

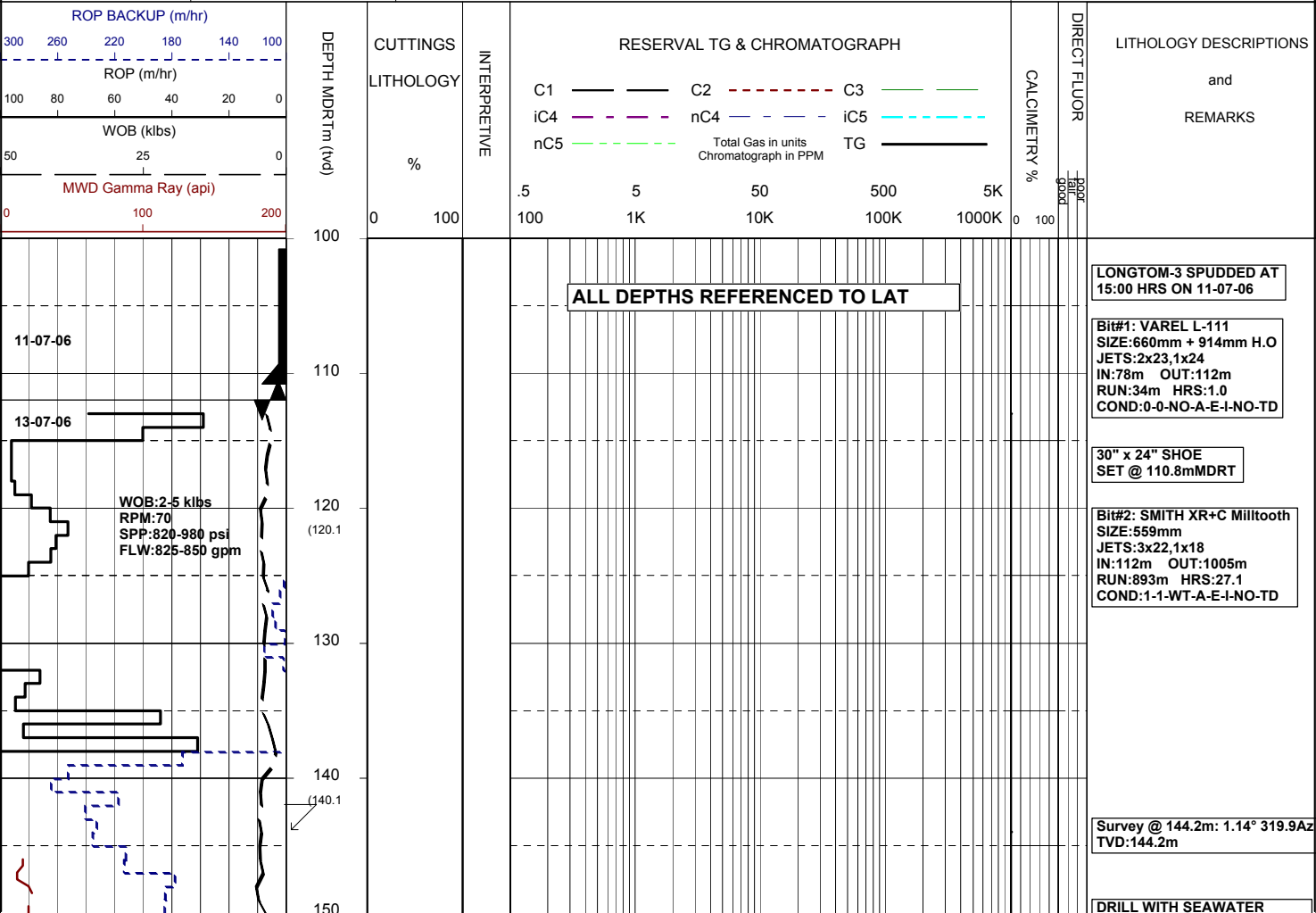


# MASTERLOG LONGTOM-3

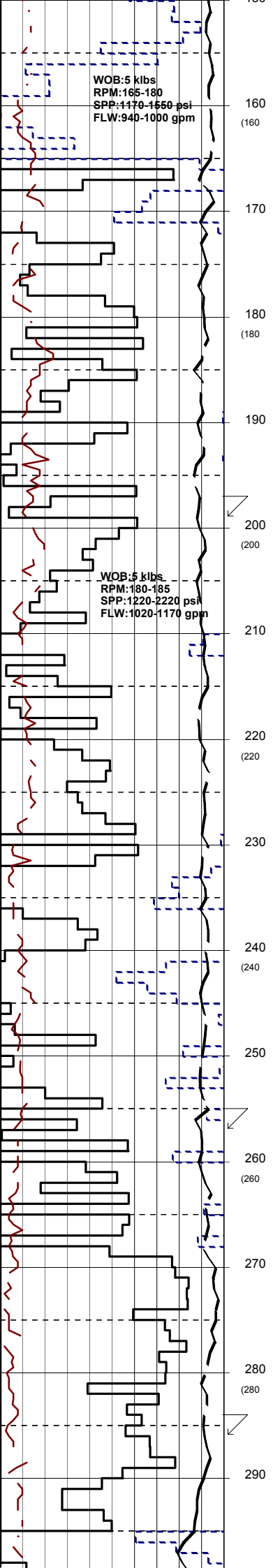


GENERAL	POSITION	HOLE / CASING INFO	DATE / DEPTH	ENGINEERS
Country : AUSTRALIA	Latitude : 38°05'34.774"S	914mm(36") hole to: 112.0m	Spud Date : 11-07-2006	T. N. KYAW
Permit : VIC/P54	Longitude : 148°18'41.479"E	559mm(22") hole to: 1005m	Total Depth Date : XX-09-2006	F. MAKHAD
Field : LONGTOM	UTM Co-ord X (m E): 615005	241mm(9 1/2") hole to: m	Total Depth (mMDRT): m	A. DUNN
Basin : GIPPSLAND	UTM Co-ord Y (m N): 5783055	762mm(30") Cond. to: 110.8m	True Vertical Depth (mTVDSS): m	D. ADDERLEY
Well Type : APPRAISAL	RT to MSL (m): 21.5	406mm(16") Csg. to: 995.3m	Log Scale : 1/ 500	
Rig: OCEAN PATRIOT	RT to Sea Bed (m): 78.2		Final Status : ?	

ABBREVIATIONS		LITHOLOGY LEGEND				ENGINEERING LEGEND	
MW Mud Weight	WOB Weight on Bit (klbs)	Claystone	Marl	Lithic Fragment	Cement	Shoe	DOLOMITE
FV Funnel Viscosity	RPM Rotations Per Min	Siltstone	Clay, Limestone	Foraminifera	Glaucanite	Deviation survey	RFT
PV Plastic Viscosity	FLW Flow Rate (gpm)	Shale	Limestone	Fossils	Pyrite	DST	FIT
YP Yield Point	SPP Pump Pressure (psi)	Fine SST	Dolomite	Bryozoa	Iron Minerals	TEST Test	Mud loss
Gel Gel Strength	RR Re-Run Bit	Medium SST	Coal	Sponges	Mica	Sidewall Core	Mud gain
WL Water Loss	TG Trip Gas	Coarse SST	Arg. SST	Brachiopoda	Carb Fragments	Core	
KCl Potassium Chloride	CG Connection Gas						
Cl Chlorides	BG Background Gas						
Incl Inclination	DGP Drilled Gas Peak						
Az Azimuth	MM Mud Motor						



AND HI-VIS SWEEPS  
RETURNS TO THE SEAFLOOR.

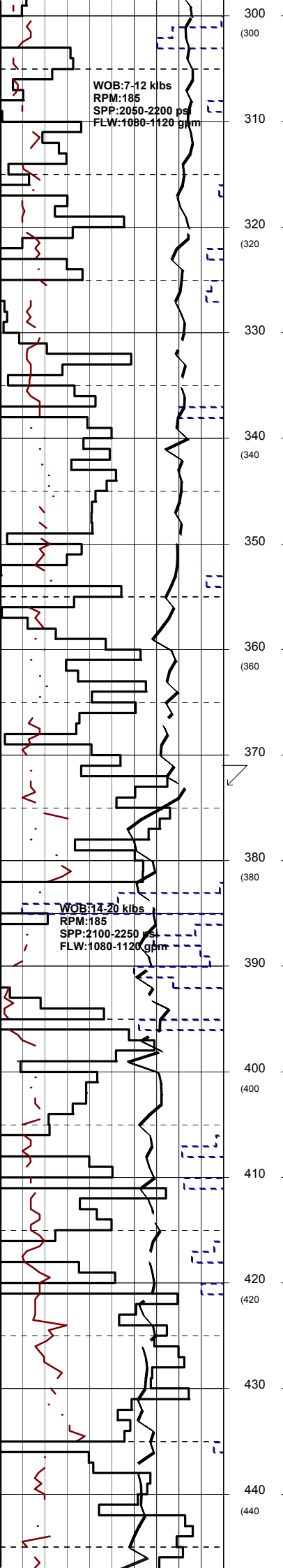


Survey @ 199.1m: 1.01° 317.8Az  
TVD: 199.1m

DRILL WITH SEAWATER  
AND HI-VIS SWEEPS  
RETURNS TO THE SEAFLOOR.

Survey @ 256.9m: 1.02° 314.1Az  
TVD: 256.9m

Survey @ 285.5m: 0.77° 322.6Az  
TVD: 285.5m

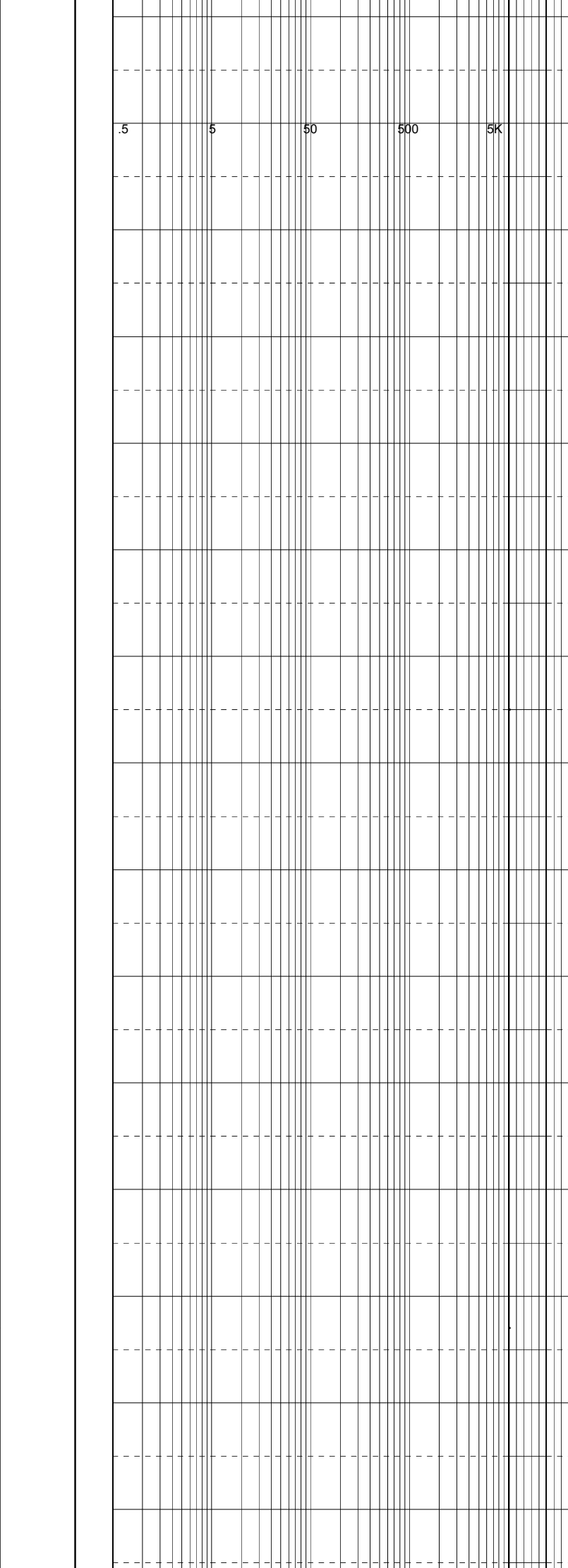
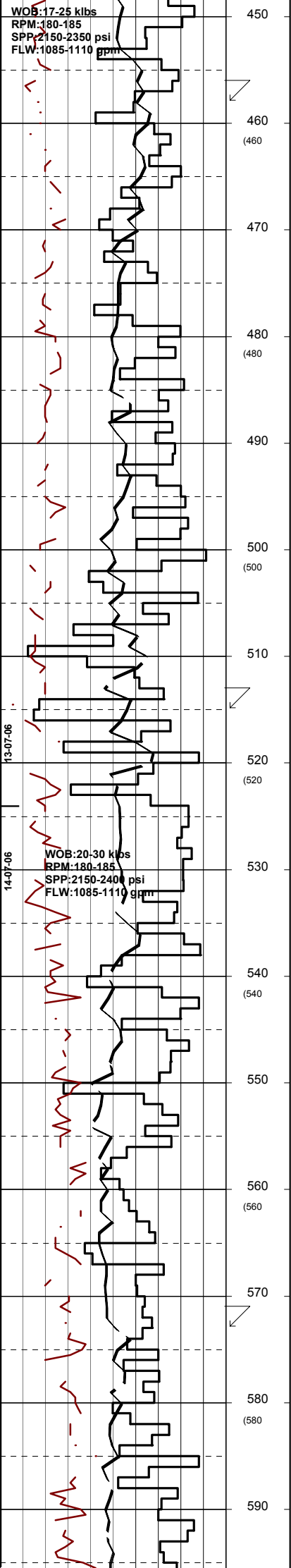


