

FORMATION EVALUATION LOG

WELL : KILLARNEY 1



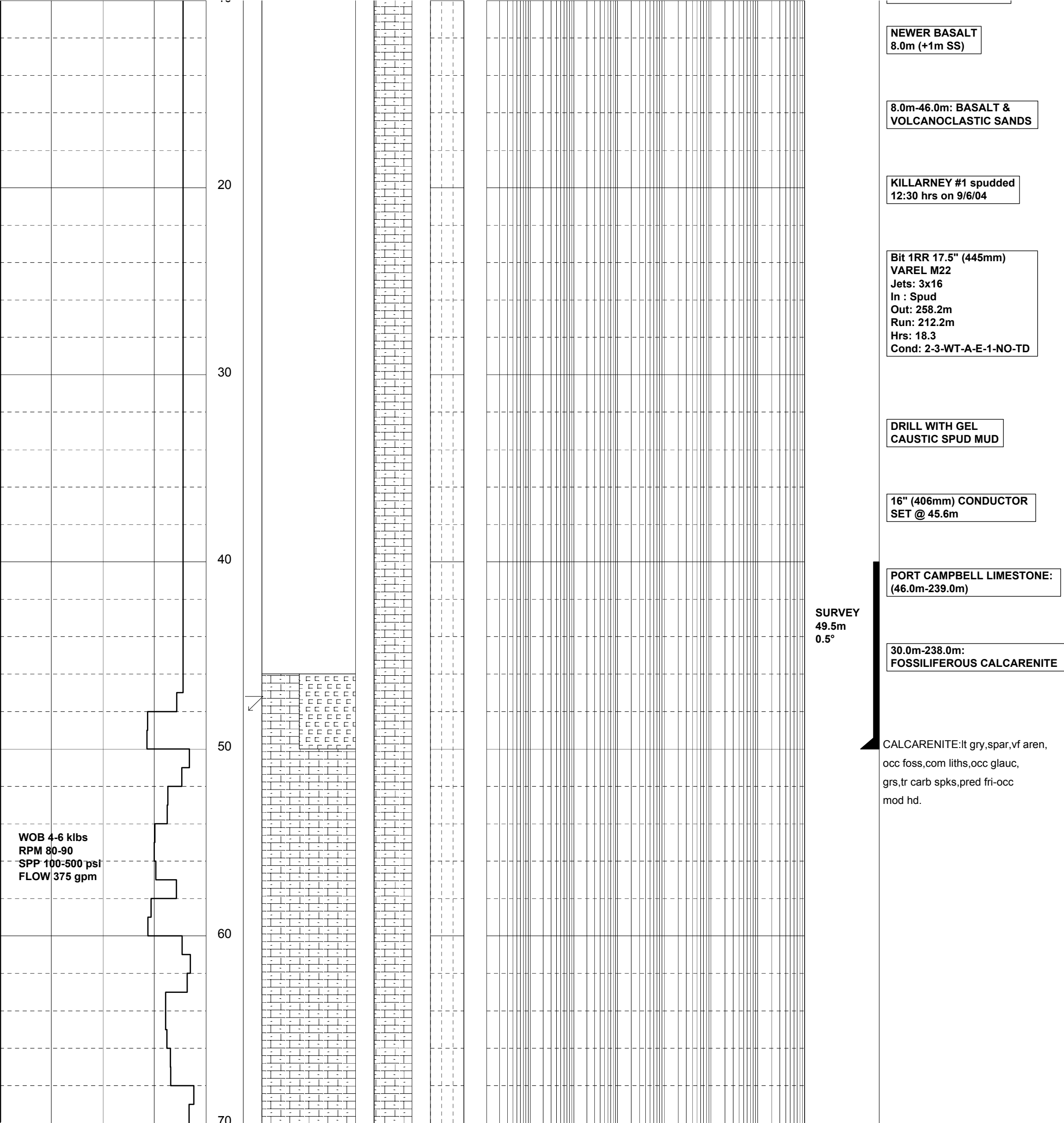
COMPANY	ESSENTIAL PETROLEUM	SPUD DATE	09-June-2004
RIG	HUNT #2	TD DATE	17-June-2004
AREA	PEP, Vic	TD DRILLER	1640.46m
COUNTRY	AUSTRALIA	TD WIRELINE	1638.8m
LOCATION	(SURVEYED)	LOGGED FROM	256.8m
ELEVATION	24.50 m (KB-GL)	LOGGED TO	1638.8m
ALTITUDE	22.45 m (GL-MSL)	STATUS	P & A
DEPTH REF	28.4 m KELLY BUSHINGS		

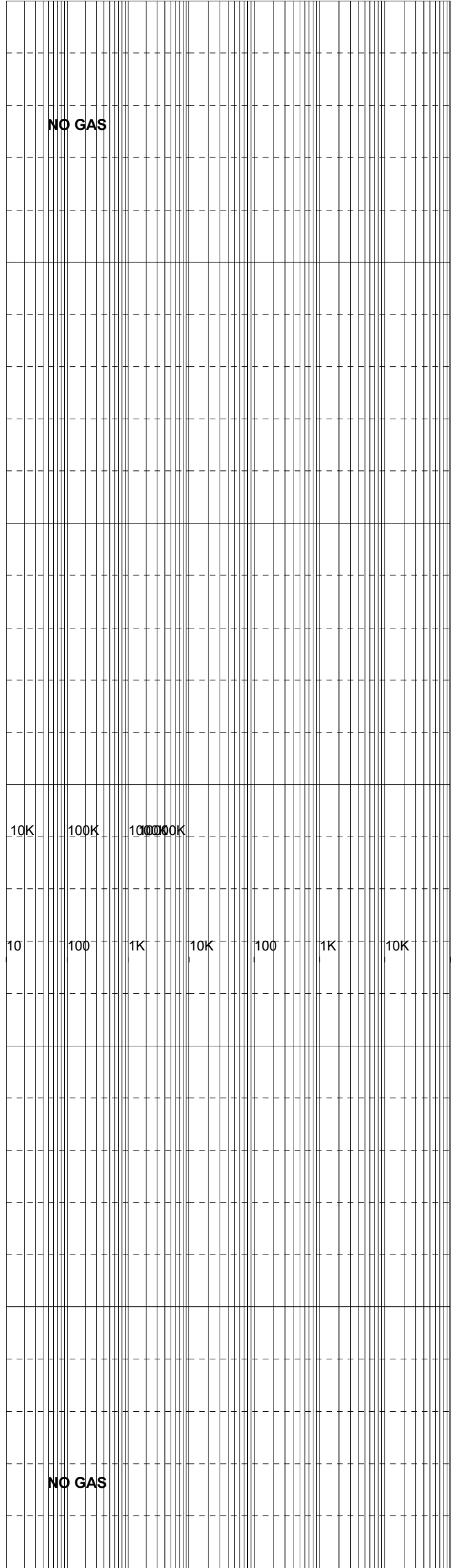
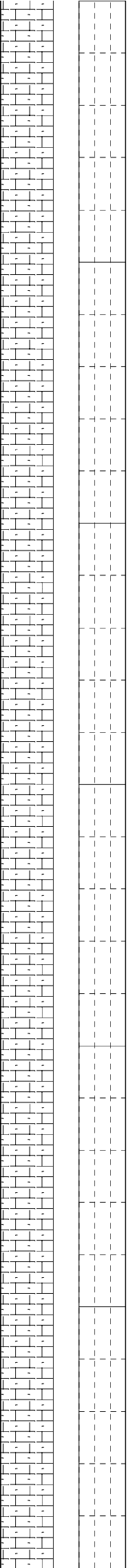
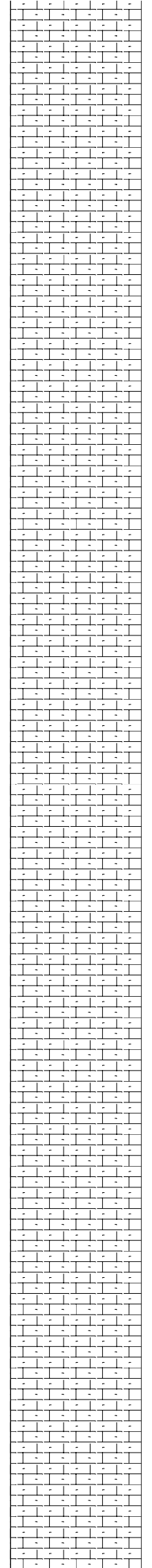
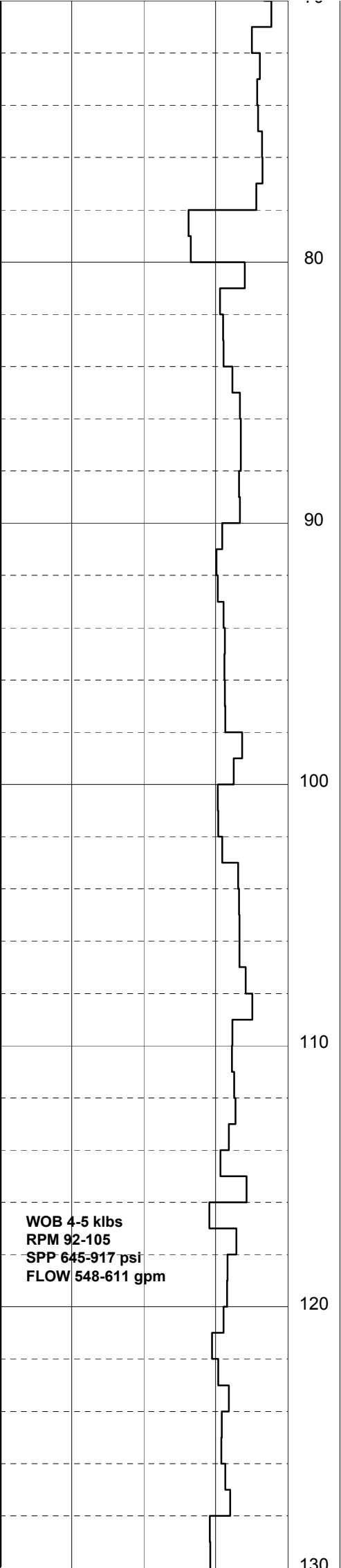
WELL CONFIGURATION				LOGGING ENGINEERS		DEPTH SCALE 1/ 200
BIT SIZE (in)	HOLE DEPTH (m)	CASING SIZE (in)	CASING DEPTH (m)	Andrew Morris		
		BBB	CCC	Phil Smith		
		DDD	EEE			

SYMBOLS				ABBREVIATIONS		MUD DATA	
	NEW BIT RUN	 CORED INTERVAL DST	 FLUORESCENCE	NO SHOW	NB NEW BIT	DS DIRECTIONAL SURVEY	W WEIGHT lb/gal
	NEW CORE BIT RUN			WEAK SHOW	NCB NEW CORE BIT	WT WIPER TRIP	MG MUD GRADIENT psi/kft
	CASING SHOE			FAIR SHOW	RRB RE-RUN BITT	POOH PULL OUT OF HOLE	V VISCOSITY s/qt
	LINER HANGER			GOOD SHOW	CS CASING SHOE	RIH RUN IN HOLE	PV PLASTIC VISCOSITY Cp
	Recovered SIDEWALL CORES				SWC SIDE WALL CORE	WOW WAIT ON WEATHER	YP YIELD POINT lb/cf2
	Not Recovered				EL ELECTRIC LOG	LAT LOGGED AFTER TRIP	GEL GEL STRENGTH lb/cf2
					WOB WEIGHT ON BIT	LCM LOST CIRCULATION MATERIAL	pH ACIDITY
					RPM REVS PER MINUTE	DC DEPTH CORRECTION	F FILTRATE cm3/30
					PP PUMP PRESSURE	DST DRILL STEM TEST	CK CAKE THICKNESS in/32
					SPM STROKES PER MINUTE	RMG REAMING	S SALINITY kg/m3
					CR CIRCULATED RETURNS	ML MUD LOSSES	SD SAND CONTENT %
					PR POOR RETURNS	FR FLOW RATE	O OIL CONTENT %
					NR NO RETURNS	FC FLOW CHECK	WL WATER LOSS cm3/30
					TG TRIP GAS	BR BIT RUN	SOL SOLIDS CONTENT %
					CG CONNECTION GAS		pF FILTRATE ALKALINITY %
					WTG WIPER TRIP GAS		GYP GYPSUM CONTENT lb/bbl

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

ROP m/hr				DEPTH (m)(kb)(m)	SIDEWALLS	CUTTINGS	LITH	OIL SHOWS	G F W	TOTAL GAS PPM				CHROMATOLOG(ppm)				BITS SHOES CORED INTERVALS DST INTERVALS	COMMENTS W/L RUNS
100			0							10K	100K	1000K	10000K	C1 _____	iC4__ _ _				
200			100											C2 ____ _	nC4____ _				
300			200											C3 _ _ _ _	iC5_ _ _ _				
															nC5_ _ _ _				
										10	100	1K	10K	10K	100	1K	10K		
				0	%	100													





