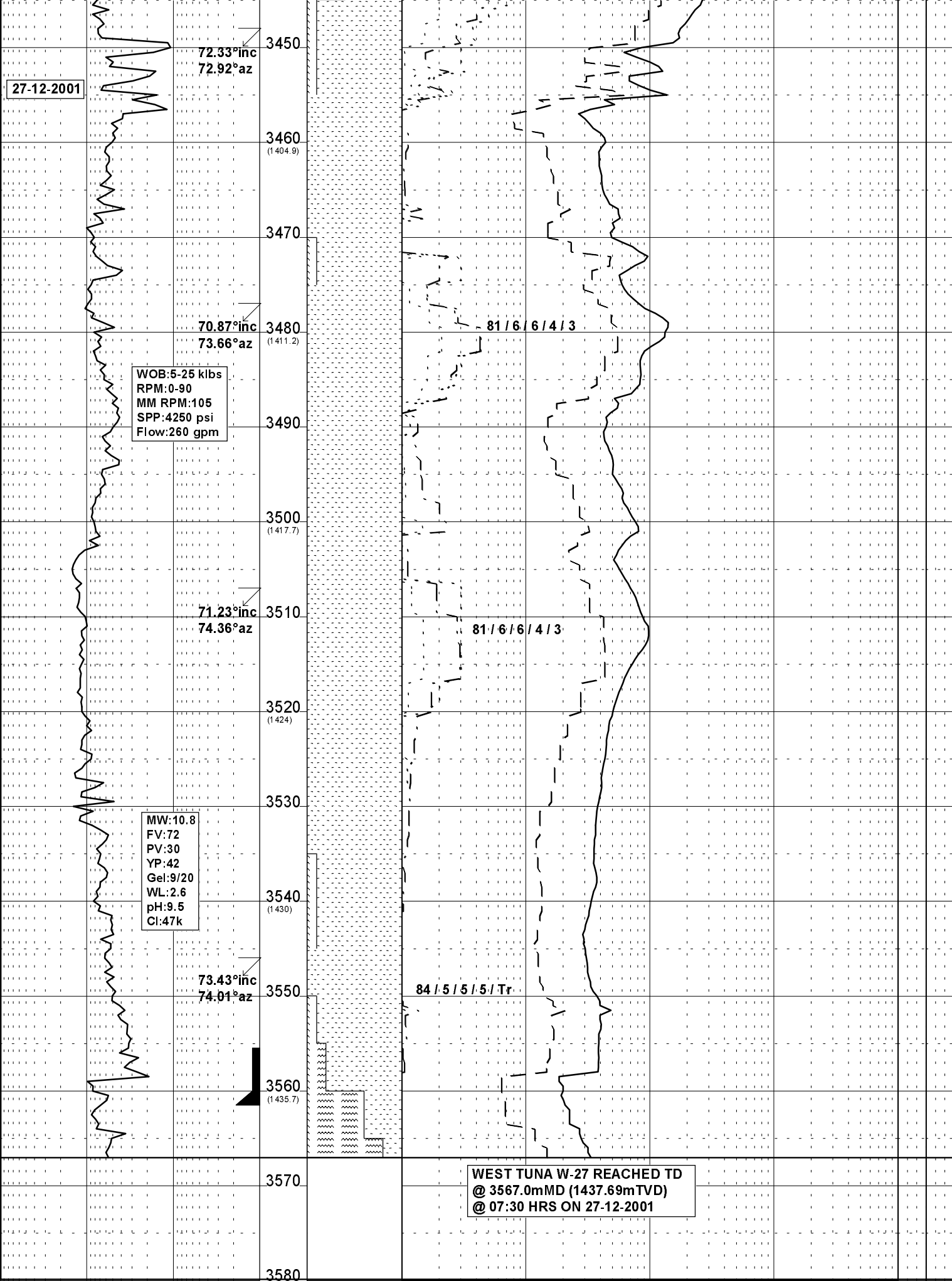
SILTSTONE: lt-med gy, lt bn gy, arg
-aren, calc, tr carb spks, tr calc
frag, tr disseminated pyr, sft-frm, blky-
sbbiky.

SANDSTONE: clr-trns, opq, f-v crs,
dom med-crs, pr srt, ang-rnd, dom
sa-sr, tr pyr cmt, occ-com nod pyr
com ang bit frac grn, pred cln &
lse, fr-gd inf por.

SANDSTONE: clr-trns, occ milky wh,
f-crs, dom crs, pr-mod srt, sa-ang,
occ v ang & frac crs grn, wk pyr
cmt, occ pyr nod, cln, gd inf por,
no fluor.

SANDSTONE: clr-trns, occ milky wh,
f-crs, dom med-crs, pr-mod srt, sa-
ang, sr i/p, occ v ang bit frac
grn, wk pyr cmt, occ pyr nod, cln,
gd inf por, no fluor.

SILTSTONE: lt-med gy, lt bn/gy,
arg, calc, tr foss, tr disseminated pyr,
sft-frm, sbbiky-blky.



SANDSTONE:clr-trnsl,med-crs,dom
crs,occ v crs,pr srt,sr-ang,com
v ang frac grn,tr pyr cmt,gd
inf por,no fluor.

SANDSTONE:clr-trnsl,med-dom crs,
occ v crs,pr-mod srt,sr-ang,com
v ang bit frac grn,tr pyr cmt,
occ pyr nod,cln,lse,fr inf por,
no fluor.

SANDSTONE:clr-trnsl,med-crs,occ
v crs,pr srt,sr-ang,com v ang
bit frac grn,tr pyr cmt,tr pyr
nod,cln,lse,fr inf por,no fluor

SANDSTONE:clr-trnsl,f-v crs,dom
crs,pr srt,sr-ang,com v ang bit
frac grn,tr pyr cmt,occ pyr nod,
cln & lse,pr-fr inf por,no fluor

SILTSTONE:lt bn gy,yelsh bn,rr
dk gy,arg,tr carb spk,rr dissem
pyr,micmic,g/t CLST,v sft-disp,
sbbiky-amorph.

4-1/2" Liner Set @ 3561.5 metres

3560m-3567m:
Logged Post Backreaming