.5      5      50      500      5K

**DRILL WITH SEAWATER  
 AND HI-VIS SWEEPS  
 RETURNS TO THE SEAFLOOR.**

**Survey @ 373.3m: 0.37° 298.4Az  
 TVD: 373.3m**

**DRILL WITH SEAWATER  
 AND HI-VIS SWEEPS  
 RETURNS TO THE SEAFLOOR.**

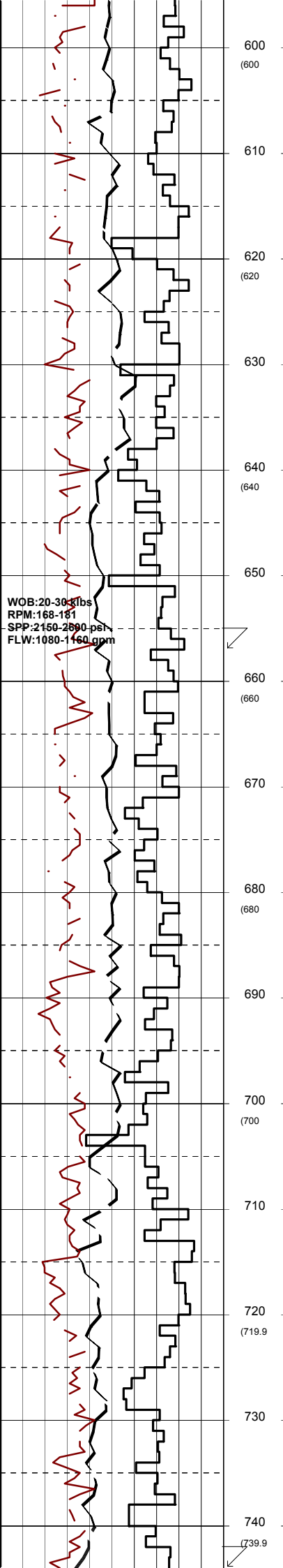


Survey @ 457.6m: 0.63° 340.7Az  
TVD: 457.6m

Survey @ 514.7m: 0.25° 238.8Az  
TVD: 514.6m

DRILL WITH SEAWATER  
AND HI-VIS SWEEPS  
RETURNS TO THE SEAFLOOR.

Survey @ 573.4m: 0.44° 72.2Az  
TVD: 573.3m



600  
(600)

610

620  
(620)

630

640  
(640)

650

660  
(660)

670

680  
(680)

690

700  
(700)

710

720  
(719.9)

730

740  
(739.9)

.5      5      50      500      5K

**DRILL WITH SEAWATER  
 AND HI-VIS SWEEPS  
 RETURNS TO THE SEAFLOOR.**

Survey @ 657.5m: 0.63° 5.6Az  
 TVD: 657.4m

Survey @ 744.2m: 1.18° 5.2Az

TVD:744.1m

DRILL WITH SEAWATER AND HI-VIS SWEEPS RETURNS TO THE SEAFLOOR.

.5 5 50 500 5K

WOB:22-33 klbs  
RPM:157-182  
SPP:2350-2580 psi  
FLW:1120-1145 gpm

750  
760 (759.9)  
770  
780 (779.9)  
790  
800 (799.9)  
810  
820 (819.9)  
830  
840 (839.9)  
850  
860 (859.9)  
870  
880 (879.9)  
890

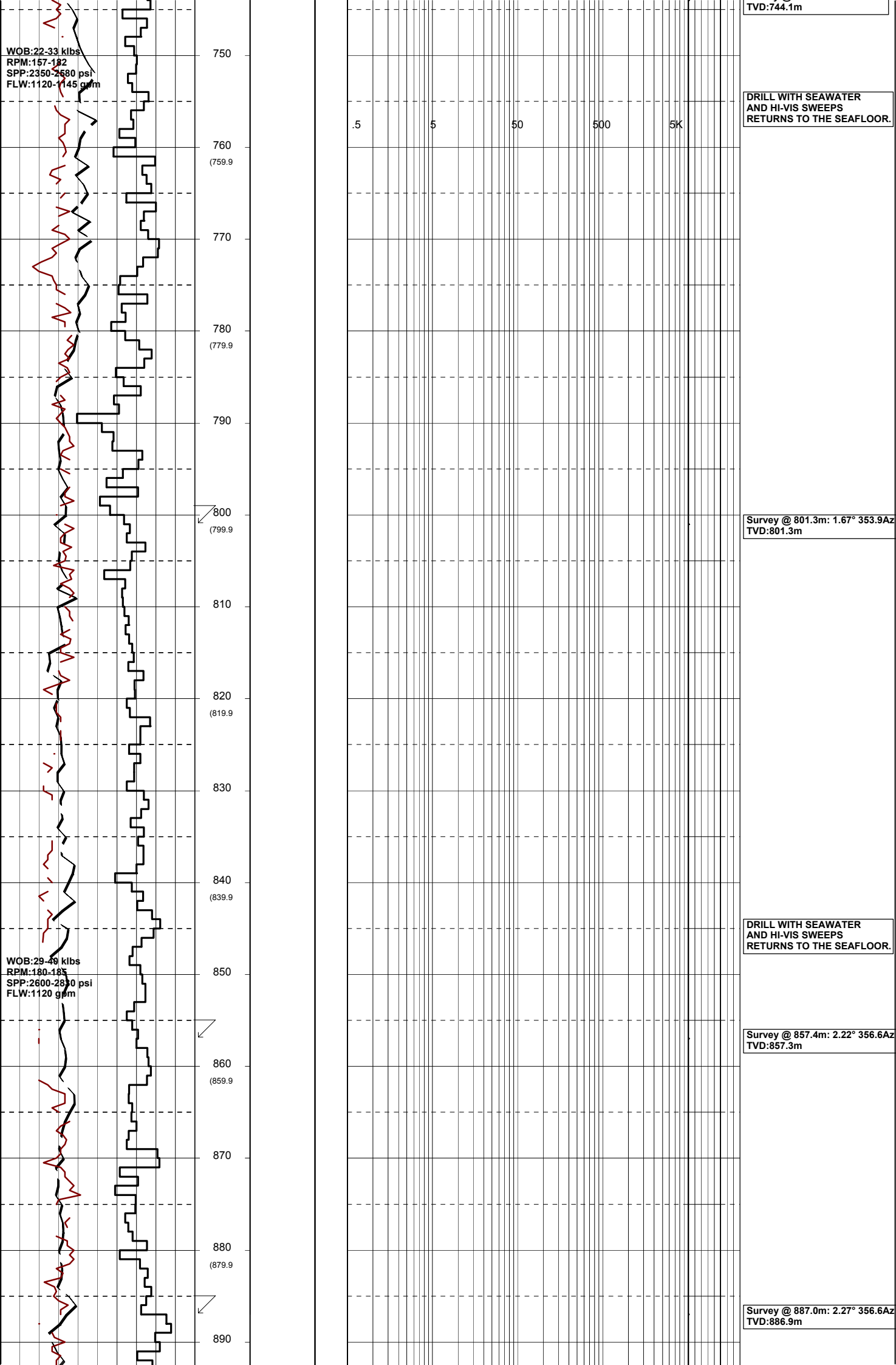
Survey @ 801.3m: 1.67° 353.9Az  
TVD:801.3m

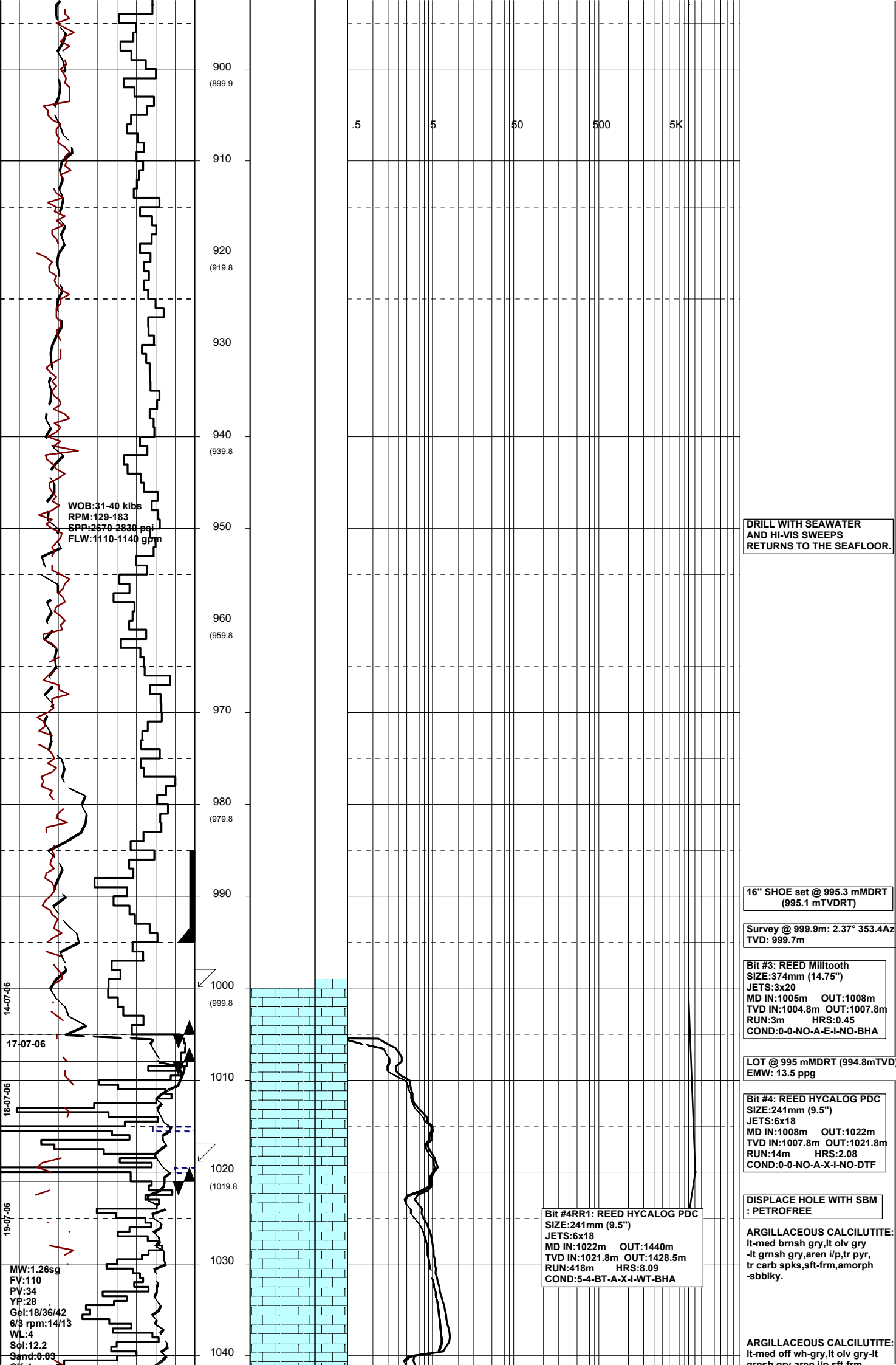
WOB:29-48 klbs  
RPM:180-185  
SPP:2600-2830 psi  
FLW:1120 gpm