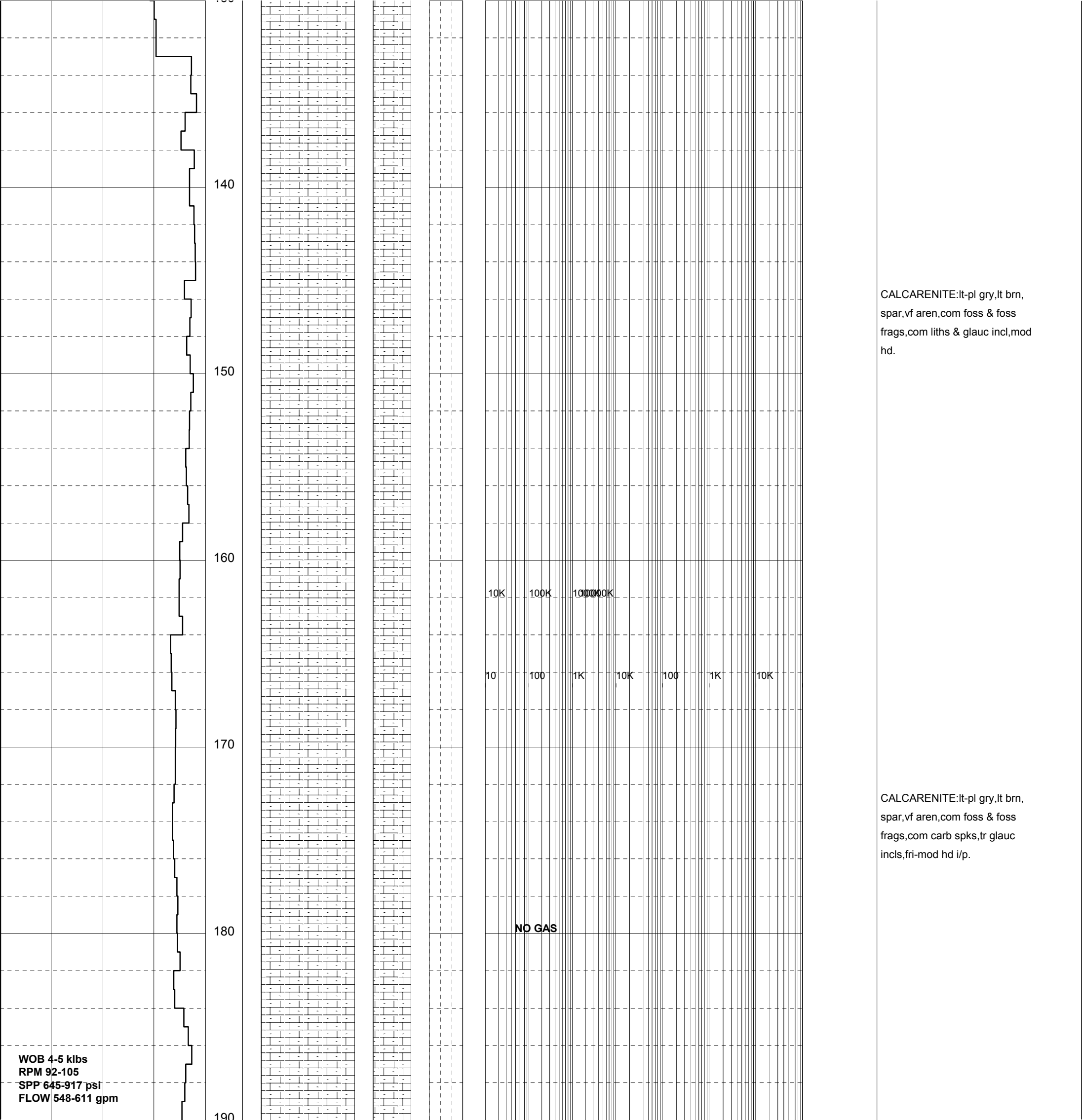
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FV 60
PV 12
YP 23
Gel 11/23
WL -
FC -
Sol 0.4
pH 8.8
Cl 0.8k

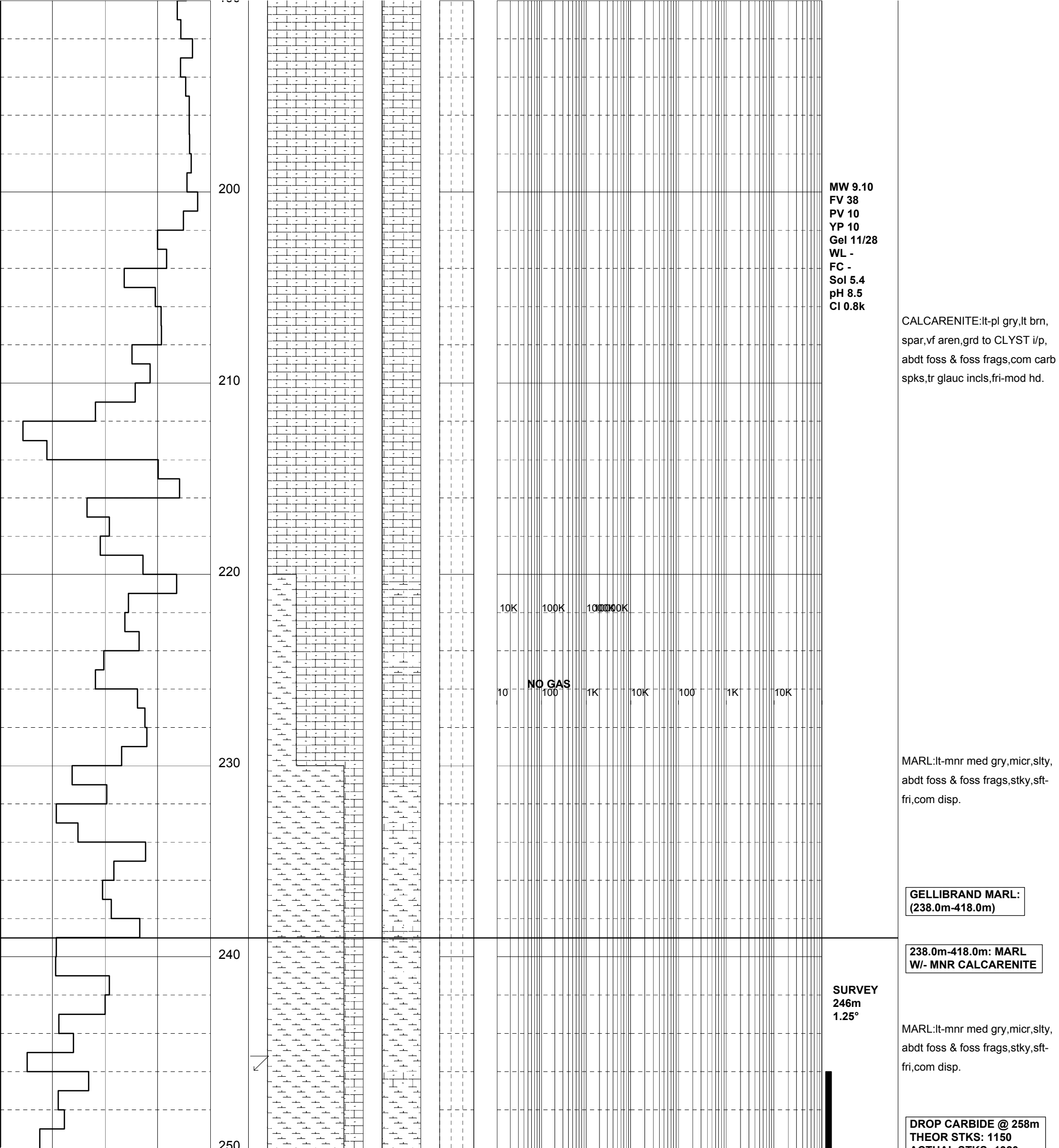
COAL(TR):blk,dll,vf calc aren
incls,mod hd-pred hd,blky,unevn

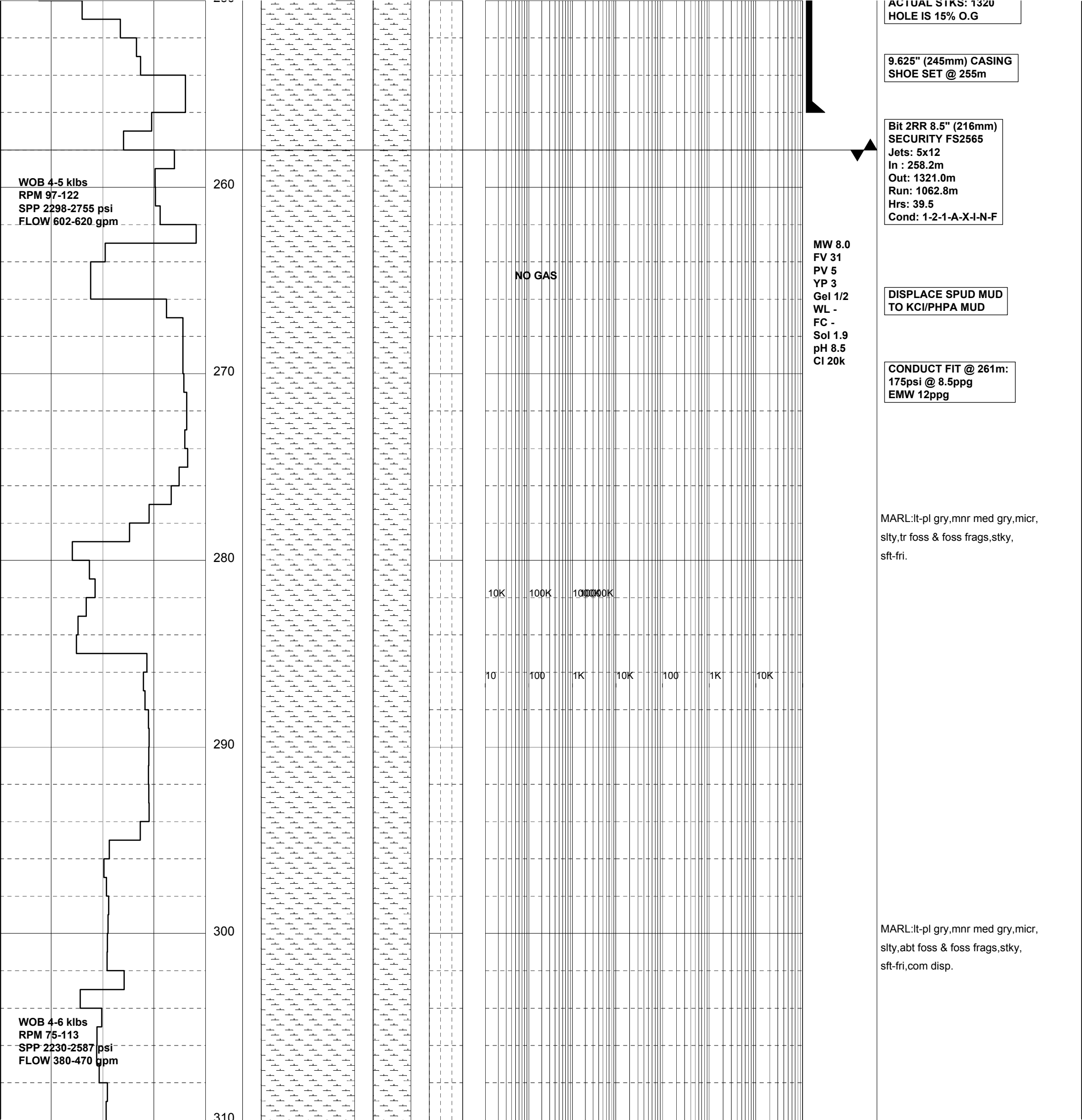
CALCARENITE:lt-pl gry,spar,f-
pred vf aren,com foss & foss
frags,com liths & glauc incls,
mnr pyr nods,fri,mnr mod hd i/p

CALCARENITE:lt-pl gry,spar,pred
vf aren,com foss & foss frags,
com liths & glauc incls,mnr pyr
nods,fri,mnr mod hd i/p.

CALCARENITE:lt-pl gry,lt brn,
spar,f-pred vf aren,tr-com foss
frags,com liths & glauc incls,
mod hd.







ACTUAL STKS: 1320
HOLE IS 15% O.G

9.625" (245mm) CASING
SHOE SET @ 255m

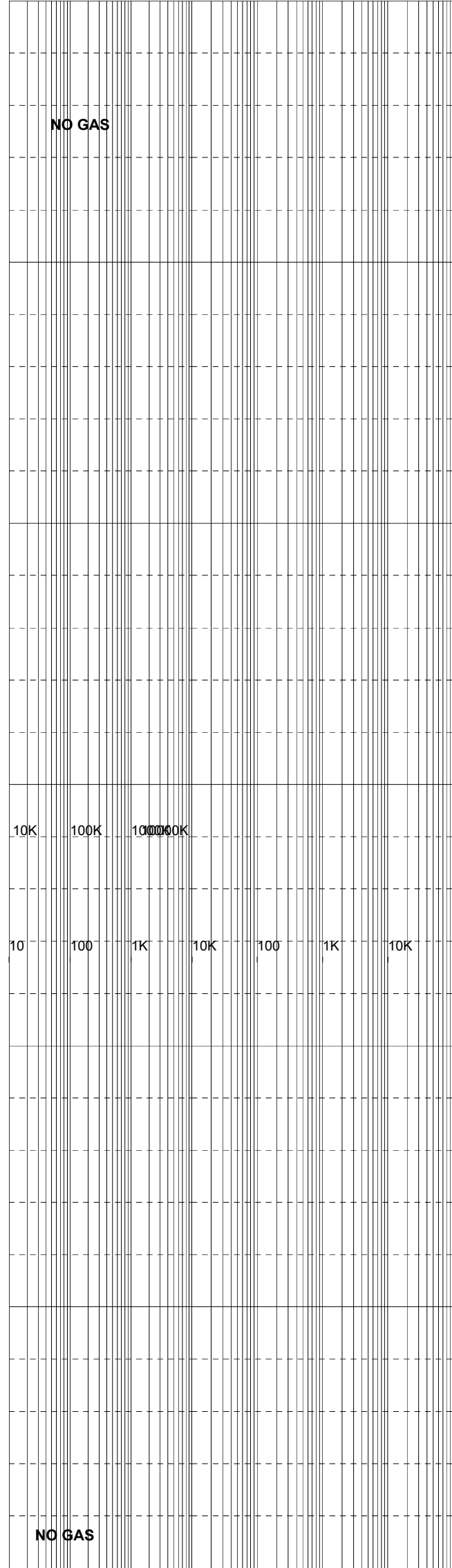
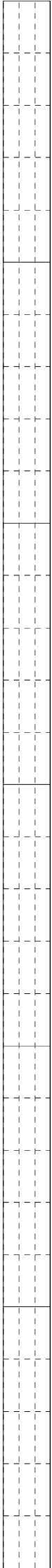
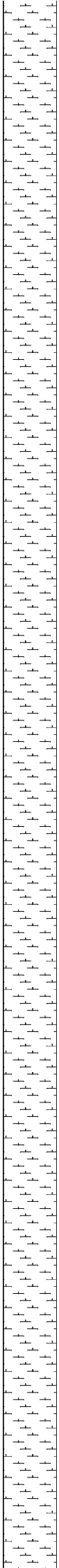
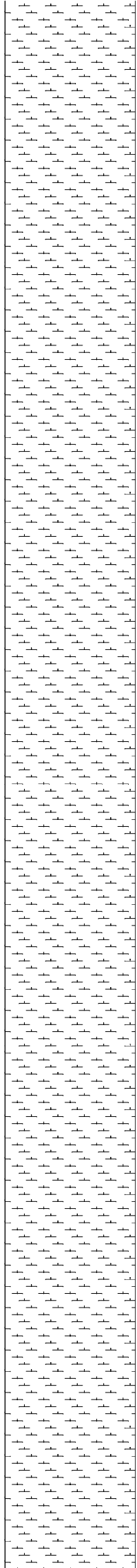
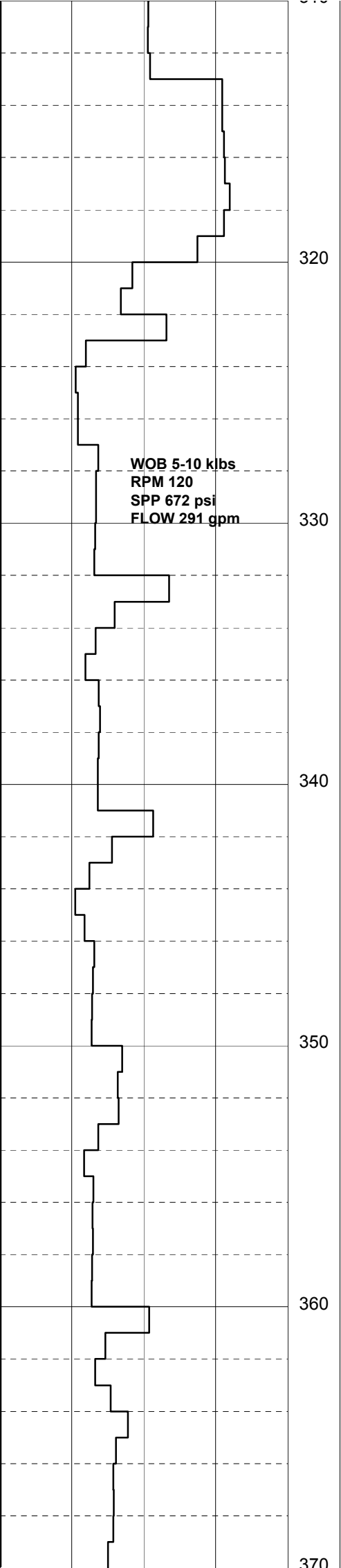
Bit 2RR 8.5" (216mm)
SECURITY FS2565
Jets: 5x12
In : 258.2m
Out: 1321.0m
Run: 1062.8m
Hrs: 39.5
Cond: 1-2-1-A-X-I-N-F

DISPLACE SPUD MUD
TO KCI/PHPA MUD

CONDUCT FIT @ 261m:
175psi @ 8.5ppg
EMW 12ppg

MARL:lt-pl gry,mnrr med gry,micr,
slty,tr foss & foss frags,stky,
sft-fri.

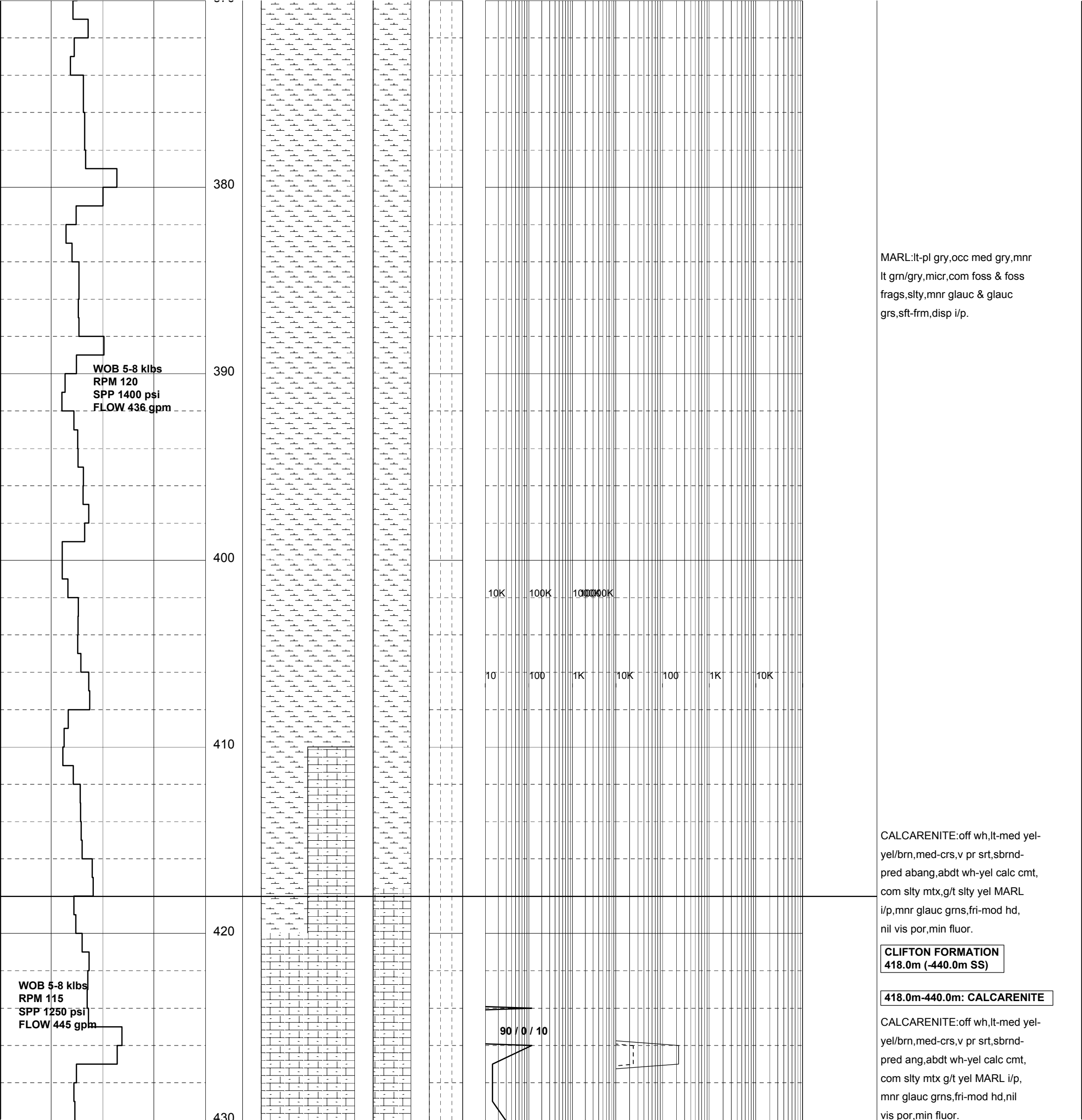
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slty,abt foss & foss frags,stky,
sft-fri,com disp.

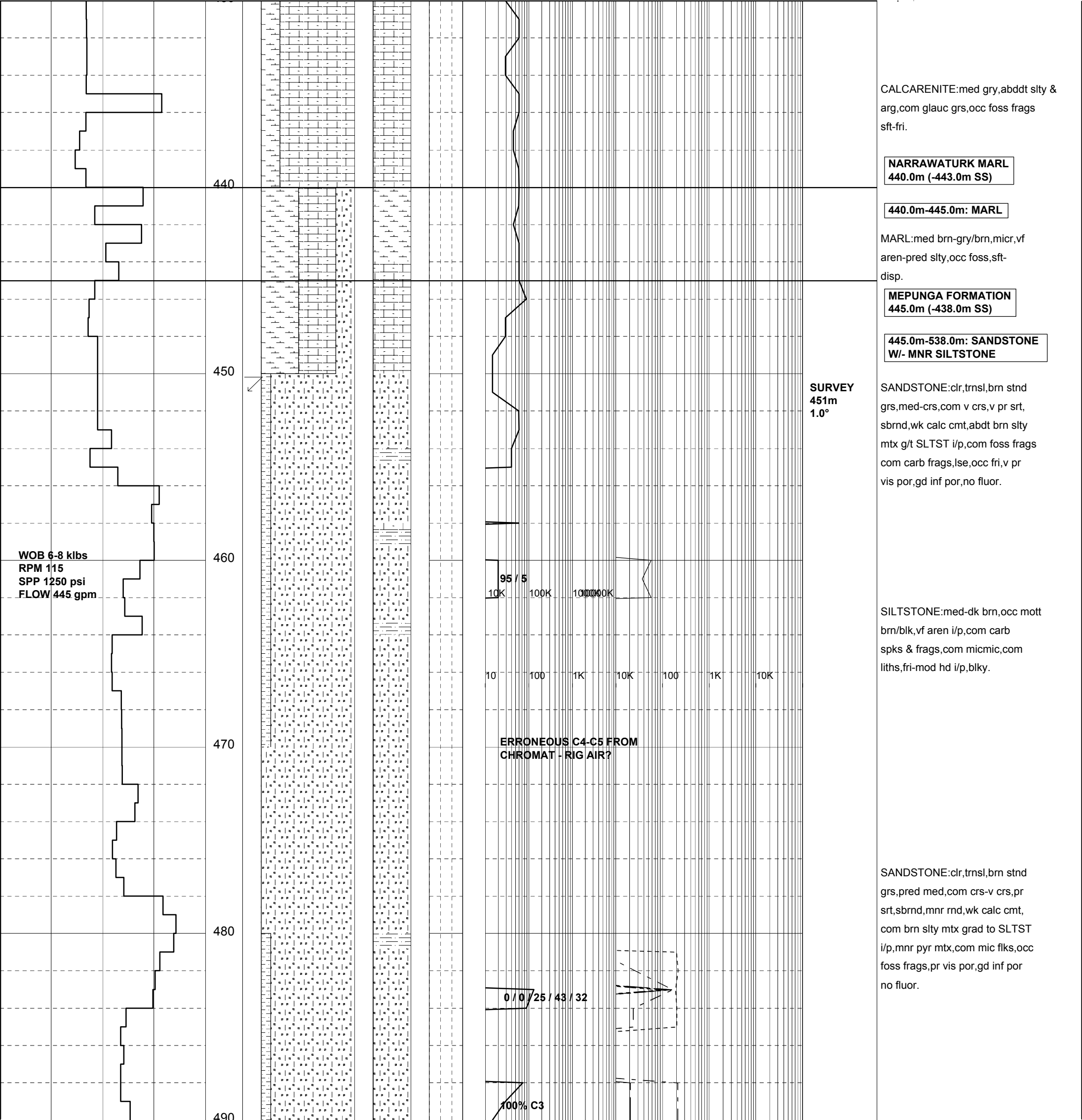


MARL:lt-pl gry,mnr med gry,micr,
slty,abt foss & foss frags,stky,
sft-fri,com disp.

MARL:lt-pl gry,tr med gry,micr,
slty,abdt foss & foss frags,sft-
fri.

MARL:lt-pl gry,micr,slty,abdt
foss & foss frags,dom fri,sft
i/p.





CALCARENITE:med gry,abddt slty & arg,com glauc grs,occ foss frags sft-fri.

NARRAWATURK MARL
440.0m (-443.0m SS)

440.0m-445.0m: MARL

MARL:med brn-gry/brn,micr,vf aren-pred slty,occ foss,sft-disp.

MEPUNGA FORMATION
445.0m (-438.0m SS)

445.0m-538.0m: SANDSTONE
W/- MNR SILTSTONE

SANDSTONE:clr,trnsl,brn stnd grs,med-crs,com v crs,v pr srt,sbrnd,wk calc cmt,abdt brn slty mtz g/t SLTST i/p,com foss frags com carb frags,lse,occ fri,v pr vis por,gd inf por,no fluor.

SILTSTONE:med-dk brn,occ mott brn/blk,vf aren i/p,com carb spks & frags,com micmic,com liths,fri-mod hd i/p,blkly.

SANDSTONE:clr,trnsl,brn stnd grs,pred med,com crs-v crs,pr srt,sbrnd,mnr rnd,wk calc cmt,com brn slty mtz grad to SLTST i/p,mnr pyr mtz,com mic flks,occ foss frags,pr vis por,gd inf por no fluor.

SURVEY
451m
1.0°

WOB 6-8 klbs
RPM 115
SPP 1250 psi
FLOW 445 gpm

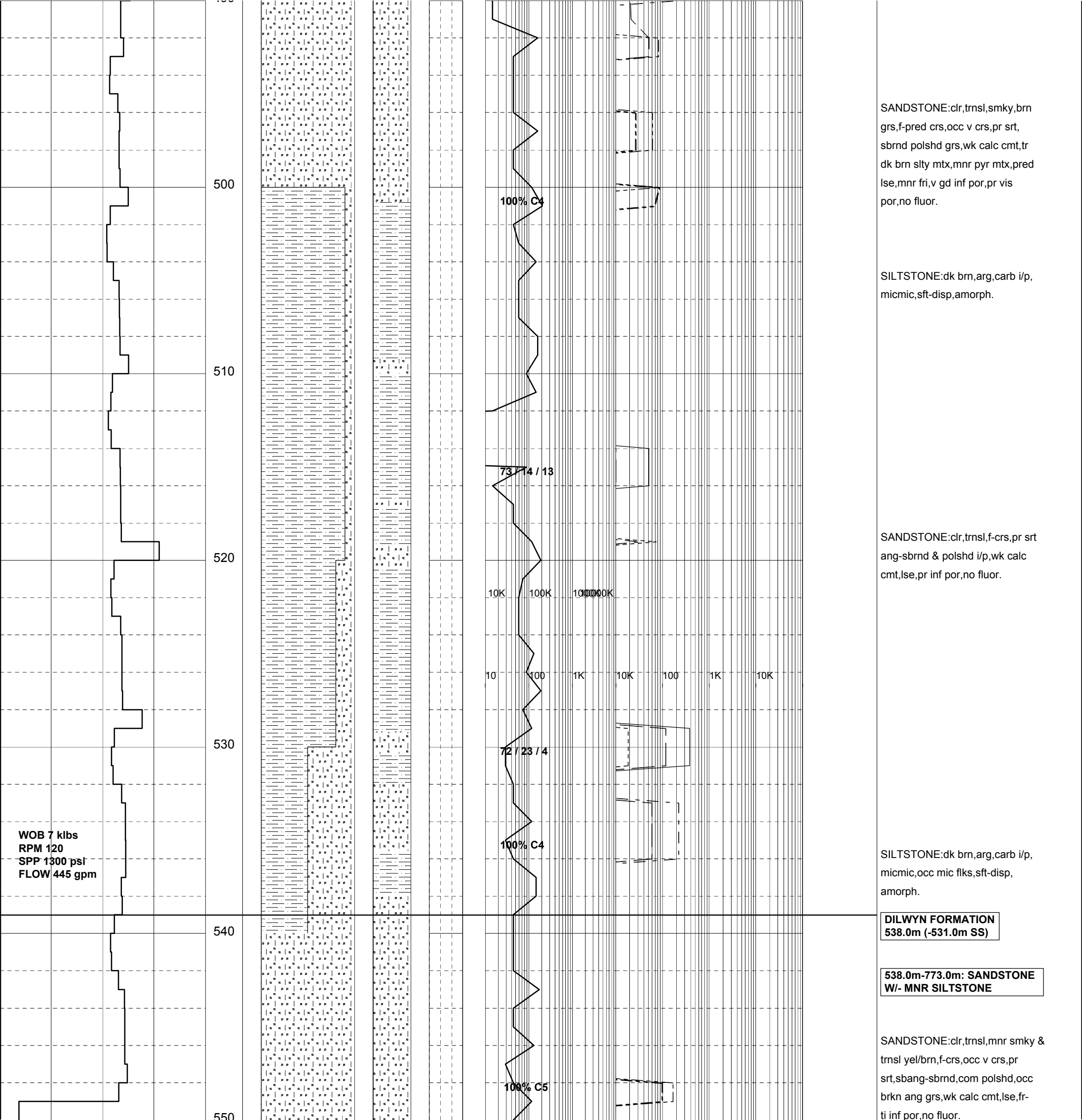
95 / 5
10K 100K 1000K

10 100 1K 10K 100 1K 10K

ERRONEOUS C4-C5 FROM
CHROMAT - RIG AIR?