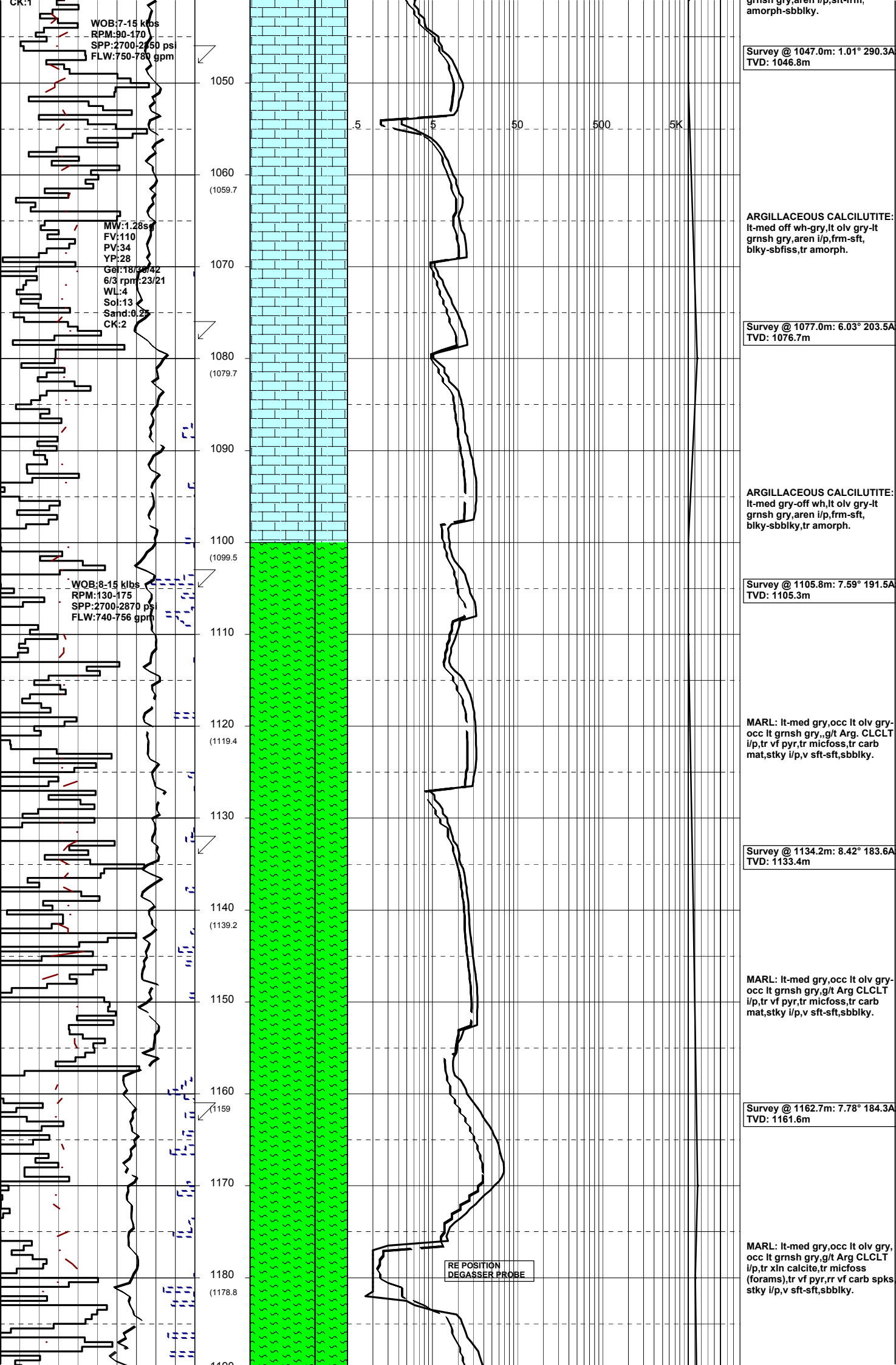
DRILL WITH SEAWATER AND HI-VIS SWEEPS RETURNS TO THE SEAFLOOR.

Survey @ 857.4m: 2.22° 356.6Az  
TVD:857.3m

Survey @ 887.0m: 2.27° 356.6Az  
TVD:886.9m







WOB:7-15 kbps  
 RPM:90-170  
 SPP:2700-2850 psi  
 FLW:750-780 gpm

MW:1.285  
 FV:110  
 PV:34  
 YP:28  
 Gel:18/23/42  
 6/3 rpm:23/21  
 WL:4  
 Sol:13  
 Sand:0.25  
 CK:2

WOB:8-15 kbps  
 RPM:130-175  
 SPP:2700-2870 psi  
 FLW:740-756 gpm

Survey @ 1047.0m: 1.01° 290.3A  
 TVD: 1046.8m

ARGILLACEOUS CALCILUTITE:  
 lt-med off wh-gry,lt olv gry-lt  
 grnsh gry,aren i/p,frm-sft,  
 blk-ysbflky,tr amorph.

Survey @ 1077.0m: 6.03° 203.5A  
 TVD: 1076.7m

ARGILLACEOUS CALCILUTITE:  
 lt-med gry-off wh,lt olv gry-lt  
 grnsh gry,aren i/p,frm-sft,  
 blk-ysbflky,tr amorph.

Survey @ 1105.8m: 7.59° 191.5A  
 TVD: 1105.3m

MARL: lt-med gry,occ lt olv gry-  
 occ lt grnsh gry,,g/t Arg. CLCLT  
 i/p,tr vf pyr,tr micfoss,tr carb  
 mat,stk i/p,v sft-sft,sbflky.

Survey @ 1134.2m: 8.42° 183.6A  
 TVD: 1133.4m

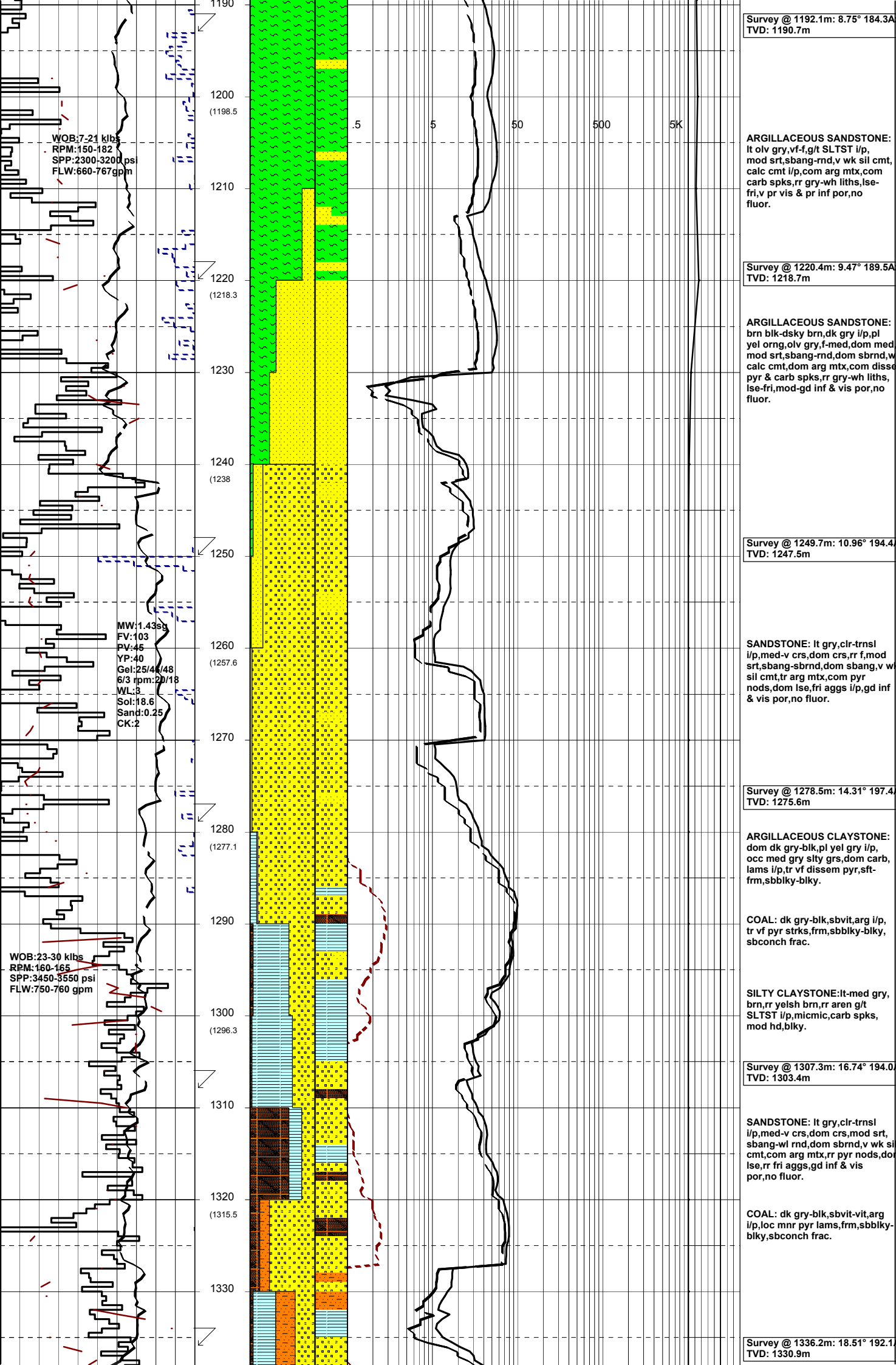
MARL: lt-med gry,occ lt olv gry-  
 occ lt grnsh gry,g/t Arg CLCLT  
 i/p,tr vf pyr,tr micfoss,tr carb  
 mat,stk i/p,v sft-sft,sbflky.

Survey @ 1162.7m: 7.78° 184.3A  
 TVD: 1161.6m

MARL: lt-med gry,occ lt olv gry,  
 occ lt grnsh gry,g/t Arg CLCLT  
 i/p,tr xln calcite,tr micfoss  
 (forams),tr vf pyr,rr vf carb spks  
 stky i/p,v sft-sft,sbflky.

RE POSITION  
 DEGASSER PROBE





Survey @ 1192.1m: 8.75° 184.3A  
TVD: 1190.7m

**ARGILLACEOUS SANDSTONE:**  
lt org gry,vf-f,g/t SLTST i/p,  
mod srt,sbang-rnd,v wk sil cmt,  
calc cmt i/p,com arg mtx,com  
carb spks,rr gry-wh liths,lse-  
fri,v pr vis & pr inf por,no  
fluor.

Survey @ 1220.4m: 9.47° 189.5A  
TVD: 1218.7m

**ARGILLACEOUS SANDSTONE:**  
brn blk-dsky brn,dk gry i/p,pl  
yel org,olv gry,f-med,dom med  
mod srt,sbang-rnd,dom sbrnd,w  
calc cmt,dom arg mtx,com disse  
pyr & carb spks,rr gry-wh liths,  
lse-fri,mod-gd inf & vis por,no  
fluor.

Survey @ 1249.7m: 10.96° 194.4  
TVD: 1247.5m

**SANDSTONE:** lt gry,clr-trnsl  
i/p,med-v crs,dom crs,rr f,mod  
srt,sbang-sbrnd,dom sbang,v wk  
sil cmt,tr arg mtx,com pyr  
nods,dom lse,fri aggs i/p,gd inf  
& vis por,no fluor.

Survey @ 1278.5m: 14.31° 197.4  
TVD: 1275.6m

**ARGILLACEOUS CLAYSTONE:**  
dom dk gry-blk,pl yel gry i/p,  
occ med gry stly grs,dom carb,  
lams i/p,tr vf disse pyr,stf-  
frm,sbbiky-blky.

**COAL:** dk gry-blk,svbit,arg i/p,  
tr vf pyr strks,frm,sbbiky-blky,  
sbconch frac.

**SILTY CLAYSTONE:**lt-med gry,  
brn,rr yelsh brn,rr aren g/t  
SLTST i/p,micmic,carb spks,  
mod hd,blky.

Survey @ 1307.3m: 16.74° 194.0  
TVD: 1303.4m

**SANDSTONE:** lt gry,clr-trnsl  
i/p,med-v crs,dom crs,mod srt,  
sbang-w rnd,dom sbrnd,v wk sil  
cmt,com arg mtx,rr pyr nods,dot  
lse,rr fri aggs,gd inf & vis  
por,no fluor.

**COAL:** dk gry-blk,svbit-vit,arg  
i/p,loc mnr pyr lams,frm,sbbiky-  
blky,sbconch frac.

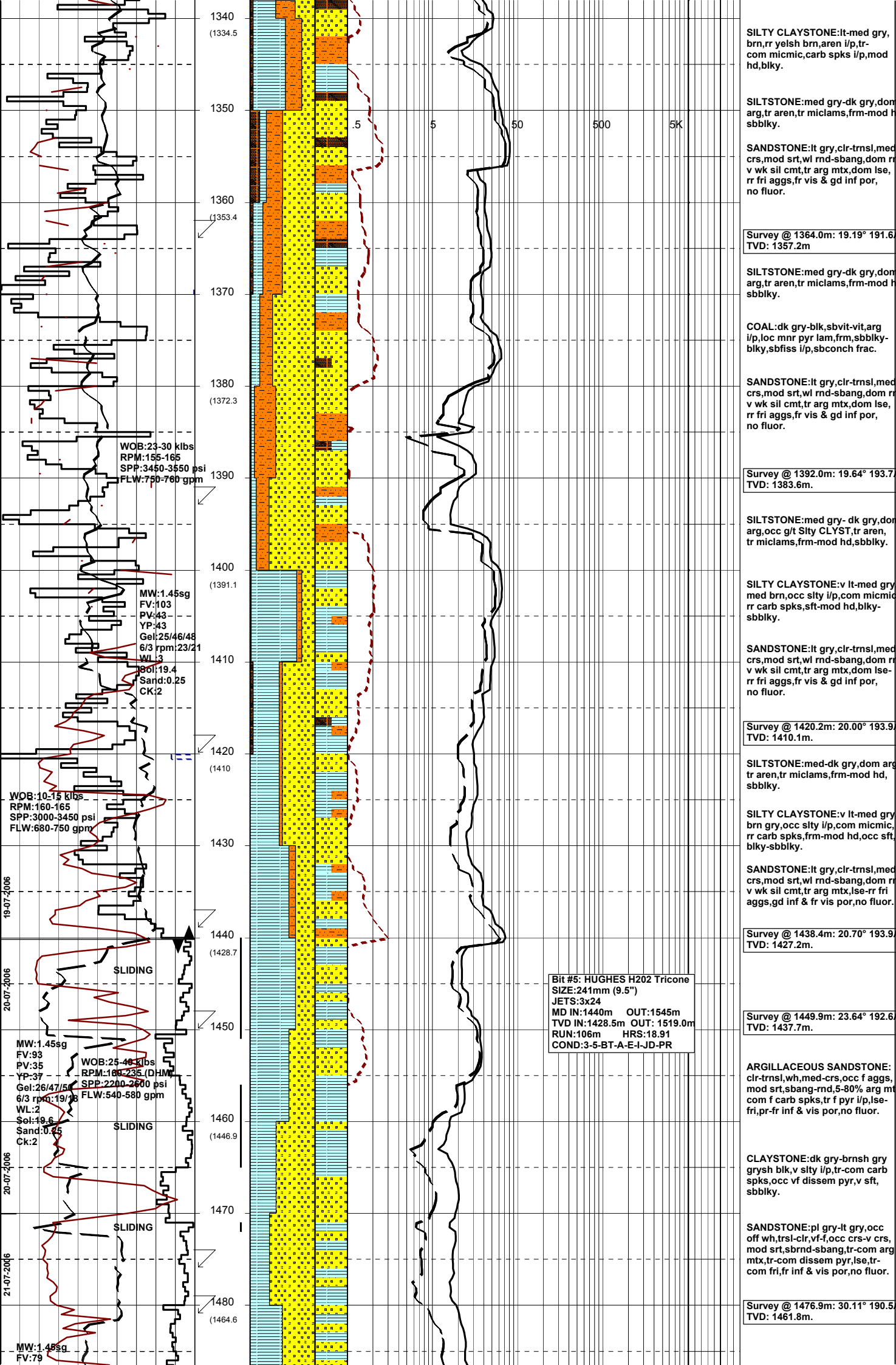
Survey @ 1336.2m: 18.51° 192.1  
TVD: 1330.9m