0 / 0 / 25 / 43 / 32

100% C3



SANDSTONE:clr,trns,smky,brn
grs,f-pred crs,occ v crs,pr srt,
sbrnd polshd grs,wk calc cmt,tr
dk brn slty mtz,mnr pyr mtz,pred
lse,mnr fri,v gd inf por,pr vis
por,no fluor.

SILTSTONE:dk brn,arg,carb i/p,
micmic,sft-disp,amorph.

SANDSTONE:clr,trns,f-crs,pr srt
ang-sbrnd & polshd i/p,wk calc
cmt,lse,pr inf por,no fluor.

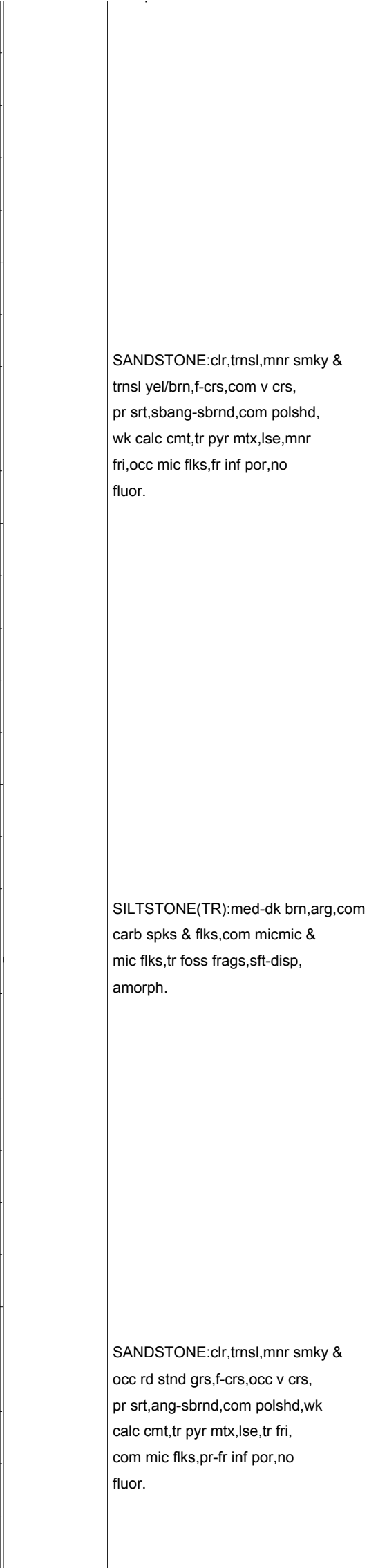
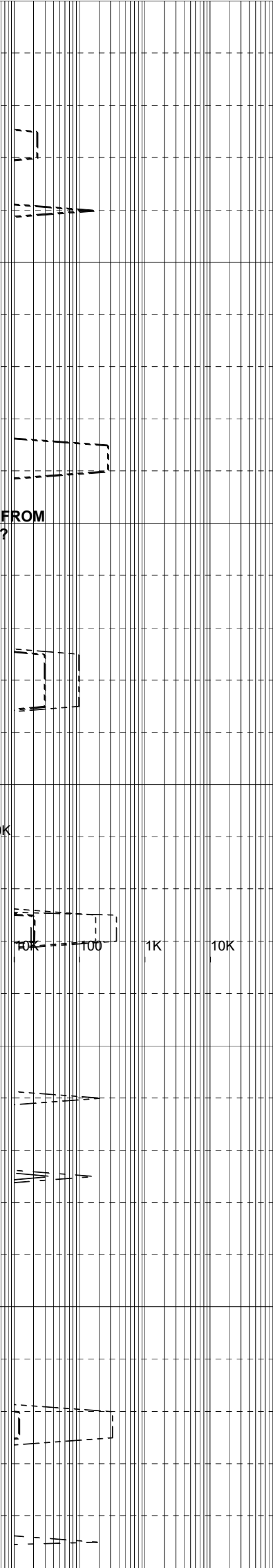
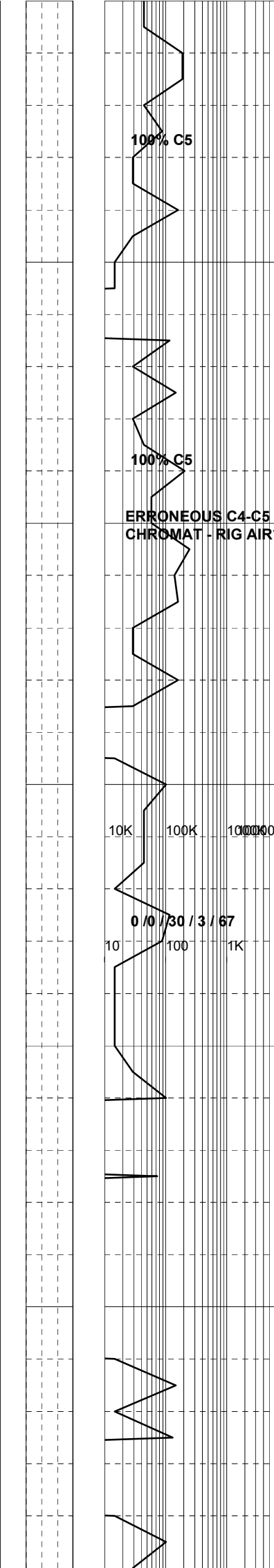
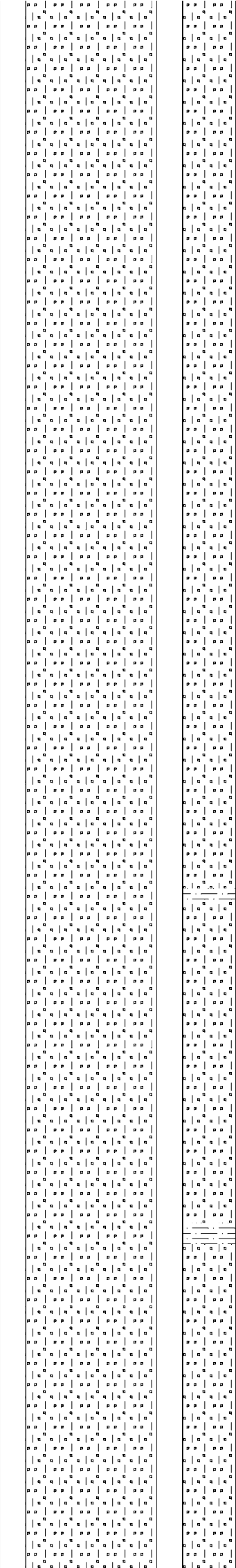
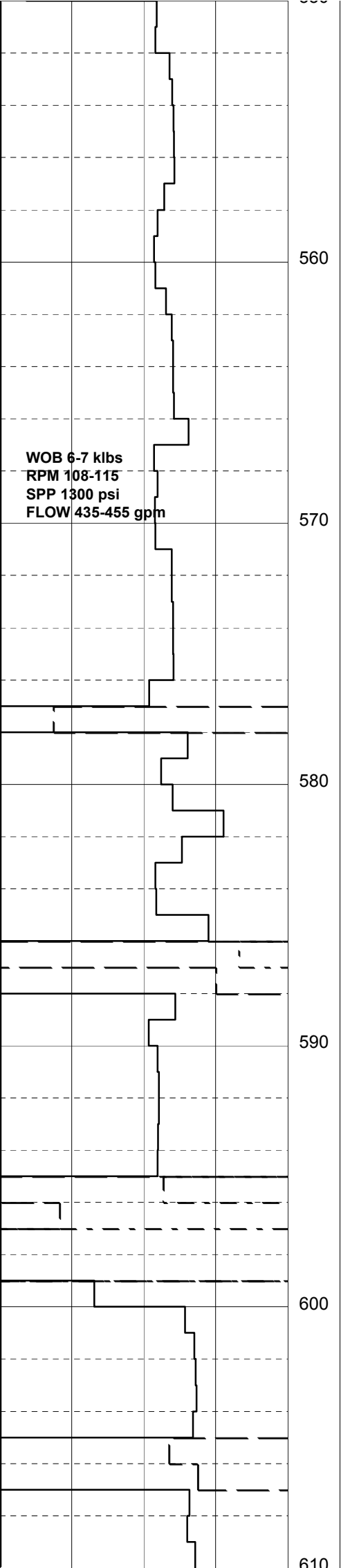
SILTSTONE:dk brn,arg,carb i/p,
micmic,occ mic flks,sft-disp,
amorph.

DILWYN FORMATION
538.0m (-531.0m SS)

538.0m-773.0m: SANDSTONE
W/- MNR SILTSTONE

SANDSTONE:clr,trns,mnr smky &
trns yel/brn,f-crs,occ v crs,pr
srt,sbang-sbrnd,com polshd,occ
brkn ang grs,wk calc cmt,lse,fr-
ti inf por,no fluor.

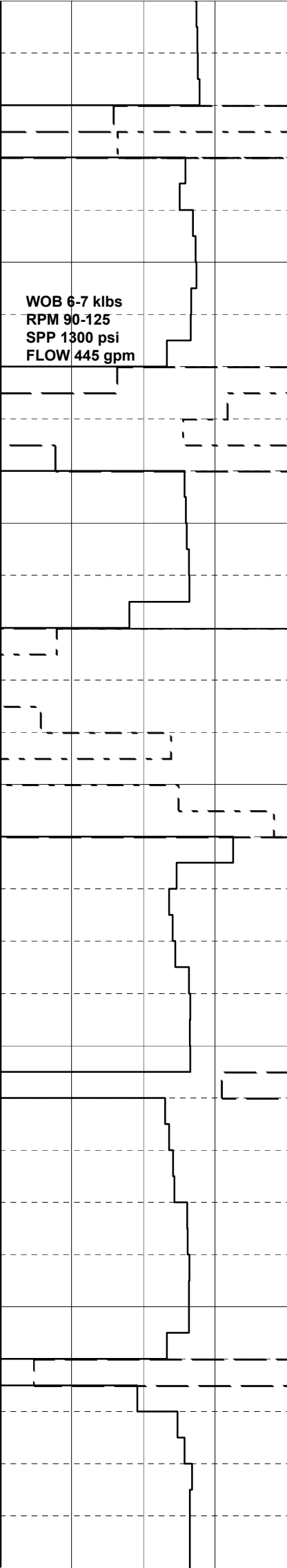
WOB 7 klbs
RPM 120
SPP 1300 psi
FLOW 445 gpm



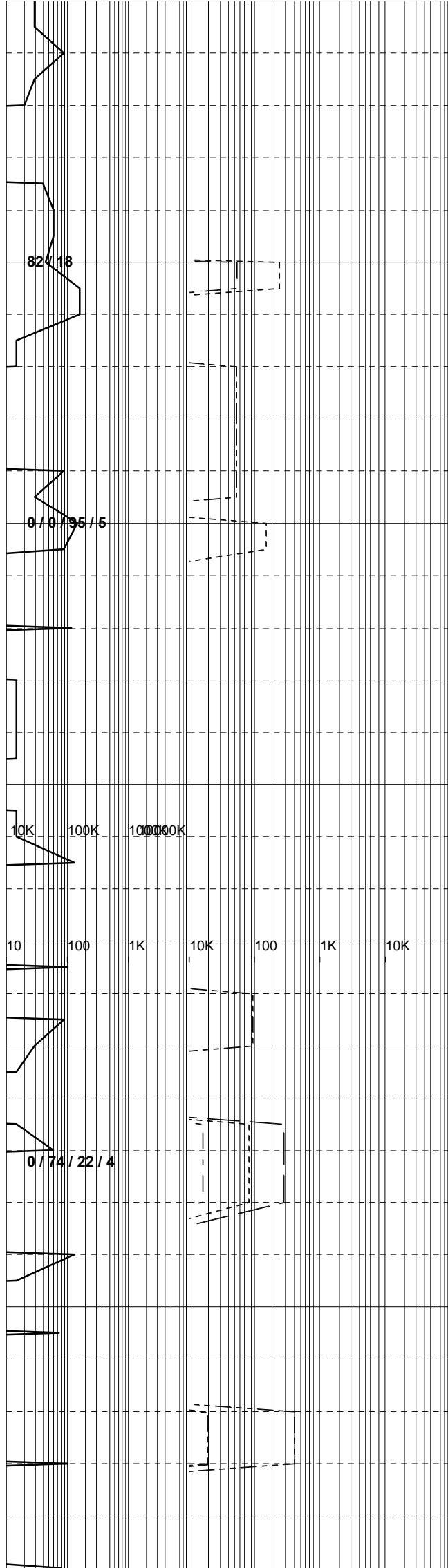
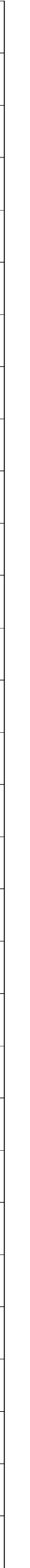
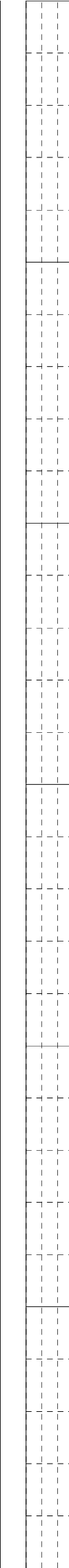
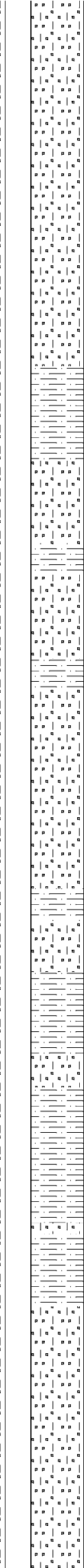
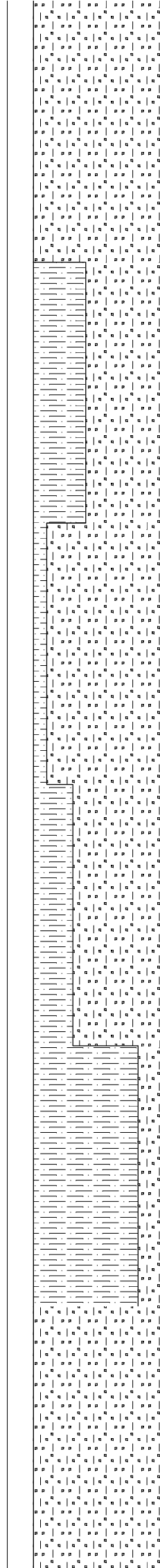
SANDSTONE:clr,tnsl,mnr smky &
tnsl yel/brn,f-crs,com v crs,
pr srt,sbang-sbrnd,com polshd,
wk calc cmt,tr pyr mtx,lse,mnr
fri,occ mic flks,fr inf por,no
fluor.

SILTSTONE(TR):med-dk brn,arg,com
carb spks & flks,com micmic &
mic flks,tr foss frags,sft-disp,
amorph.

SANDSTONE:clr,tnsl,mnr smky &
occ rd stnd grs,f-crs,occ v crs,
pr srt,ang-sbrnd,com polshd,wk
calc cmt,tr pyr mtx,lse,tr fri,
com mic flks,pr-fr inf por,no
fluor.



610
620
630
640
650
660
670

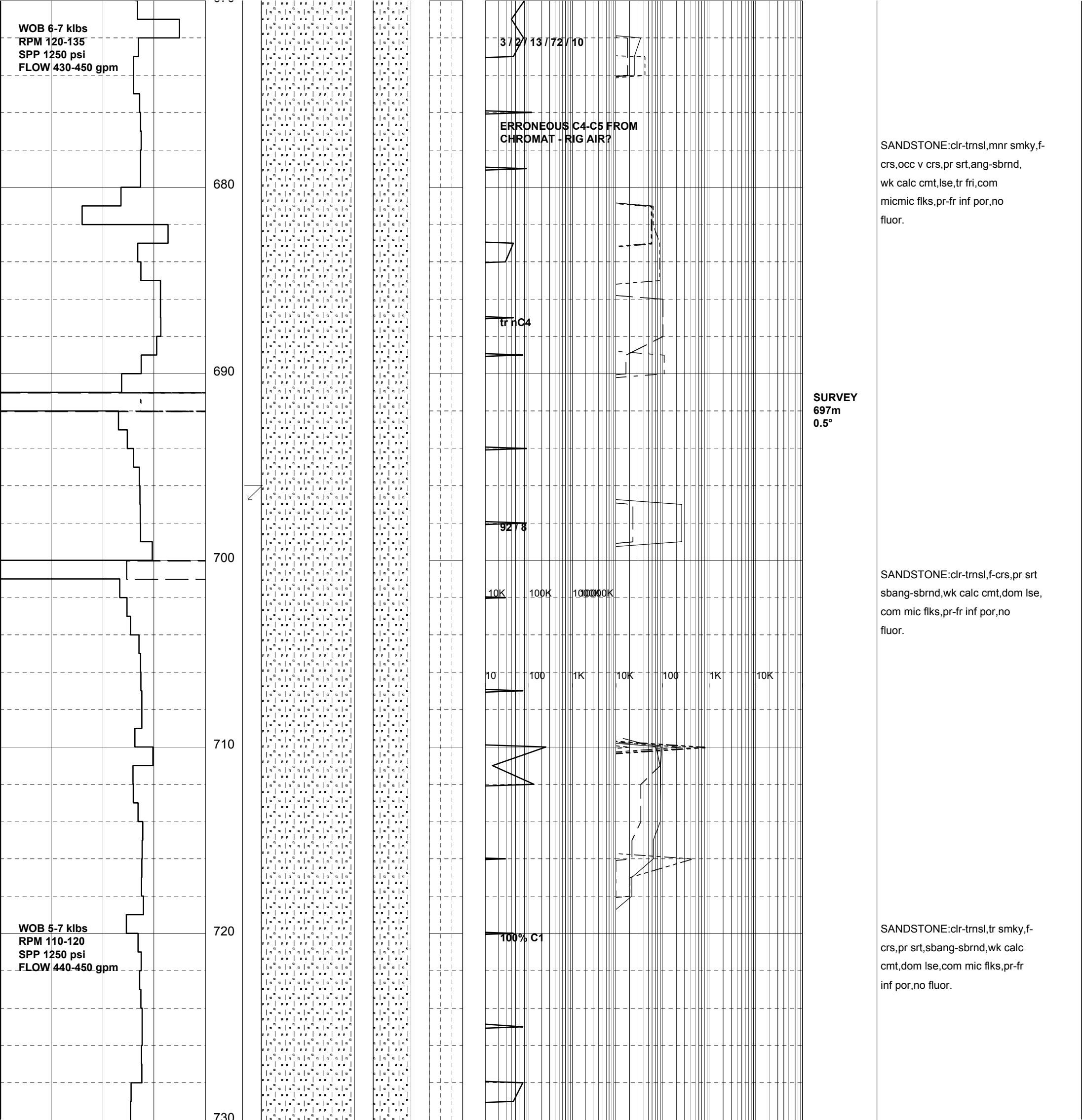


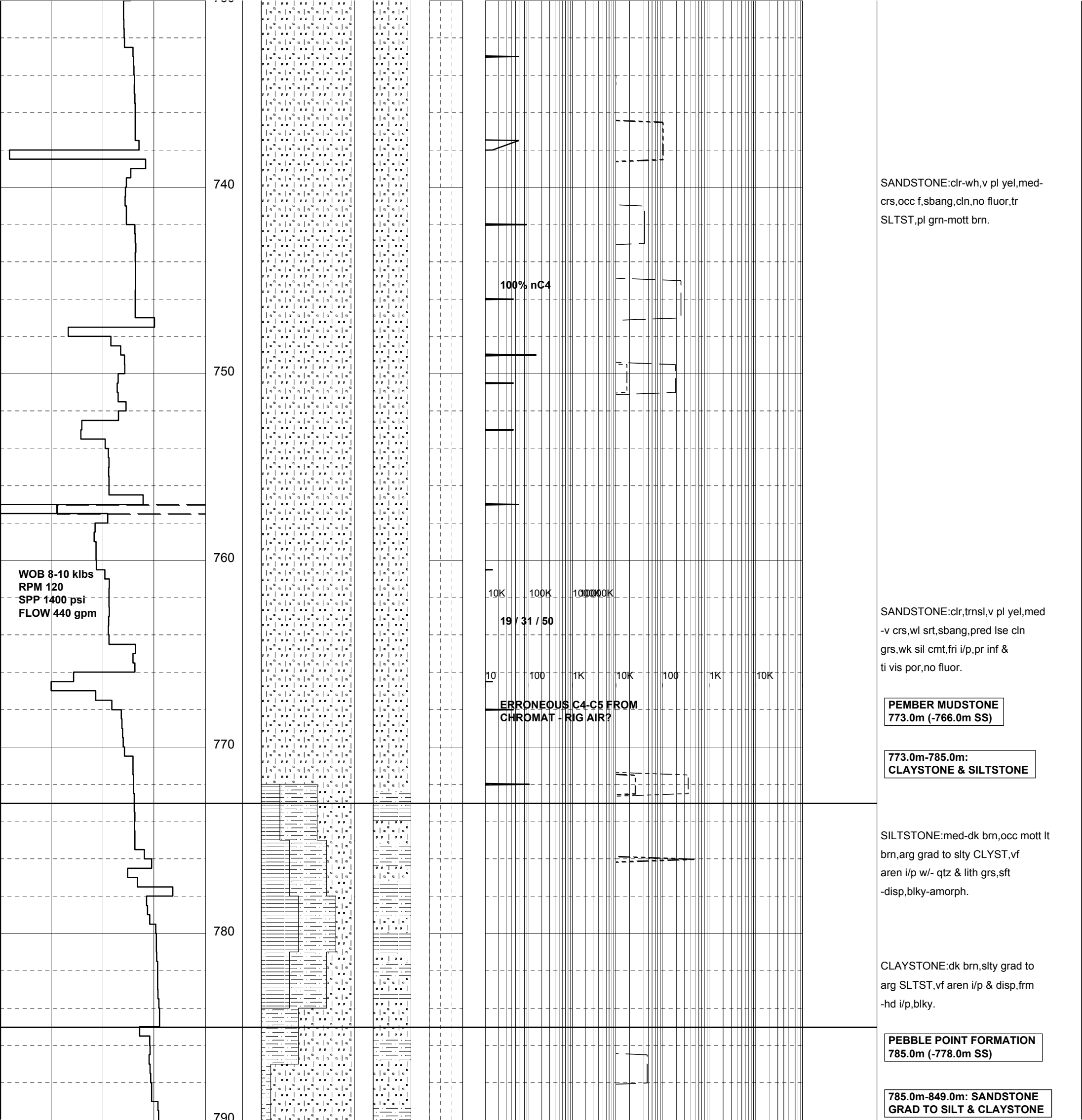
MW 9.2
FV 39
PV 10
YP 15
Gel 2/4
WL 7.2
FC 1
Sol 4.9
pH 8.5
Cl 21k

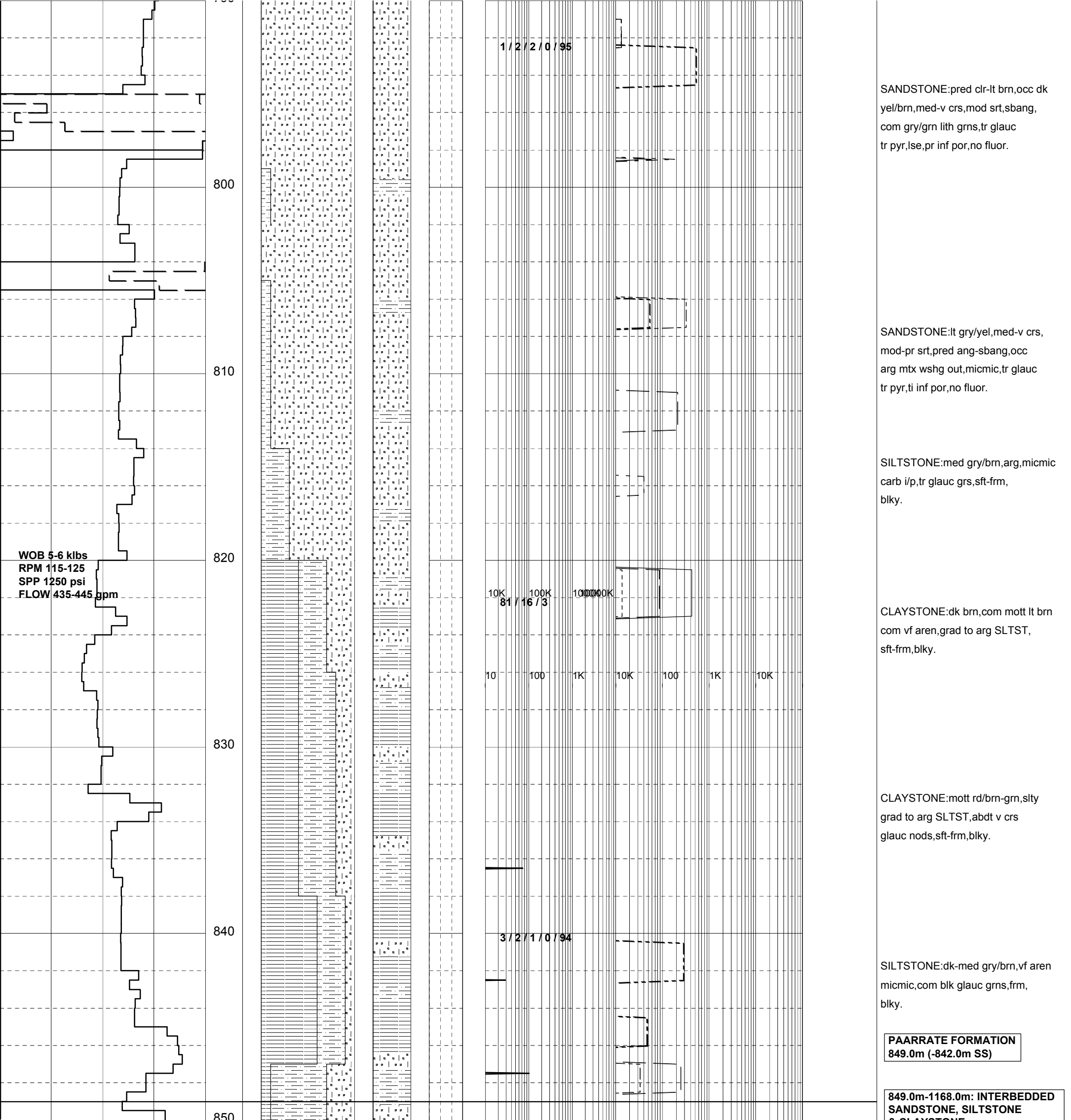
SILTSTONE: med-dk brn, arg, tr-com
carb spks, com micmic, tr foss
frags, sft, occ amorph.