WOB:7-21 klbs  
RPM:150-182  
SPP:2300-3200 psi  
FLW:660-767 gpm

MW:1.43ss  
FV:103  
PV:45  
YP:40  
Gel:25/44/48  
6/3 rpm:20/18  
WL:3  
Sol:18.6  
Sand:0.25  
CK:2

WOB:23-30 klbs  
RPM:160-165  
SPP:3450-3550 psi  
FLW:750-760 gpm

.5      5      50      500      5K



**SILTY CLAYSTONE:**lt-med gry, brn,rr yelsh brn,aren i/p,tr-com micmic,carb spks i/p,mod hd,blky.

**SILTSTONE:**med gry-dk gry,don arg,tr aren,tr miclams,frm-mod h sbbiky.

**SANDSTONE:**lt gry,clr-trnsl,med crs,mod srt,wl rnd-sbang,dom r v wk sil cmt,tr arg mtx,dom lse, rr fri aggs,fr vis & gd inf por, no fluor.

Survey @ 1364.0m: 19.19° 191.6°  
TVD: 1357.2m

**SILTSTONE:**med gry-dk gry,don arg,tr aren,tr miclams,frm-mod h sbbiky.

**COAL:**dk gry-blk,sbvit-vit,arg i/p,loc mnr pyr lam,frm,sbbiky-blky,sbfiss i/p,sbconch frac.

**SANDSTONE:**lt gry,clr-trnsl,med crs,mod srt,wl rnd-sbang,dom r v wk sil cmt,tr arg mtx,dom lse, rr fri aggs,fr vis & gd inf por, no fluor.

Survey @ 1392.0m: 19.64° 193.7°  
TVD: 1383.6m

**SILTSTONE:**med gry- dk gry,don arg,occ g/t Sity CLYST,tr aren, tr miclams,frm-mod hd,sbbiky.

**SILTY CLAYSTONE:**v lt-med gry, med brn,occ slty i/p,com micmic, rr carb spks,sft-mod hd,blky-sbbiky.

**SANDSTONE:**lt gry,clr-trnsl,med crs,mod srt,wl rnd-sbang,dom r v wk sil cmt,tr arg mtx,dom lse-rr fri aggs,fr vis & gd inf por, no fluor.

Survey @ 1420.2m: 20.00° 193.9°  
TVD: 1410.1m

**SILTSTONE:**med-dk gry,don arg tr aren,tr miclams,frm-mod hd, sbbiky.

**SILTY CLAYSTONE:**v lt-med gry, brn gry,occ slty i/p,com micmic, rr carb spks,frm-mod hd,occ sft, blky-sbbiky.

**SANDSTONE:**lt gry,clr-trnsl,med crs,mod srt,wl rnd-sbang,dom r v wk sil cmt,tr arg mtx,lse-rr fri aggs,gd inf & fr vis por,no fluor.

Survey @ 1438.4m: 20.70° 193.9°  
TVD: 1427.2m

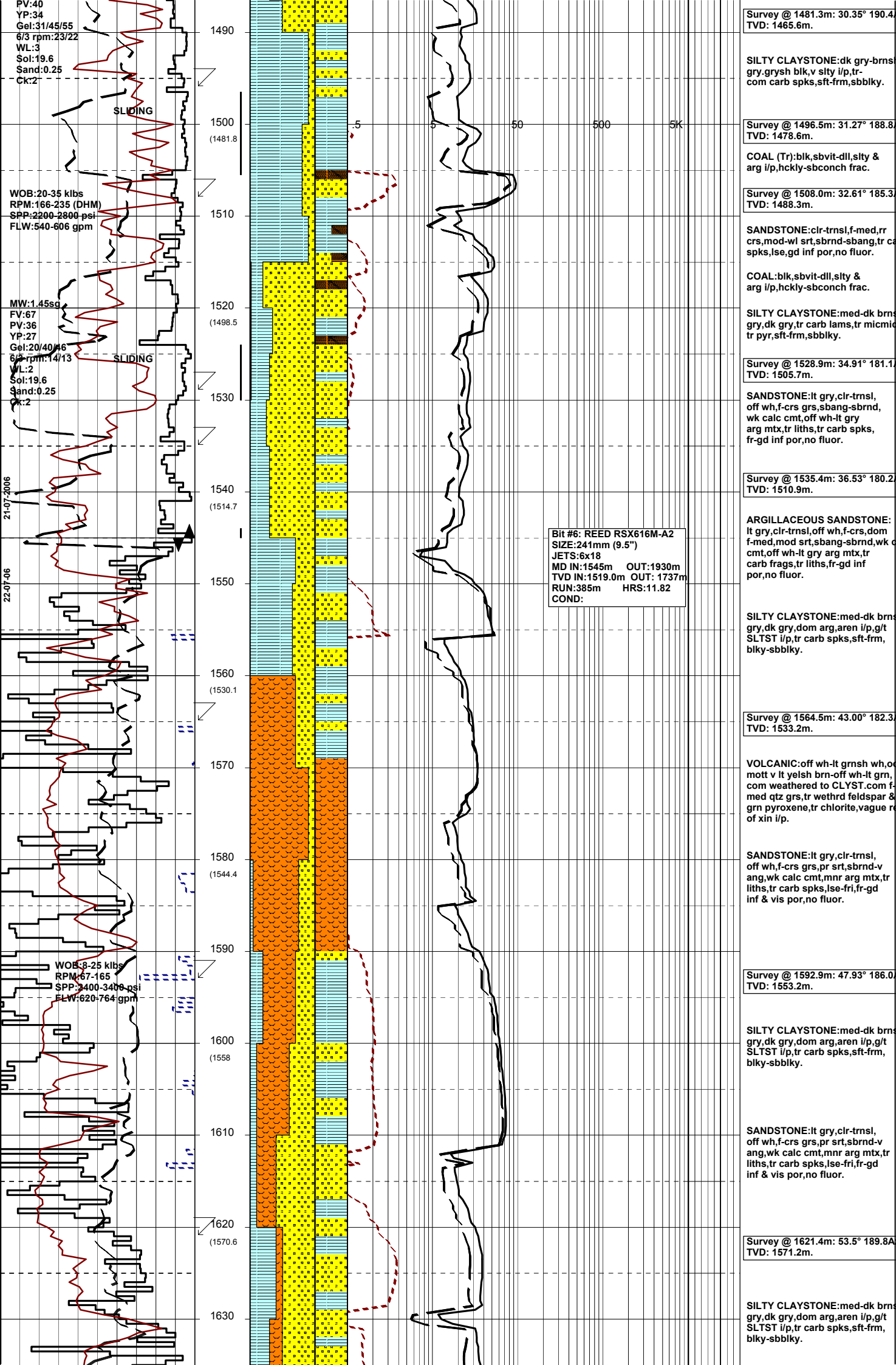
Survey @ 1449.9m: 23.64° 192.6°  
TVD: 1437.7m

**ARGILLACEOUS SANDSTONE:** clr-trnsl,wh,med-crs,occ f aggs, mod srt,sbang-rnd,5-80% arg mt, com f carb spks,tr f pyr i/p,lse-fri,pr-fr inf & vis por,no fluor.

**CLAYSTONE:**dk gry-brnsh gry grysh blk,v stly i/p,tr-com carb spks,occ vf dissem pyr,v sft, sbbiky.

**SANDSTONE:**pl gry-lt gry,occ off wh,trsl-clr,vf-f,occ crs-v crs, mod srt,sbrnd-sbang,tr-com arg mtx,tr-com dissem pyr,lse,tr-com fri,fr inf & vis por,no fluor.

Survey @ 1476.9m: 30.11° 190.5°  
TVD: 1461.8m



PV:40  
 YP:34  
 Gel:31/45/55  
 6/3 rpm:23/22  
 WL:3  
 Sol:19.6  
 Sand:0.25  
 Ck:2

WOB:20-35 klbs  
 RPM:166-235 (DHM)  
 SPP:2200-2800 psi  
 FLW:540-606 gpm

MW:1.45sc  
 FV:67  
 PV:36  
 YP:27  
 Gel:20/40/46  
 6/3 rpm:14/13  
 WL:2  
 Sol:19.6  
 Sand:0.25  
 Ck:2

WOB:8-25 klbs  
 RPM:67-165  
 SPP:2400-3400 psi  
 FLW:620-764 gpm

Bit #6: REED RSX616M-A2  
 SIZE:241mm (9.5")  
 JETS:6x18  
 MD IN:1545m OUT:1930m  
 TVD IN:1519.0m OUT: 1737m  
 RUN:385m HRS:11.82  
 COND:

Survey @ 1481.3m: 30.35° 190.4  
 TVD: 1465.6m.

SILTY CLAYSTONE:dk gry-brns  
 gry.grysh blk,v slty i/p, tr-  
 com carb spks,sft-frm,sbbkly.

Survey @ 1496.5m: 31.27° 188.8  
 TVD: 1478.6m.

COAL (Tr):blk,svbit-dll,slty &  
 arg i/p,hckly-sbconch frac.

Survey @ 1508.0m: 32.61° 185.3  
 TVD: 1488.3m.

SANDSTONE:clr-trnsl,f-med,rr  
 crs,mod-wl srt,sbrnd-sbang, tr ca  
 spks,lse,gd inf por,no fluor.

COAL:blk,svbit-dll,slty &  
 arg i/p,hckly-sbconch frac.

SILTY CLAYSTONE:med-dk brns  
 gry,dk gry, tr carb lams, tr micm  
 tr pyr,sft-frm,sbbkly.

Survey @ 1528.9m: 34.91° 181.1  
 TVD: 1505.7m.

SANDSTONE:lt gry,clr-trnsl,  
 off wh,f-crs grs,sbang-sbrnd,  
 wk calc cmt,off wh-lt gry  
 arg mtx,tr liths, tr carb spks,  
 fr-gd inf por,no fluor.

Survey @ 1535.4m: 36.53° 180.2  
 TVD: 1510.9m.

ARGILLACEOUS SANDSTONE:  
 lt gry,clr-trnsl,off wh,f-crs,dom  
 f-med,mod srt,sbang-sbrnd,wk c  
 cmt,off wh-lt gry arg mtx, tr  
 carb frags, tr liths, fr-gd inf  
 por,no fluor.

SILTY CLAYSTONE:med-dk brns  
 gry,dk gry,dom arg,aren i/p,g/t  
 SLTST i/p, tr carb spks,sft-frm,  
 blk-sbbkly.

Survey @ 1564.5m: 43.00° 182.3  
 TVD: 1533.2m.

VOLCANIC:off wh-lt grnsh wh,of  
 mott v lt yelsh brn-off wh-lt grn,  
 com weathered to CLYST.com f-  
 med qtz grs, tr wethrd feldspar &  
 grn pyroxene, tr chlorite,vague re  
 of xin i/p.

SANDSTONE:lt gry,clr-trnsl,  
 off wh,f-crs grs,pr srt,sbrnd-v  
 ang,wk calc cmt,mnr arg mtx, tr  
 liths, tr carb spks,lse-fri, fr-gd  
 inf & vis por,no fluor.

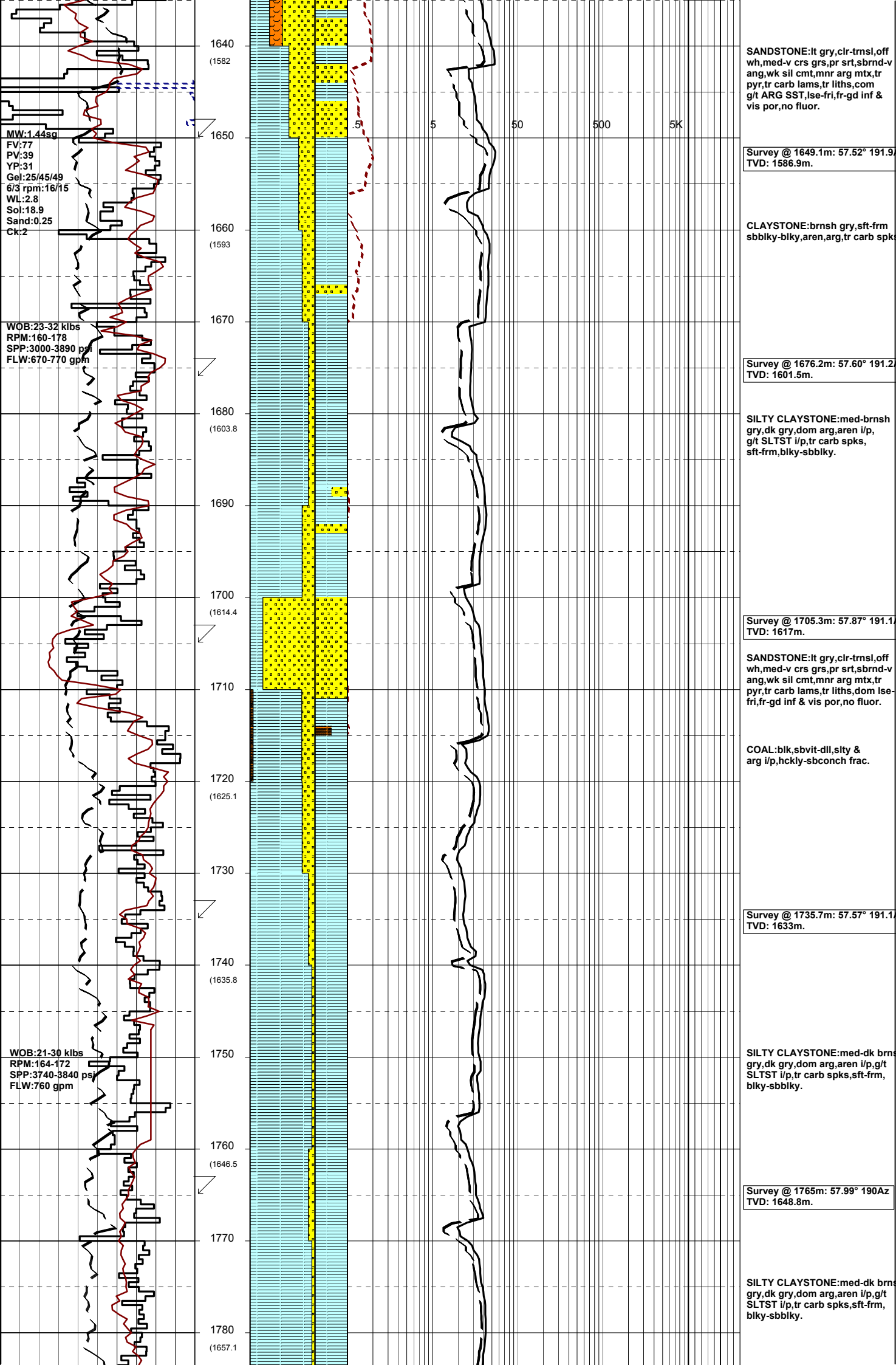
Survey @ 1592.9m: 47.93° 186.0  
 TVD: 1553.2m.

SILTY CLAYSTONE:med-dk brns  
 gry,dk gry,dom arg,aren i/p,g/t  
 SLTST i/p, tr carb spks,sft-frm,  
 blk-sbbkly.

SANDSTONE:lt gry,clr-trnsl,  
 off wh,f-crs grs,pr srt,sbrnd-v  
 ang,wk calc cmt,mnr arg mtx, tr  
 liths, tr carb spks,lse-fri, fr-gd  
 inf & vis por,no fluor.

Survey @ 1621.4m: 53.5° 189.8A  
 TVD: 1571.2m.

SILTY CLAYSTONE:med-dk brns  
 gry,dk gry,dom arg,aren i/p,g/t  
 SLTST i/p, tr carb spks,sft-frm,  
 blk-sbbkly.



MW:1.44sg  
 FV:77  
 PV:39  
 YP:31  
 Gel:25/45/49  
 6/3 rpm:16/15  
 WL:2.8  
 Sol:18.9  
 Sand:0.25  
 Ck:2

WOB:23-32 klbs  
 RPM:160-178  
 SPP:3000-3890 psi  
 FLW:670-770 gpm

WOB:21-30 klbs  
 RPM:164-172  
 SPP:3740-3840 psi  
 FLW:760 gpm

**SANDSTONE:**lt gry,clr-trnsl,off wh,med-v crs grs,pr srt,sbrnd-v ang,wk sil cmt,mnr arg mtx,tr pyr,tr carb lams,tr liths,com g/t ARG SST,lse-fri,fr-gd inf & vis por,no fluor.

Survey @ 1649.1m: 57.52° 191.9  
 TVD: 1586.9m.

**CLAYSTONE:**brnsh gry,sft frm sbbiky-blky,aren,arg,tr carb spks

Survey @ 1676.2m: 57.60° 191.2  
 TVD: 1601.5m.

**SILTY CLAYSTONE:**med-brnsh gry,dk gry,dom arg,aren i/p, g/t SLTST i/p,tr carb spks, sft frm,blky-sbbiky.

Survey @ 1705.3m: 57.87° 191.1  
 TVD: 1617m.

**SANDSTONE:**lt gry,clr-trnsl,off wh,med-v crs grs,pr srt,sbrnd-v ang,wk sil cmt,mnr arg mtx,tr pyr,tr carb lams,tr liths,dom lse-fri,fr-gd inf & vis por,no fluor.

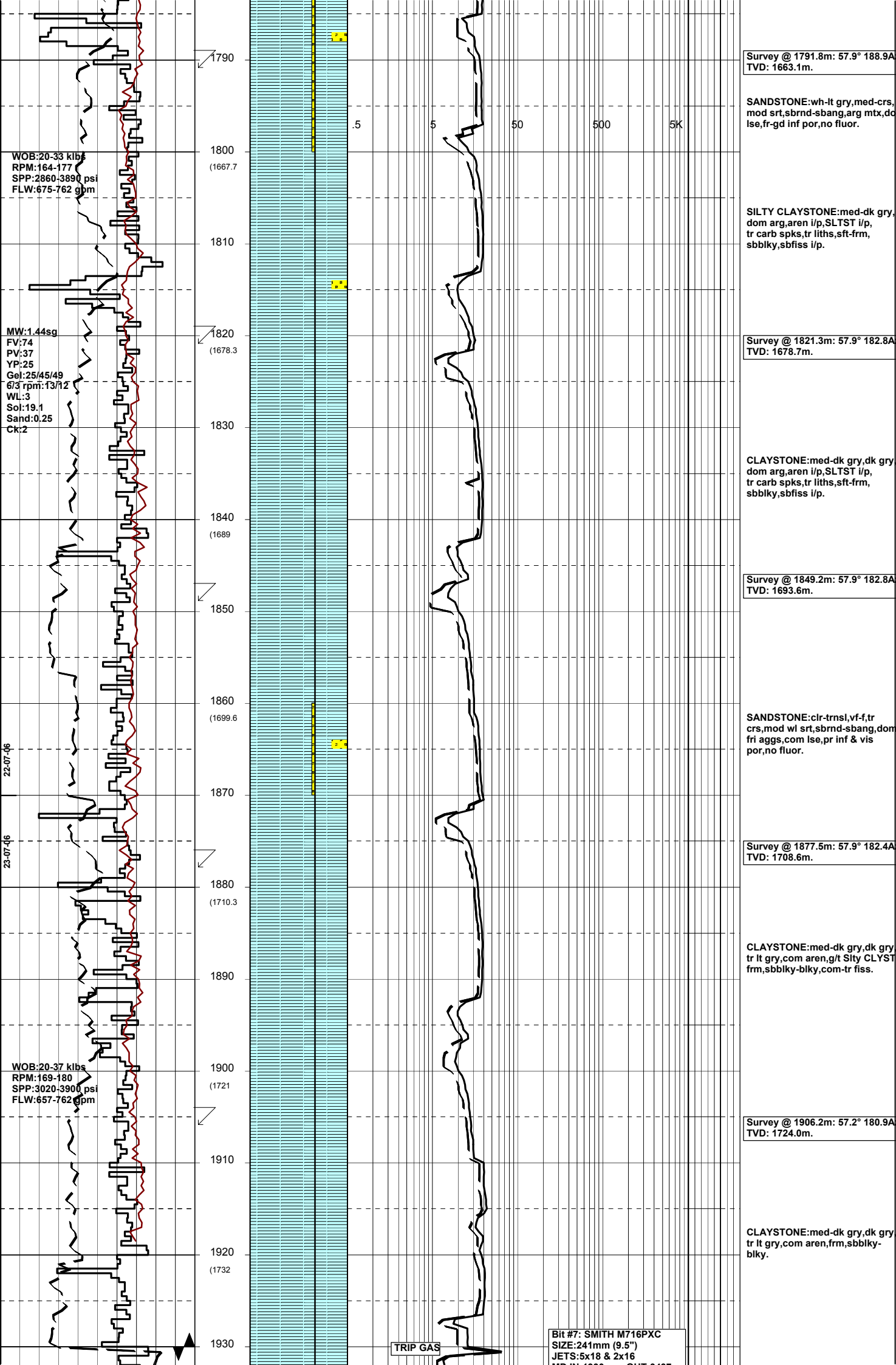
**COAL:**blk,sbvt-dll,silty & arg i/p,hckly-sbconch frac.

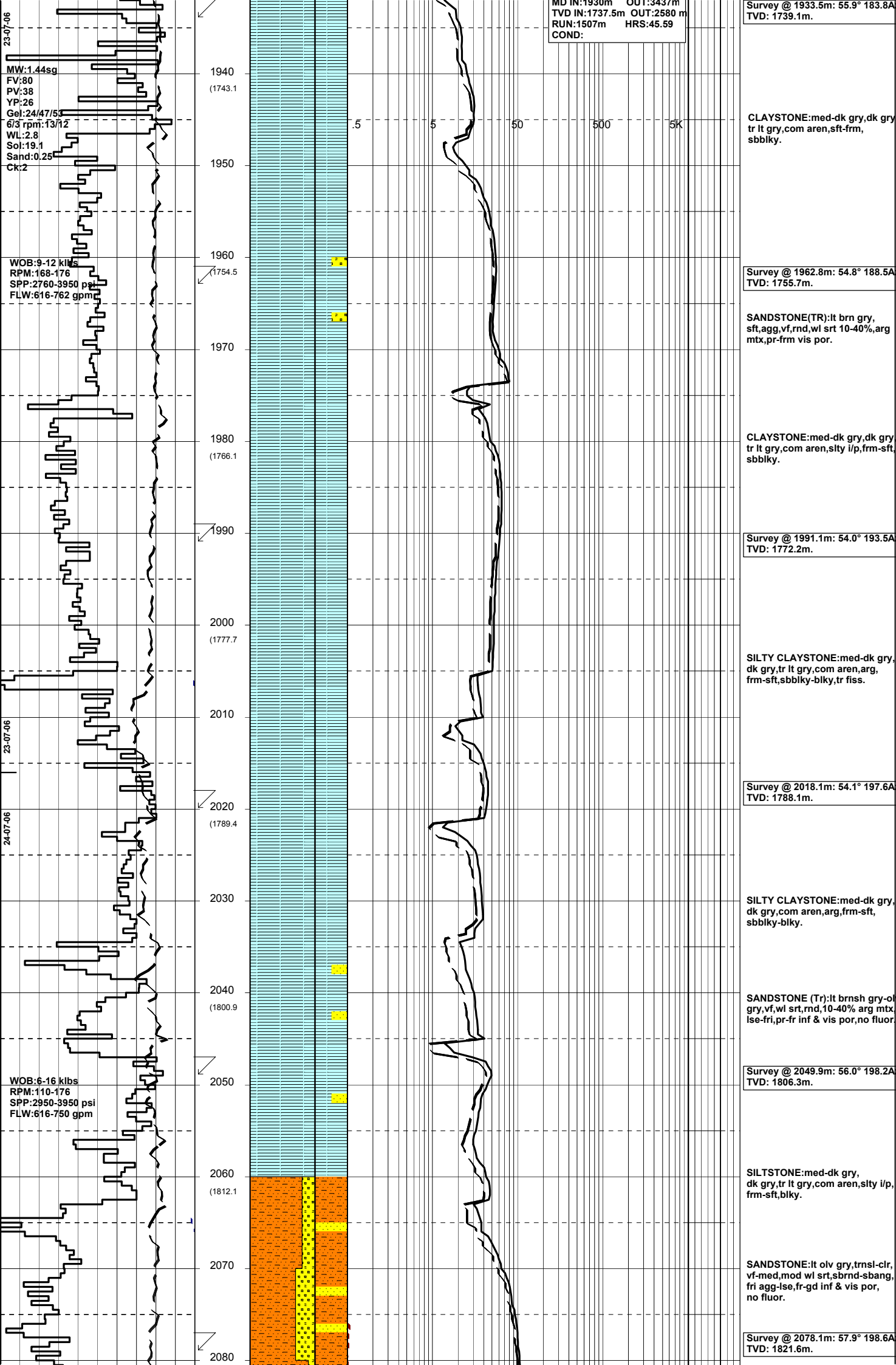
Survey @ 1735.7m: 57.57° 191.1  
 TVD: 1633m.