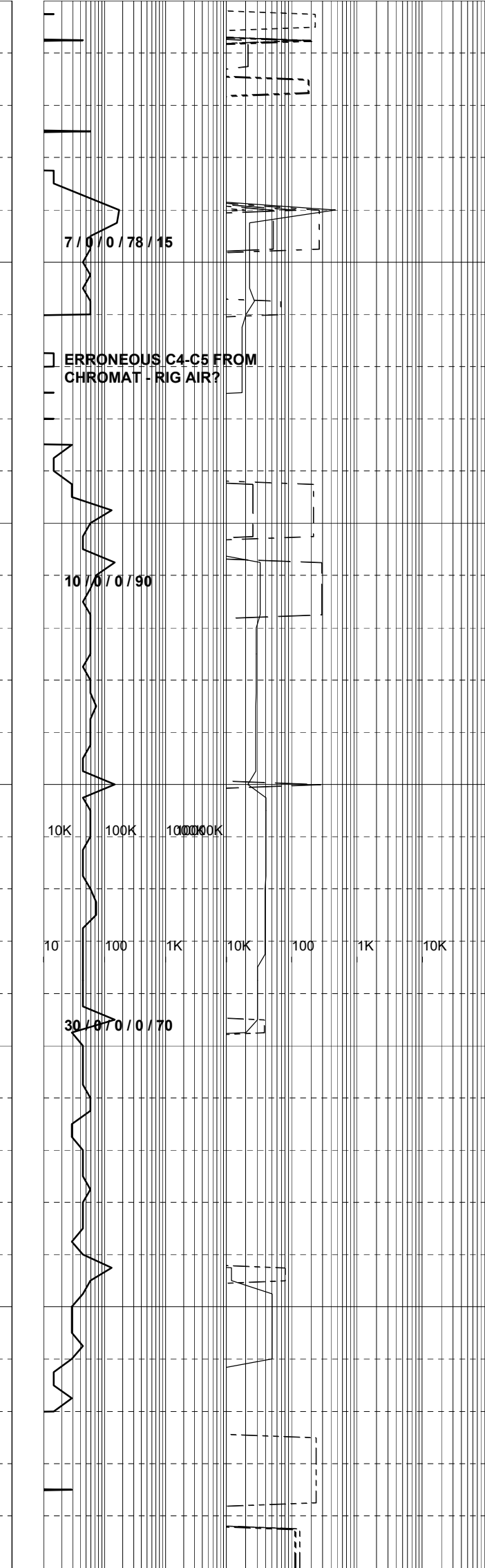
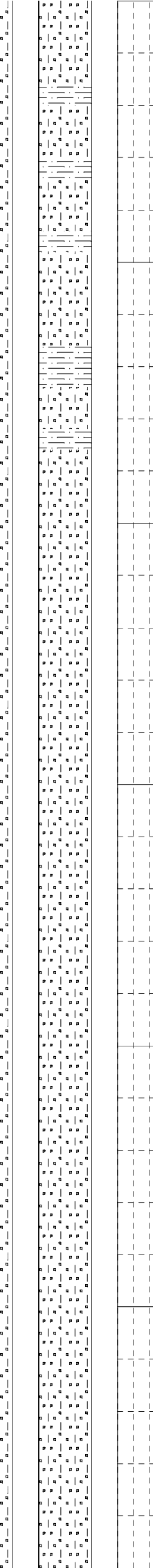
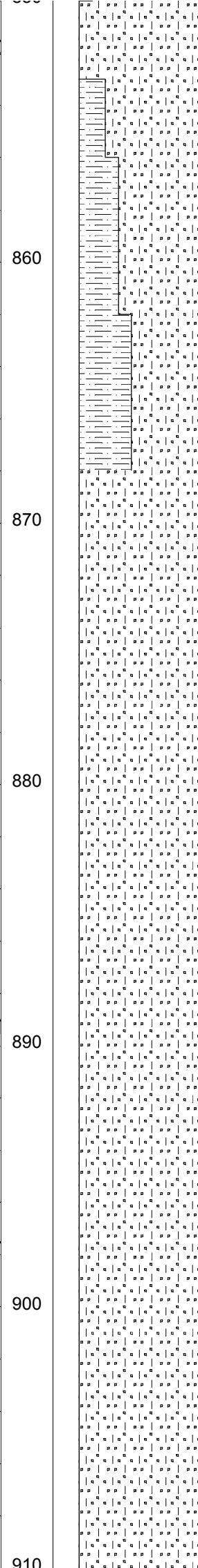
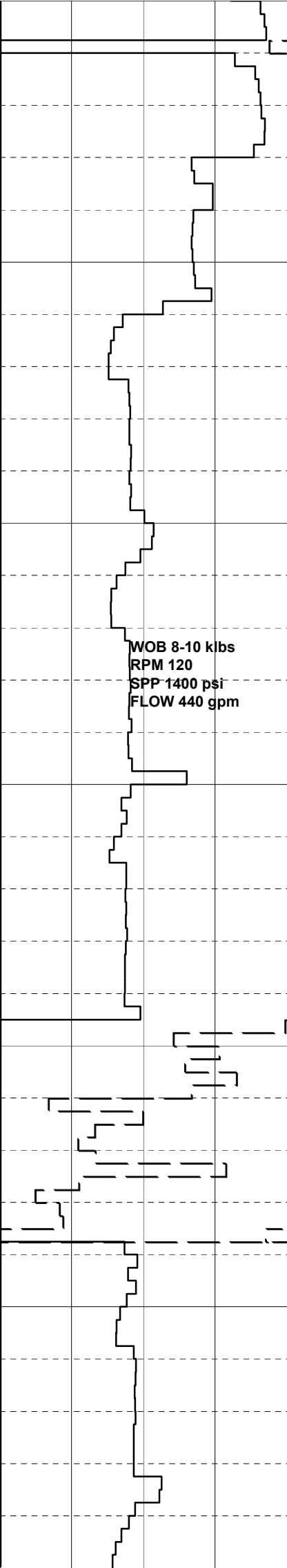
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occ red stnd grs, f-crs, pr srt,
sbang-sbrnd, wk calc cmt, tr pyr
mtx. lse, tr fri, com mic flks, pr-
fr inf por, no fluor.

SILTSTONE: med gry/brn, arg, tr
carb spks, vf micmic, sft-amorph.







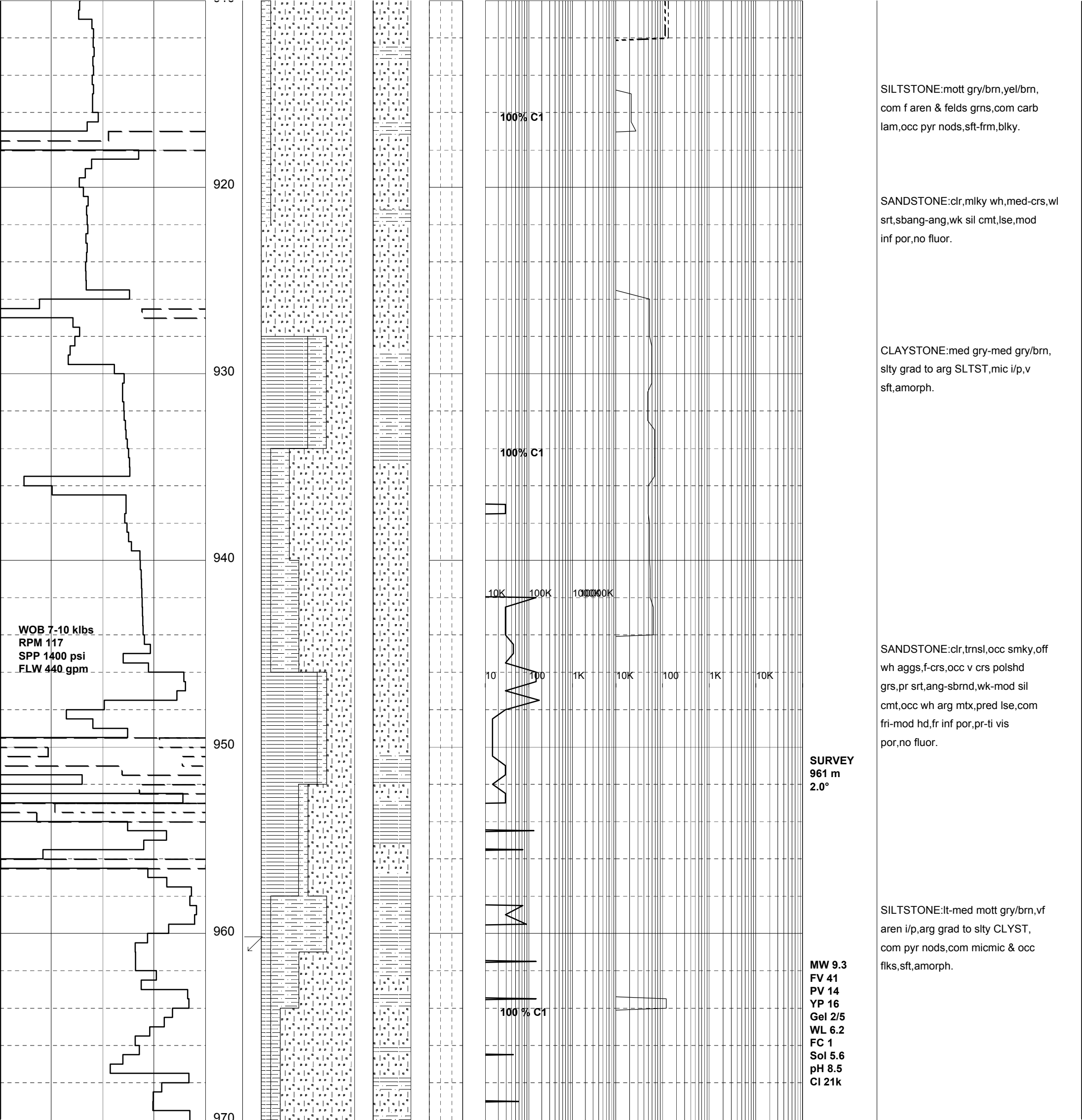


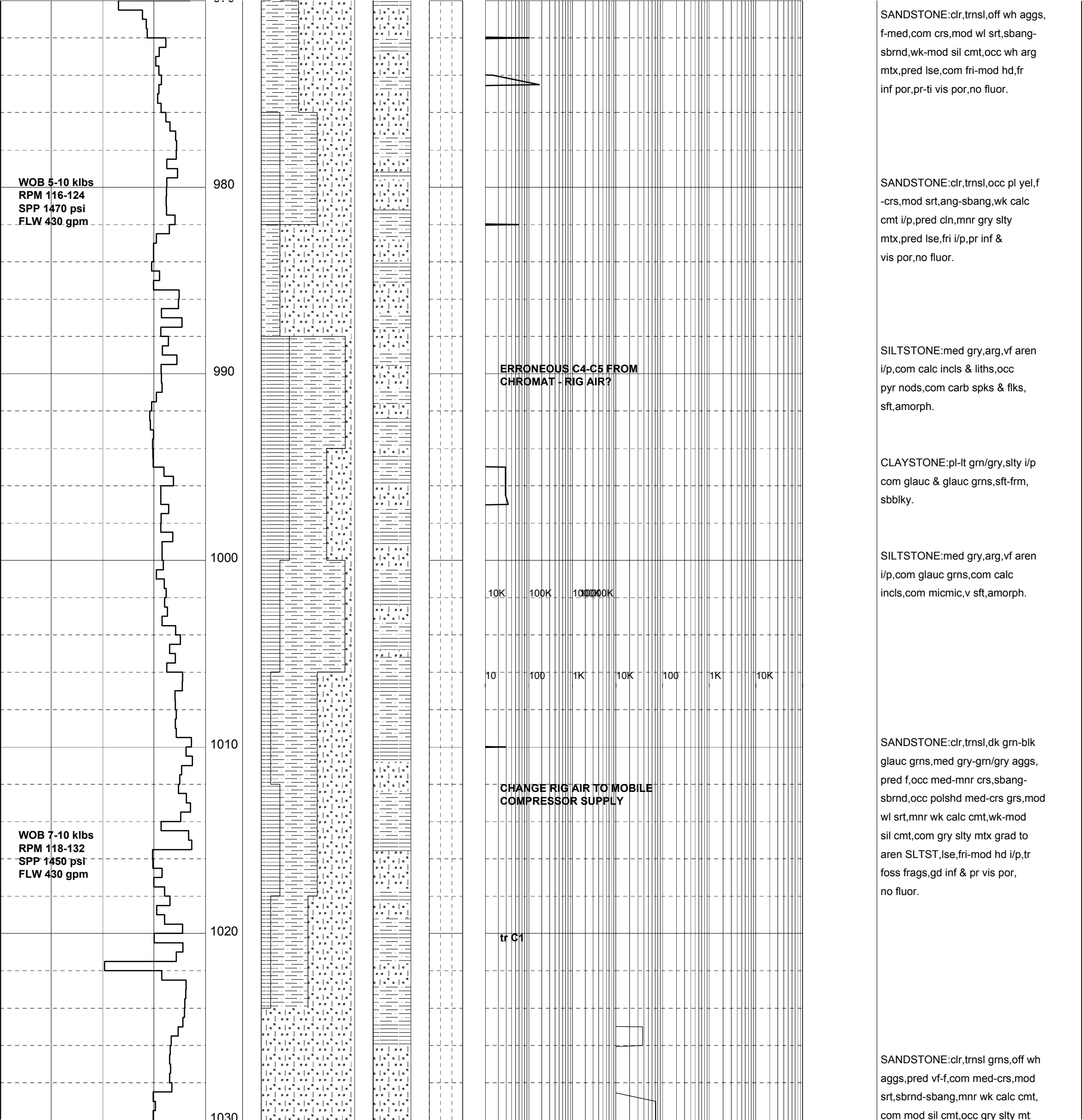
& CLAYSTONE

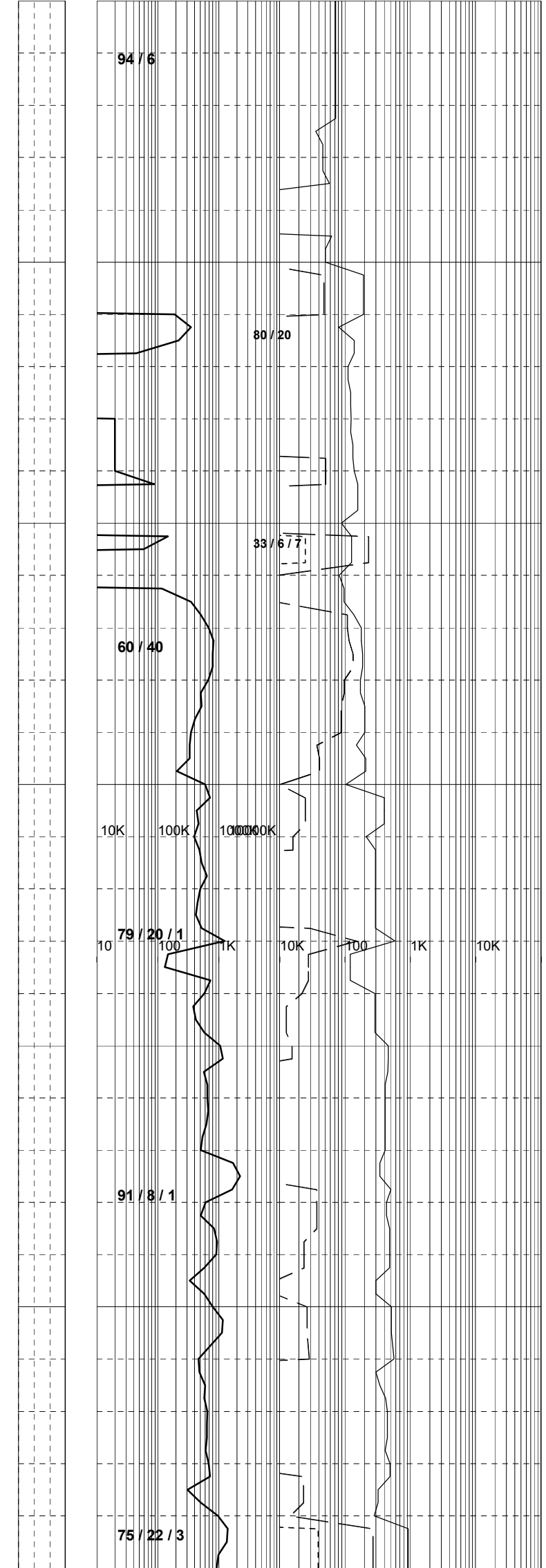
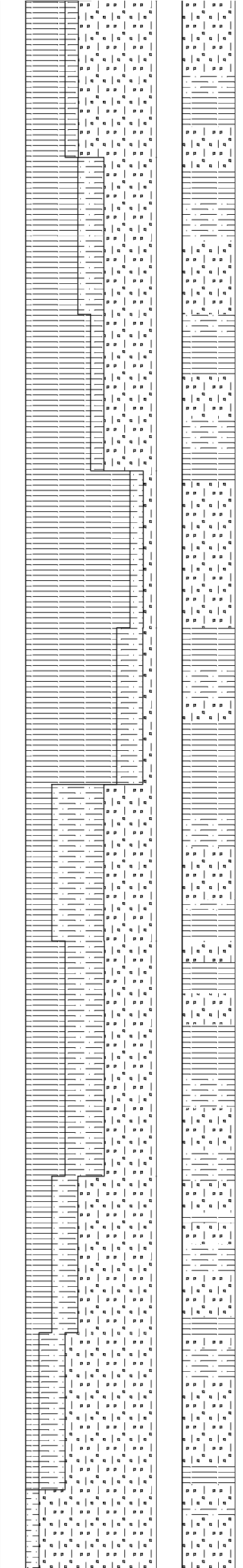
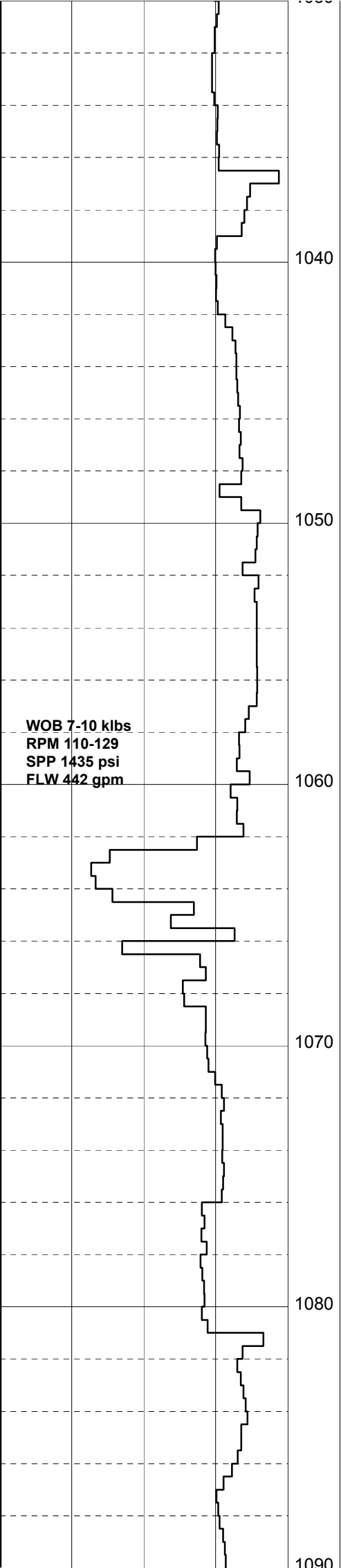
SANDSTONE:lt brn,f-v crs,pr srt, ang,wk sil cmt,slty mtx wshg out lse,pr-ti inf por,no fluor.

SANDSTONE:clr-wh,med-v crs,mod srt,ang,lse,cln qtz grns w/- tr qtz ogths,tr mic,mod inf por,no fluor.

SANDSTONE:clr-wh,f-crs,mod srt, ang-sbang,lse,cln qtz grns w/- tr qtz ogths,tr mic,mod inf por, no fluor.







tr pyr mtx,com liths & glauc
incls,com lse pred mod hd,pr vis
por,pr-fr inf por,no fluor.

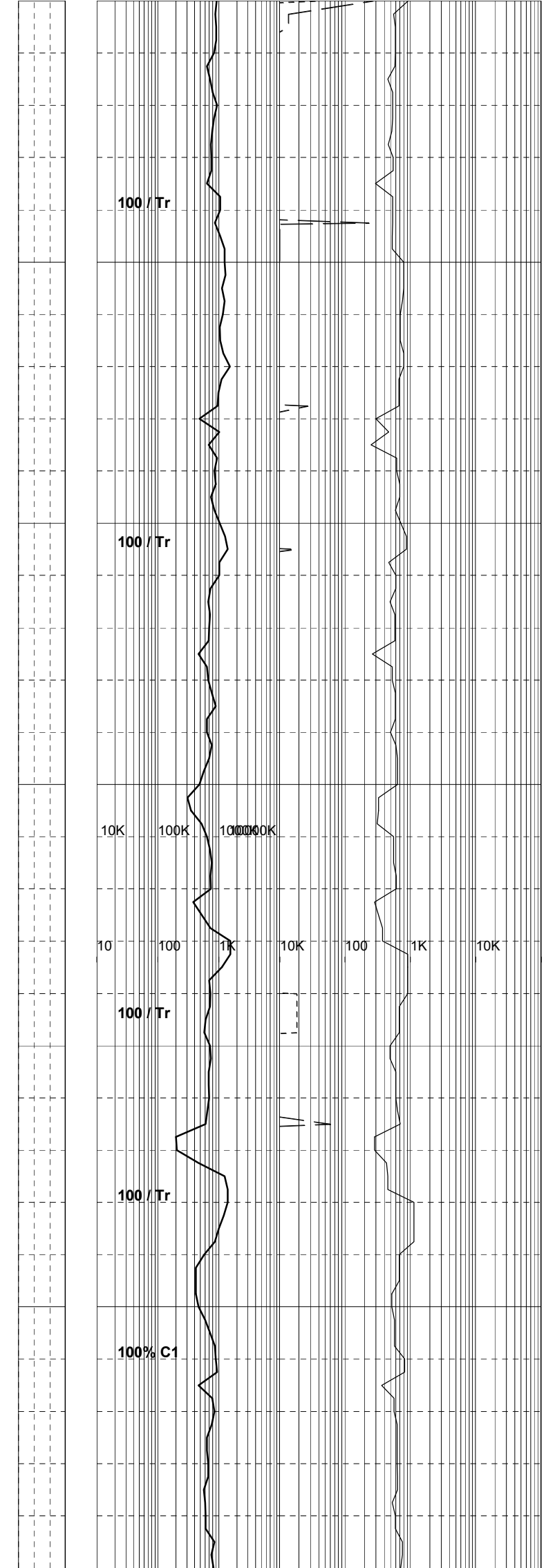
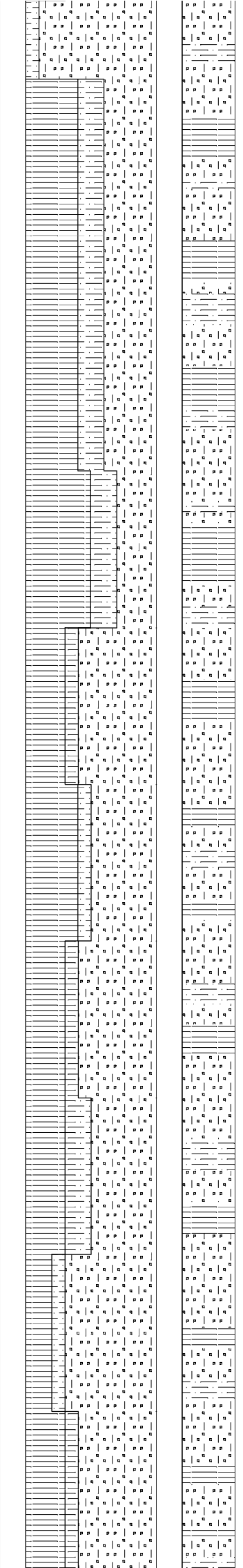
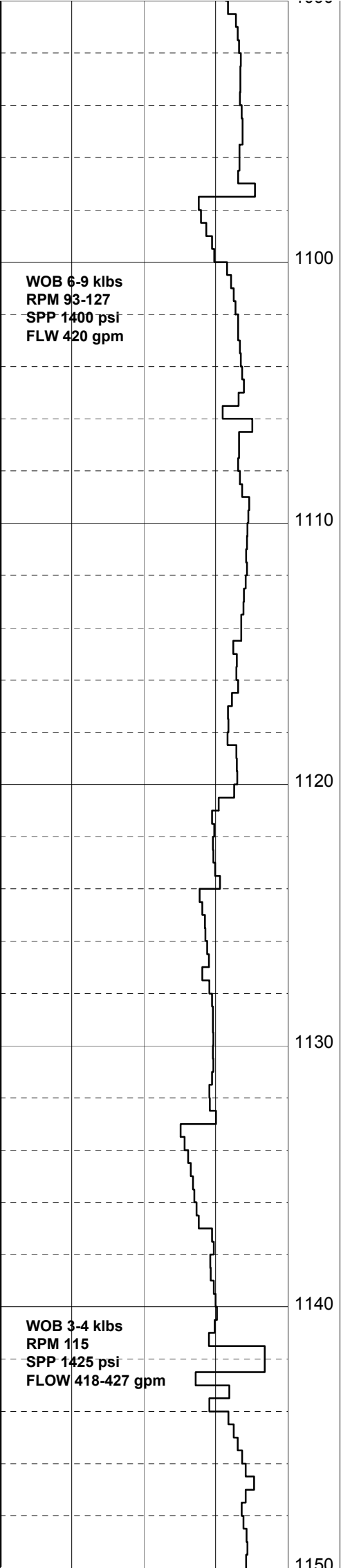
CLAYSTONE:med gry,occ lt gm/gry
silty i/p grad to arg SLTST,glauc
i/p,com carb & glaucs spks,com
dk bn liths,occ pyr nods,sft-
disp,amorph.

DROP CARBIDE @ 1038m
THEOR STKS: 1144
ACTUAL STKS: 2090
HOLE IS 38% O.G

SILTSTONE:mott med brn/gry-grn/
gry,f aren,com carb & glauc
incls,abdt pyr nods,com liths,
micmic,occ foss frags,sft-disp,
mod hd i/p,amorph-blky i/p.

CIRCULATE SAMPLE
UP @ 1066m

SANDSTONE:brn,mott,vf-crs,tr
glauc,v arg,pr srt,tr liths &
tuff grs,grd to SLTST & silty
CLYST.



SANDSTONE:gry/brn,mott,f-crs,pr
srt,sbang-sbrnd,slty mtx,com pyr
com lse,fri aggs,pr vis & inf
por,no fluor.

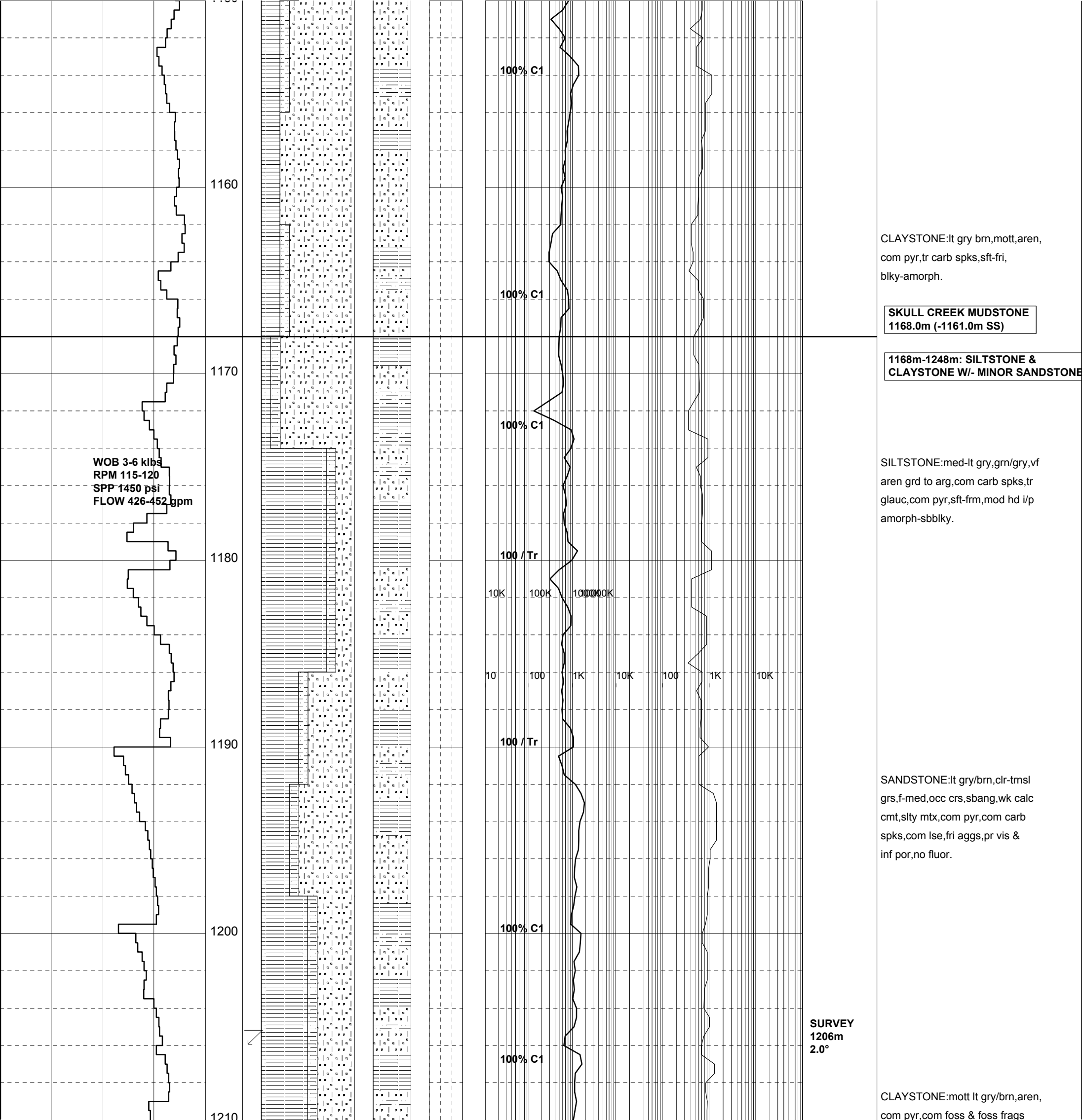
MW 9.2
FV 40
PV 13
YP 16
Gel 2/5
WL 6.0
FC 1
Sol 4.9
pH 8.5
Cl 21k