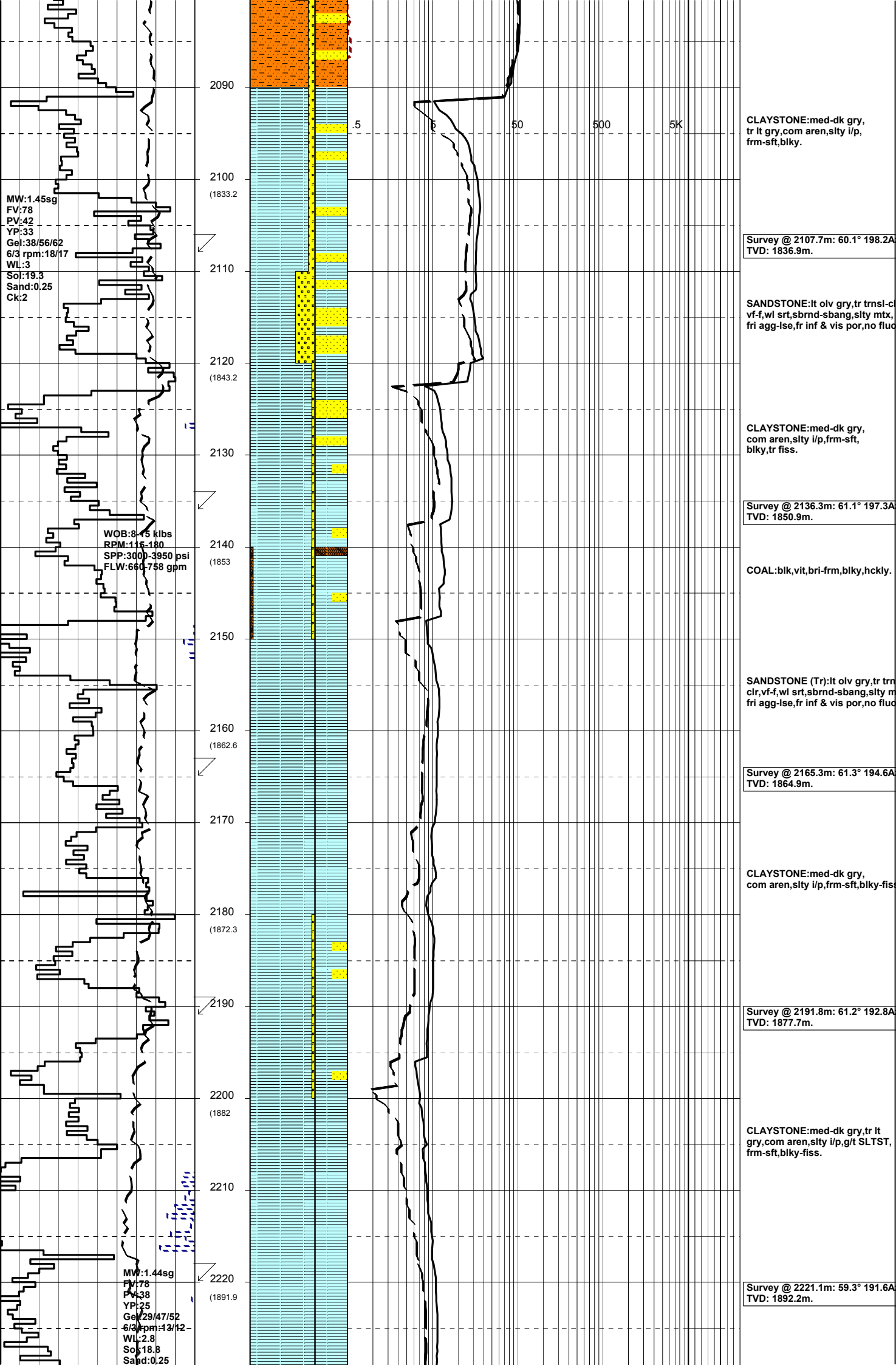
**SILTY CLAYSTONE:**med-dk brnsh gry,dk gry,dom arg,aren i/p,g/t SLTST i/p,tr carb spks,sft frm, blky-sbbiky.

Survey @ 1765m: 57.99° 190Az  
 TVD: 1648.8m.

**SILTY CLAYSTONE:**med-dk brnsh gry,dk gry,dom arg,aren i/p,g/t SLTST i/p,tr carb spks,sft frm, blky-sbbiky.







2090

2100  
(1833.2)

2110

2120  
(1843.2)

2130

2140  
(1853)

2150

2160  
(1862.6)

2170

2180  
(1872.3)

2190

2200  
(1882)

2210

2220  
(1891.9)

CLAYSTONE: med-dk gry, tr lt gry, com aren, slty i/p, frm-sft, blkly.

Survey @ 2107.7m: 60.1° 198.2A  
TVD: 1836.9m.

SANDSTONE: lt olv gry, tr trnsi-clr, vf-f, wl srt, sbrnd-sbang, slty mt, fri agg-lse, fr inf & vis por, no fluid

CLAYSTONE: med-dk gry, com aren, slty i/p, frm-sft, blkly, tr fiss.

Survey @ 2136.3m: 61.1° 197.3A  
TVD: 1850.9m.

COAL: blk, vit, bri-frm, blkly, hckly.

SANDSTONE (Tr): lt olv gry, tr trnsi-clr, vf-f, wl srt, sbrnd-sbang, slty m, fri agg-lse, fr inf & vis por, no fluid

Survey @ 2165.3m: 61.3° 194.6A  
TVD: 1864.9m.

CLAYSTONE: med-dk gry, com aren, slty i/p, frm-sft, blkly-fiss.

Survey @ 2191.8m: 61.2° 192.8A  
TVD: 1877.7m.

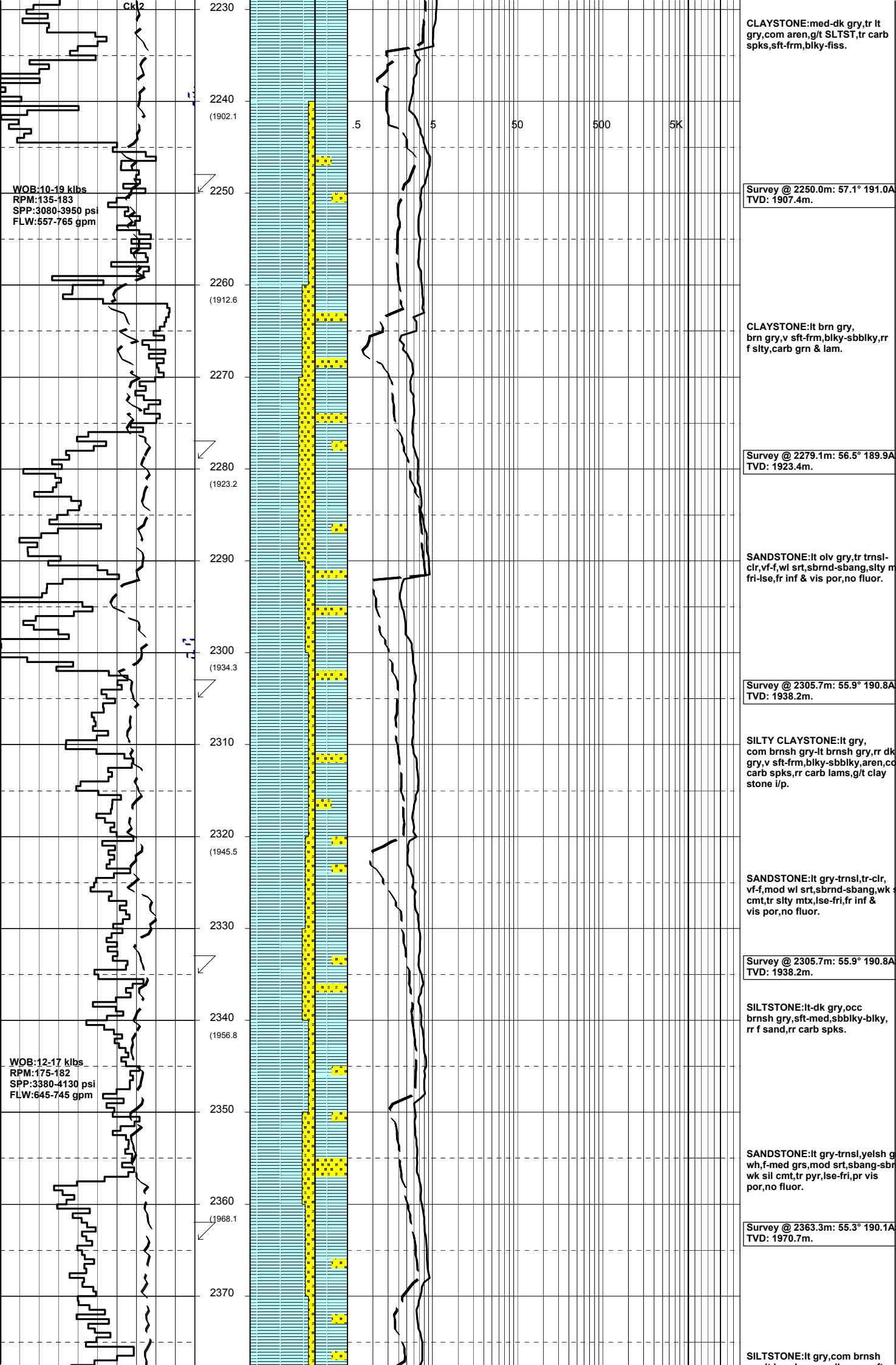
CLAYSTONE: med-dk gry, tr lt gry, com aren, slty i/p, g/t SLTST, frm-sft, blkly-fiss.

Survey @ 2221.1m: 59.3° 191.6A  
TVD: 1892.2m.

MW: 1.45 sg  
FV: 78  
PV: 42  
YP: 33  
Gel: 38/56/62  
6/3 rpm: 18/17  
WL: 3  
Sol: 19.3  
Sand: 0.25  
Ck: 2

WOB: 8.45 klbs  
RPM: 115-180  
SPP: 3000-3950 psi  
FLW: 660-758 gpm

MW: 1.44 sg  
FV: 78  
PV: 38  
YP: 25  
Gel: 29/47/52  
6/3 rpm: 13/12  
WL: 2.8  
Sol: 18.8  
Sand: 0.25



CLAYSTONE:med-dk gry,tr lt gry,com aren,g/t SLTST,tr carb spks,sft frm,blky-fiss.

Survey @ 2250.0m: 57.1° 191.0A  
TVD: 1907.4m.

CLAYSTONE:lt brn gry, brn gry,v sft frm,blky-sbbiky,rr f stly,carb grn & lam.

Survey @ 2279.1m: 56.5° 189.9A  
TVD: 1923.4m.

SANDSTONE:lt olv gry,tr trnsi-clr,vf-f,wl srt,sbrnd-sbang,sity m fri-lse,fr inf & vis por,no fluor.

Survey @ 2305.7m: 55.9° 190.8A  
TVD: 1938.2m.

SILTY CLAYSTONE:lt gry, com brnsh gry-lt brnsh gry,rr dk gry,v sft frm,blky-sbbiky,aren,cd carb spks,rr carb lams,g/t clay stone i/p.

SANDSTONE:lt gry-trnsi,tr-clr,vf-f,mod wl srt,sbrnd-sbang,wk cmt,tr slty mtx,lse-fri,fr inf & vis por,no fluor.

Survey @ 2305.7m: 55.9° 190.8A  
TVD: 1938.2m.

SILTSTONE:lt-dk gry,occ brnsh gry,sft-med,sbbiky-blky,rr f sand,rr carb spks.

SANDSTONE:lt gry-trnsi,yelsh g wh,f-med grs,mod srt,sbang-sbr wk sil cmt,tr pyr,lse-fri,pr vis por,no fluor.

Survey @ 2363.3m: 55.3° 190.1A  
TVD: 1970.7m.

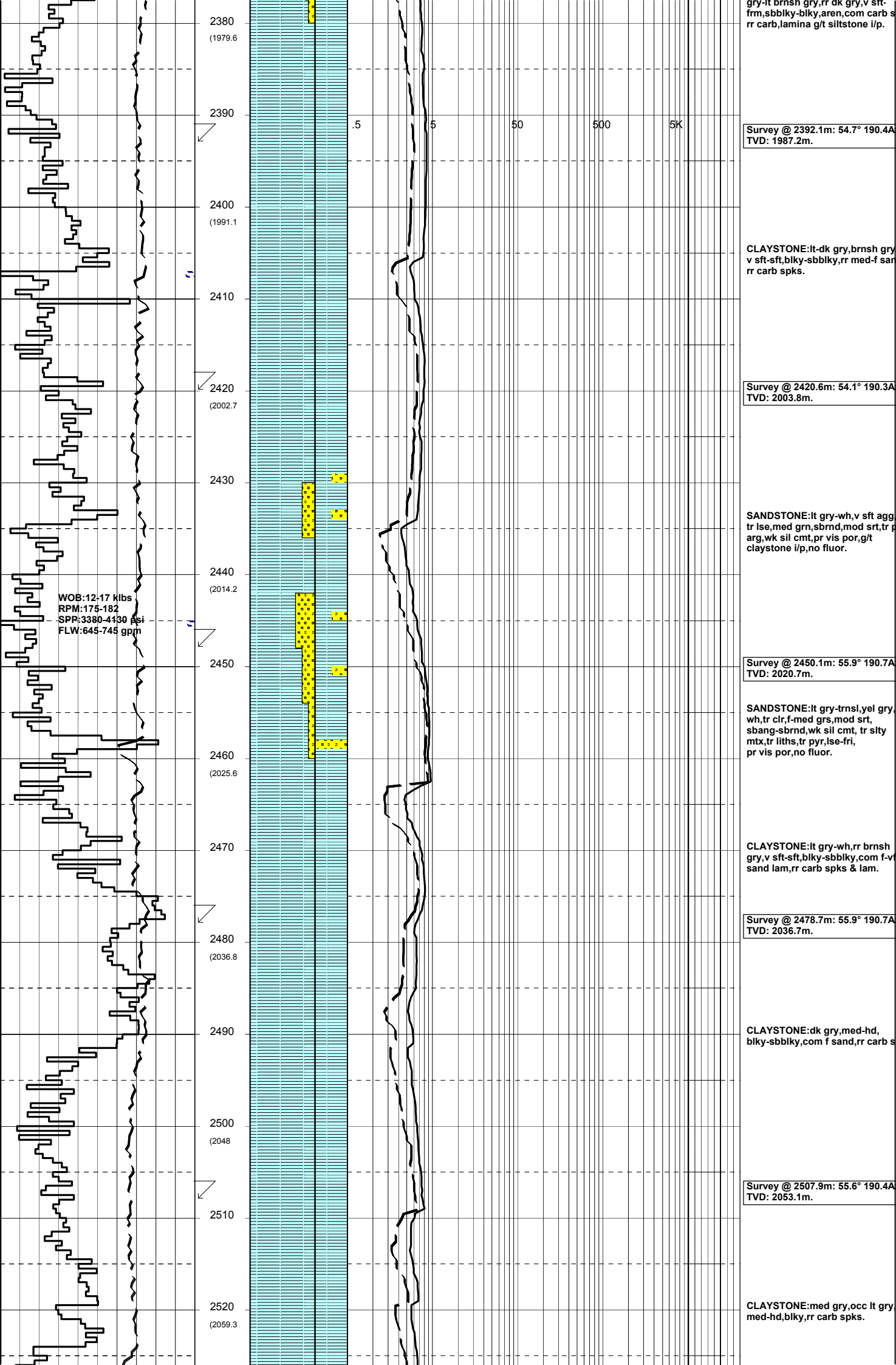
SILTSTONE:lt gry,com brnsh

WOB:10-19 klbs  
RPM:135-183  
SPP:3080-3950 psi  
FLW:557-765 gpm

WOB:12-17 klbs  
RPM:175-182  
SPP:3380-4130 psi  
FLW:645-745 gpm

SILTSTONE:lt gry,com brnsh





2380  
(1979.6)

2390  
(1991.1)

2400  
(1991.1)

2410  
(1991.1)

2420  
(2002.7)

2430  
(2002.7)

2440  
(2014.2)

2450  
(2014.2)

2460  
(2025.6)

2470  
(2025.6)

2480  
(2036.8)

2490  
(2036.8)

2500  
(2048)

2510  
(2048)

2520  
(2059.3)

.5 5 50 500 5K

Survey @ 2392.1m: 54.7° 190.4A  
TVD: 1987.2m.

CLAYSTONE:lt-dk gry,brnsh gry  
v sft-sft,blky-sbblky,rr med-f sand  
rr carb spks.

Survey @ 2420.6m: 54.1° 190.3A  
TVD: 2003.8m.

SANDSTONE:lt gry-wh,v sft agg  
tr lse,med gm,sbrnd,mod srt,rr  
arg,wk sil cmt,pr vis por,g/t  
claystone i/p,no fluor.

Survey @ 2450.1m: 55.9° 190.7A  
TVD: 2020.7m.

SANDSTONE:lt gry-trnsl,yel gry  
wh,tr clr,f-med grs,mod srt,  
sbang-sbrnd,wk sil cmt, tr slty  
mtx,tr liths,rr pyr,lse-fri,  
pr vis por,no fluor.

CLAYSTONE:lt gry-wh,rr brnsh  
gry,v sft-sft,blky-sbblky,com f-v  
sand lam,rr carb spks & lam.

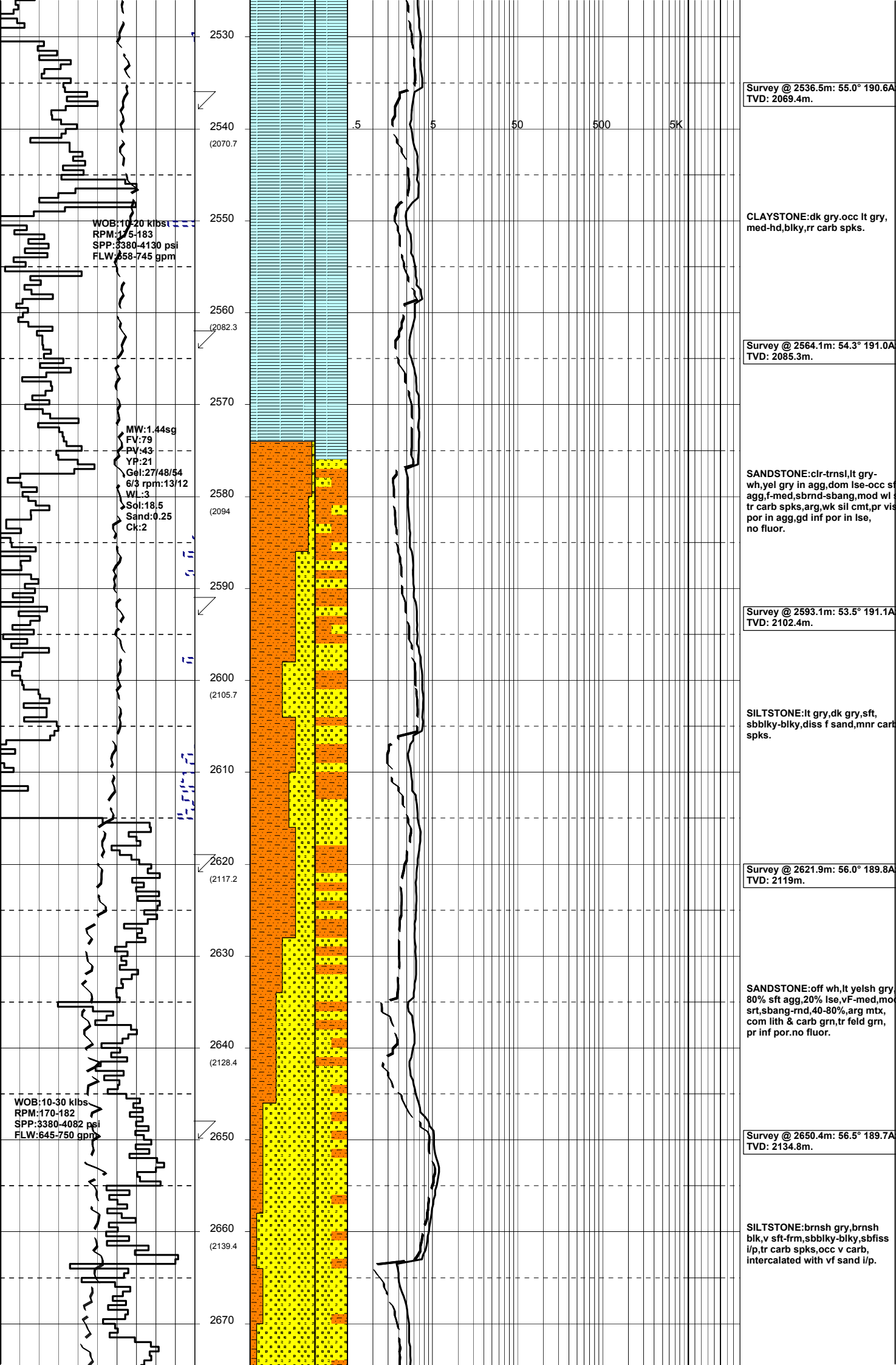
Survey @ 2478.7m: 55.9° 190.7A  
TVD: 2036.7m.

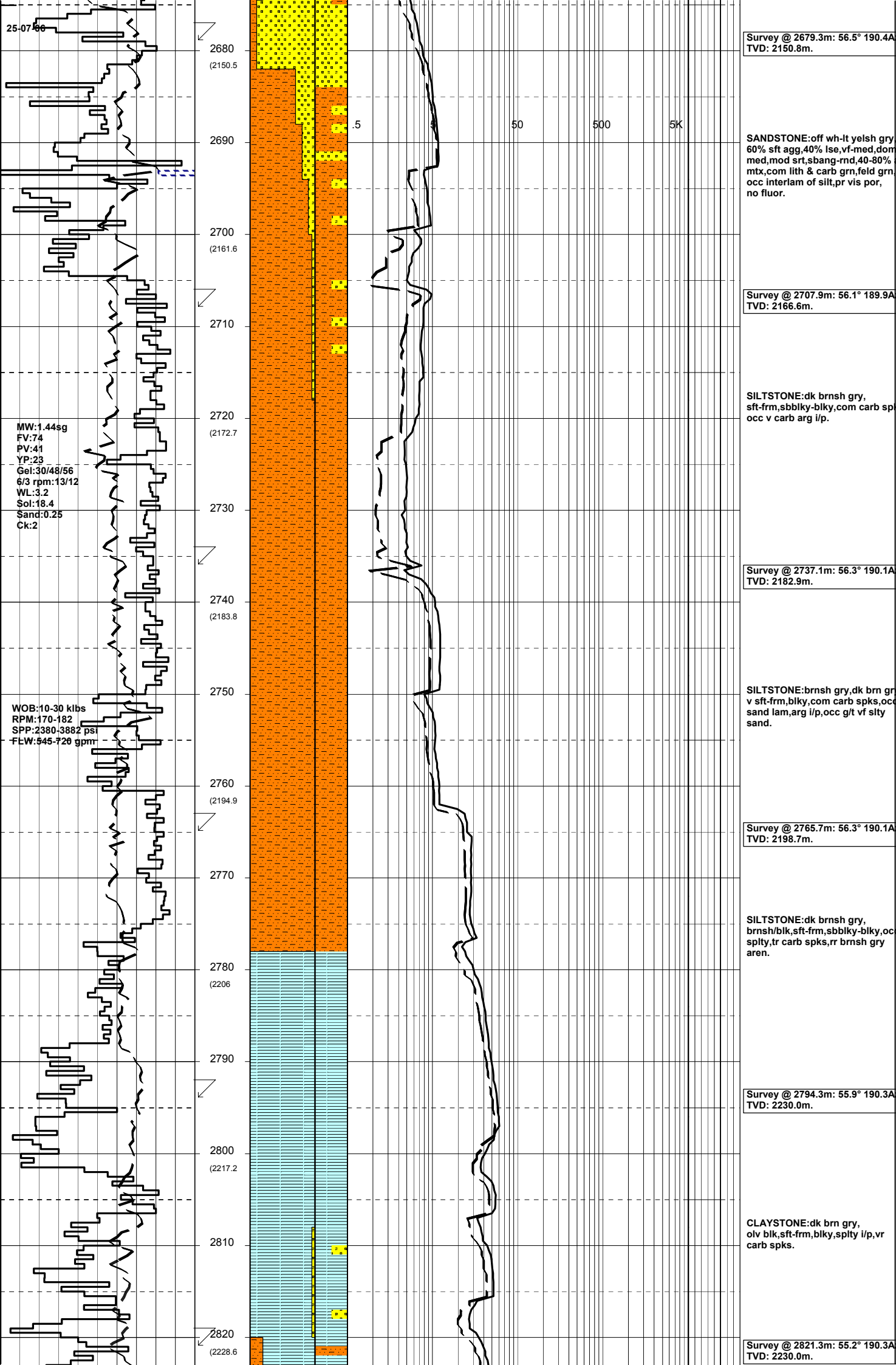
CLAYSTONE:dk gry,med-hd,  
blky-sbblky,com f sand,rr carb s