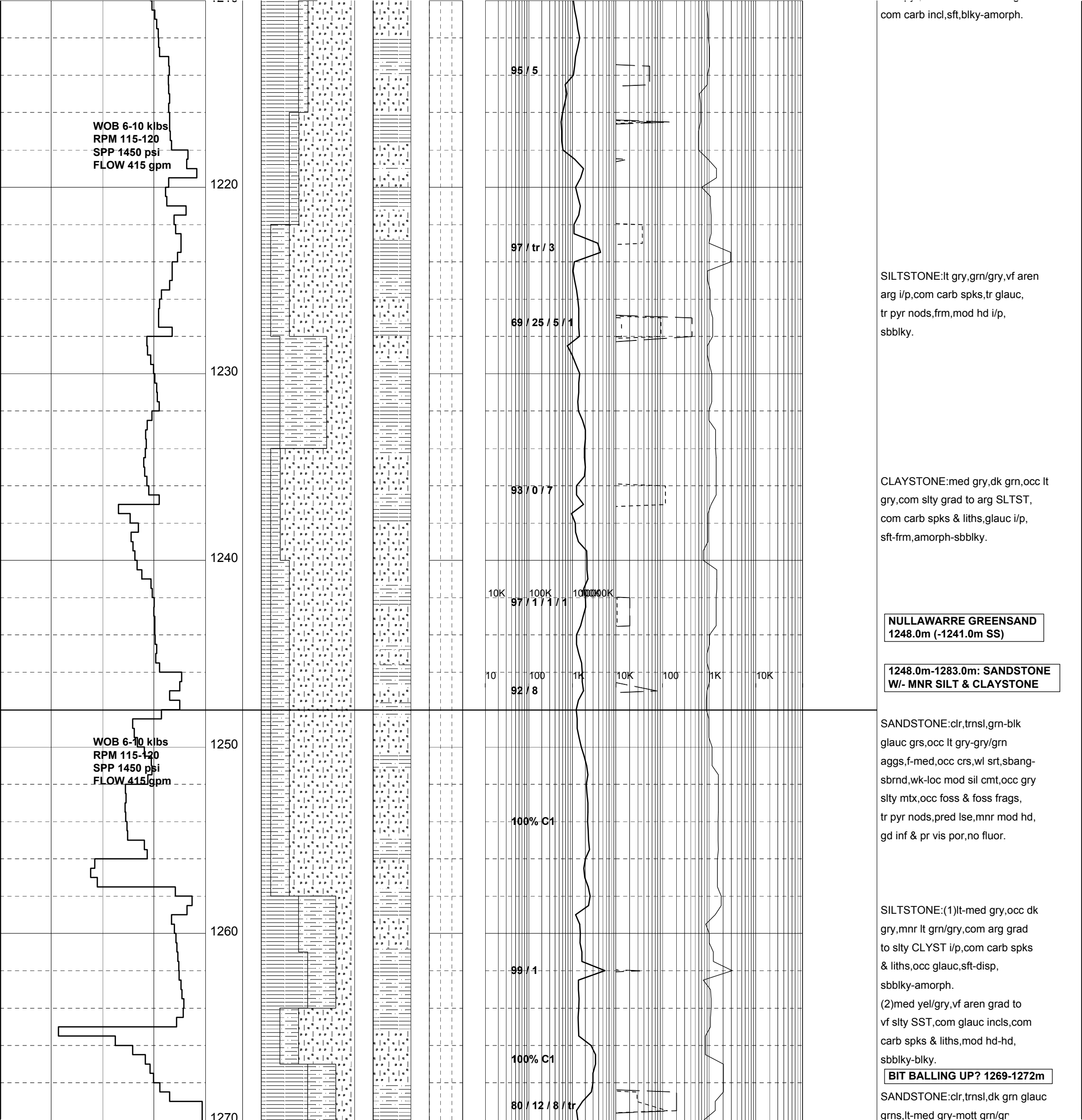
CLAYSTONE:lt/gry/brn,mott,aren,
com pyr,stky,com foss & foss
frags,fri.

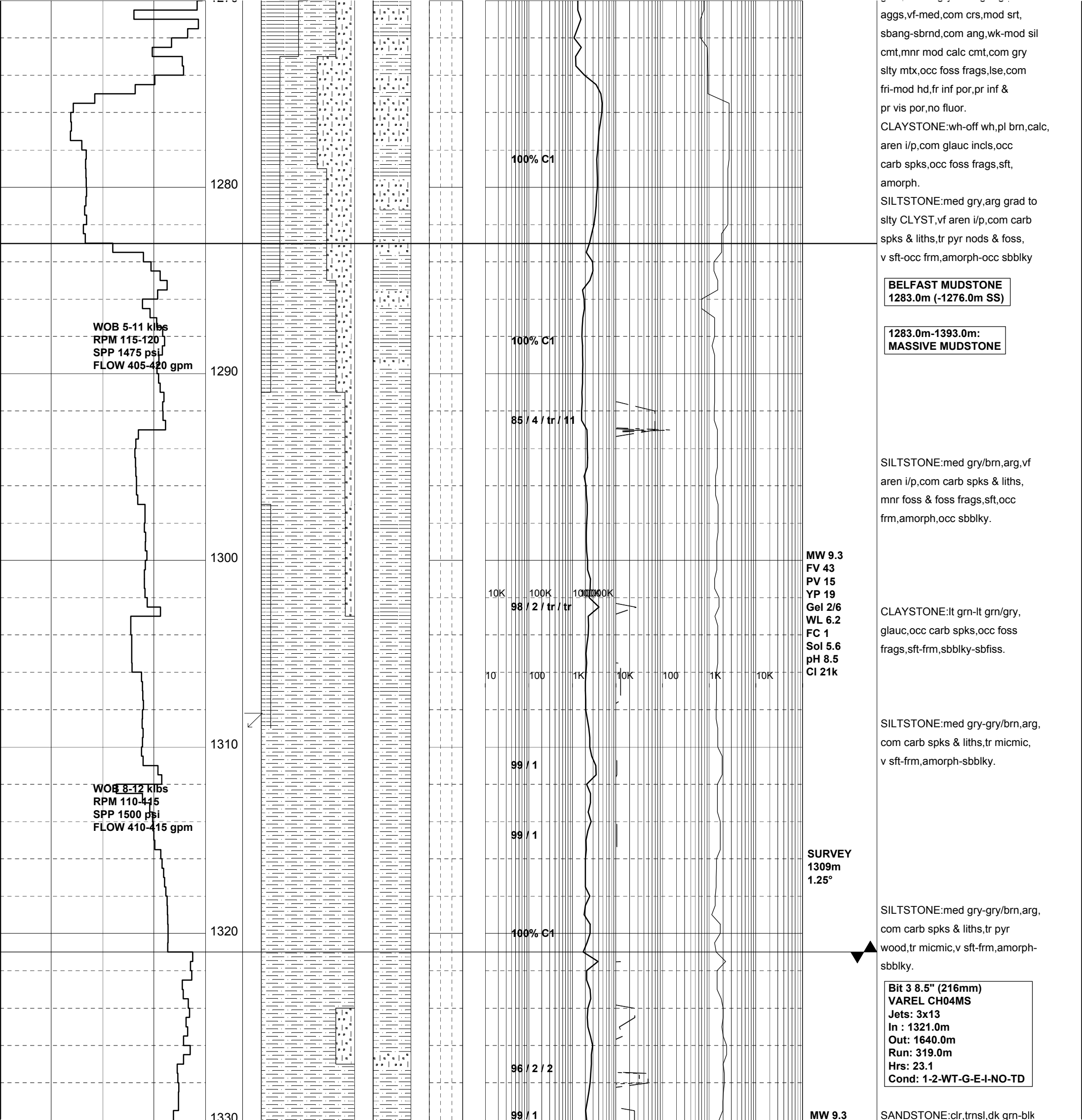
SANDSTONE:gry/brn,mott,f-crs,pr
srt,sbang-sbrnd,slty mtx,com pyr
tr carb spks,com lse,fri-mod hd
aggs,pr vis & inf por,no fluor.

CLAYSTONE:lt gry/brn,mott,aren,
com pyr,tr carb spks,fri,sbblky

SANDSTONE:clr-trnsl,gry/brn,f-
med,occ crs,sbang,wk calc cmt,
slty mtx,com pyr,com carb spks,
com lse,fri aggs,pr vis & inf
por,no fluor.

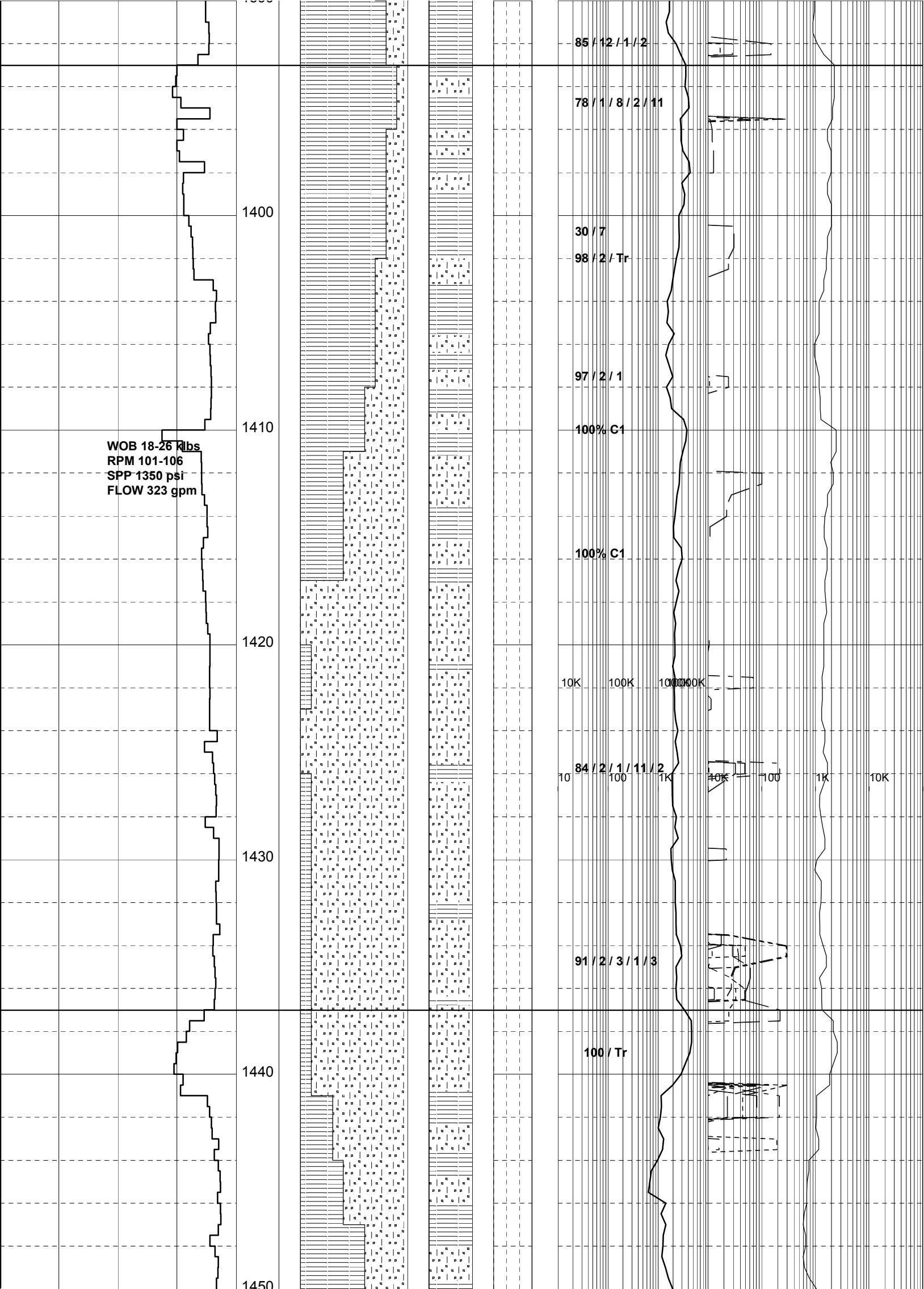






WOB 15-25 klbs
RPM 100-105
SPP 1350 psi
FLOW 320 gpm

**1393.0m-1437.0m: INTERBEDDED
GLAUCONITIC SANDSTONE &
CLAYSTONE**



CLAYSTONE
CLAYSTONE:med grn,lt-med yel,
pred glauc,com glauc grs,tr foss
tr pyr nods,sft-occ frm,amorph-
sbbiky.

**CIRCULATE SAMPLE
UP @ 1396m**

SANDSTONE:dk grn-blk glauc,clr,
trnsl yel grns,f-med,wl srt,
sbang-sbrnd,wk sil cmt,lse,gd
inf por,no fluor.

CLAYSTONE:med grn,lt-med yel,occ
dk brn,pred glauc,com glauc grns
tr foss frags,pred sft,occ frm-v
hd i/p,amorph-sbbiky.

MW 9.4
FV 40
PV 15
YP 14
Gel 2/4
WL 6.0
FC 1
Sol 6.4
pH 8.8
CI 19k

SANDSTONE:dk grn-blk glauc SST,
occ clr grs,f-occ med,wl srt,
wk sil cmt,pred lse,tr gry slty
mtx,fri-mod hd aggs,fr-gd inf
por,no fluor.

**CIRCULATE SAMPLE
UP @ 1440m**

SANDSTONE:dk grn-blk glauc SST,
dom med,occ crs,mod-wl srt,wk
sil cmt,pred dom lse,mod hd aggs
occ fri,fr-gd inf por,no fluor.

**WAARRE FORMATION B
1437.0m (-1430.0m SS)**

**1437m-1492m: INTERBEDDED
GLAUCONITIC SANDSTONE
& CLAYSTONE**

SANDSTONE:dk grn-blk glauc SST,
occ clr grs,dom med,wl srt,sbang
-sbrnd,wk sil cmt,dom lse,fri-
mod hd aggs,fr-gd vis & inf por,
no fluor.