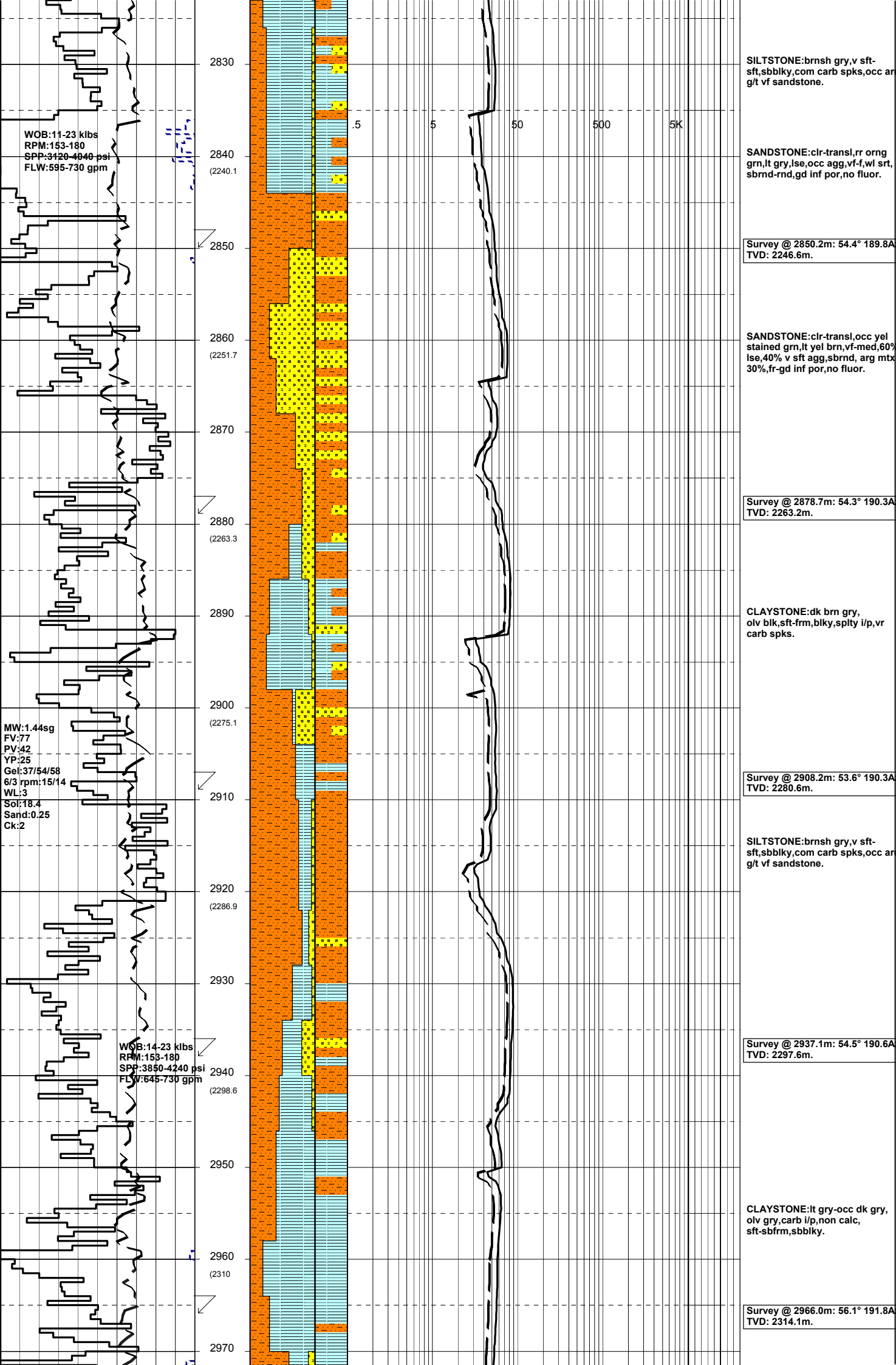
Survey @ 2507.9m: 55.6° 190.4A  
TVD: 2053.1m.

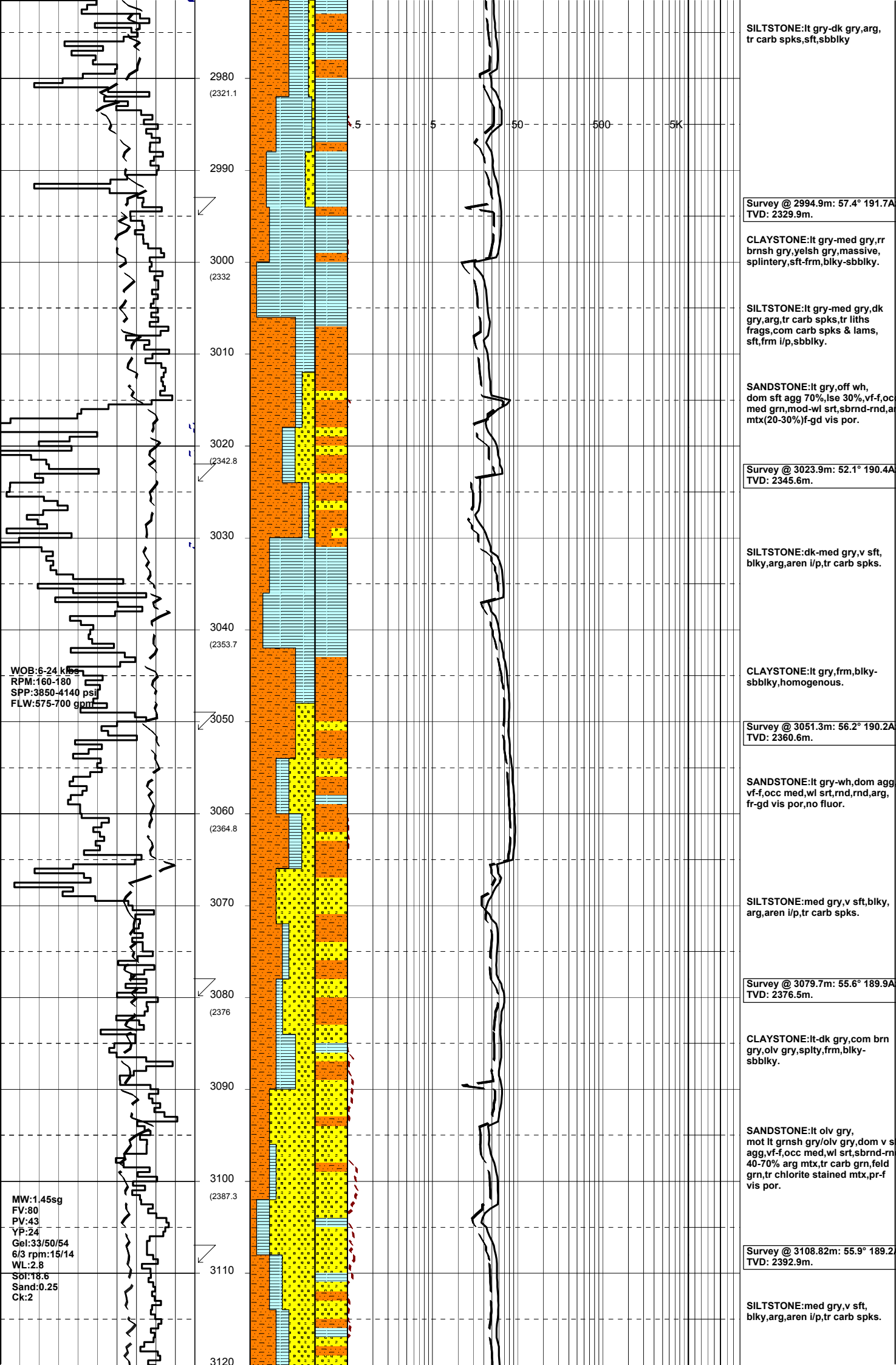
CLAYSTONE:med gry,occ lt gry  
med-hd,blky,rr carb spks.

WOB:12-17 klbs  
RPM:175-182  
SPP:3380-4130 psi  
FLW:645-745 gpm









SILTSTONE:lt gry-dk gry,arg, tr carb spks,sft,sbbiky

2980  
(2321.1)

5 5 50 500 5K

Survey @ 2994.9m: 57.4° 191.7A  
TVD: 2329.9m.

CLAYSTONE:lt gry-med gry,rr brnsh gry,yelsh gry,massive, splintery,sft frm,blky-sbbiky.

2990

3000  
(2332)

SILTSTONE:lt gry-med gry,dk gry,arg, tr carb spks, tr liths frags, com carb spks & lams, sft, frm i/p, sbbiky.

3010

SANDSTONE:lt gry, off wh, dom sft agg 70%, lse 30%, vf-f, occ med grn, mod-wl srt, sbrnd-rnd, a mtx(20-30%)f-gd vis por.

3020  
(2342.8)

Survey @ 3023.9m: 52.1° 190.4A  
TVD: 2345.6m.

SILTSTONE:dk-med gry,v sft, blky,arg,aren i/p, tr carb spks.

3030

3040  
(2353.7)

CLAYSTONE:lt gry, frm, blky-sbbiky, homogenous.

WOB:6-24 kPa  
RPM:160-180  
SPP:3850-4140 psi  
FLW:575-700 gpm

3050

Survey @ 3051.3m: 56.2° 190.2A  
TVD: 2360.6m.

SANDSTONE:lt gry-wh, dom agg vf-f, occ med, wl srt, rnd, rnd, arg, fr-gd vis por, no fluor.

3060  
(2364.8)

SILTSTONE:med gry,v sft, blky, arg,aren i/p, tr carb spks.

3070

3080  
(2376)

Survey @ 3079.7m: 55.6° 189.9A  
TVD: 2376.5m.

CLAYSTONE:lt-dk gry, com brn gry, olv gry, spity, frm, blky-sbbiky.

3090

SANDSTONE:lt olv gry, mot lt grnsh gry/olv gry, dom s agg, vf-f, occ med, wl srt, sbrnd-rnd 40-70% arg mtx, tr carb grn, feld grn, tr chlorite stained mtx, pr-f vis por.

3100  
(2387.3)

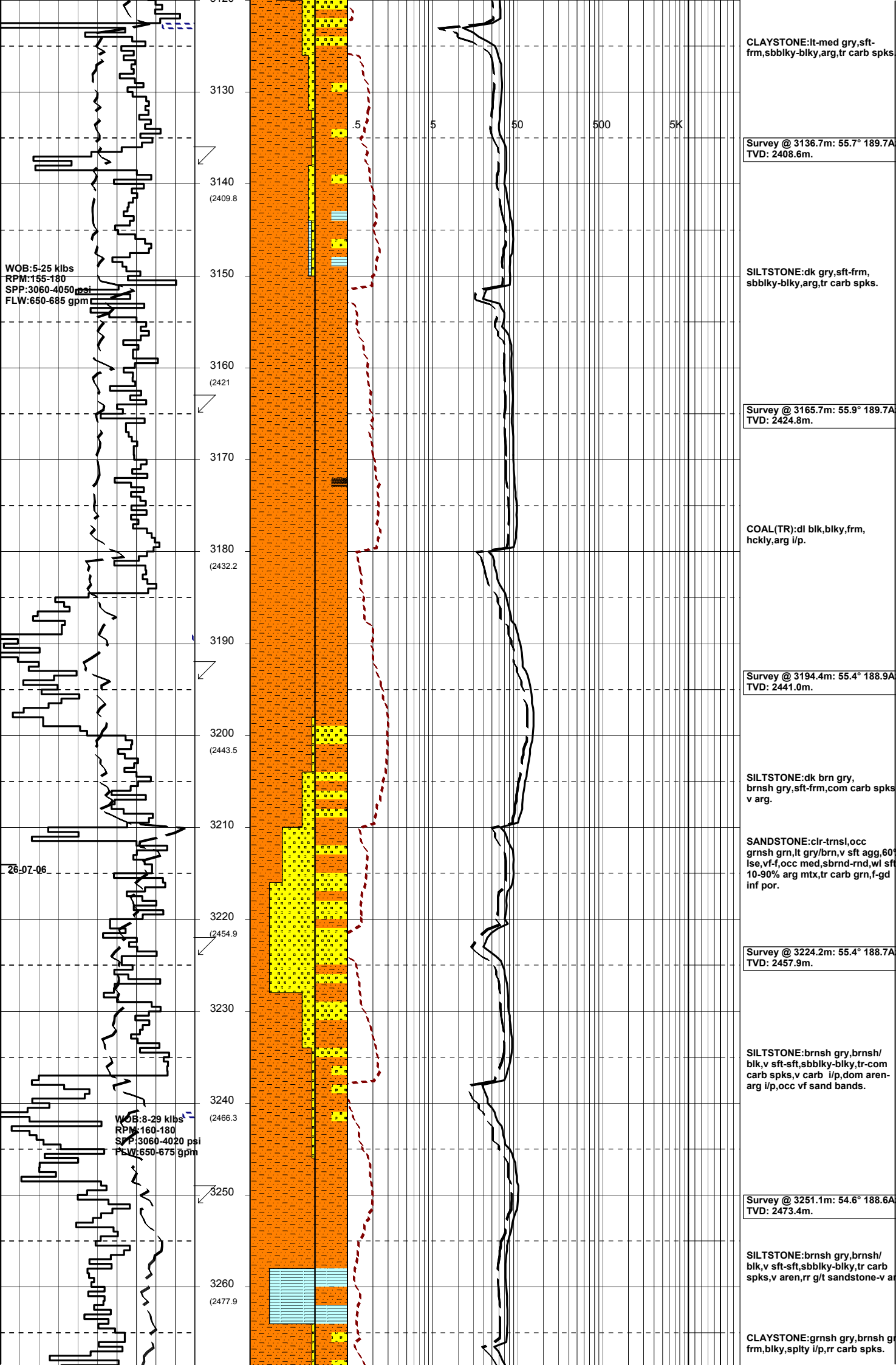
MW:1.45sg  
FV:80  
PV:43  
YP:24  
Gel:33/50/54  
6/3 rpm:15/14  
WL:2.8  
SOI:18.6  
Sand:0.25  
Ck:2

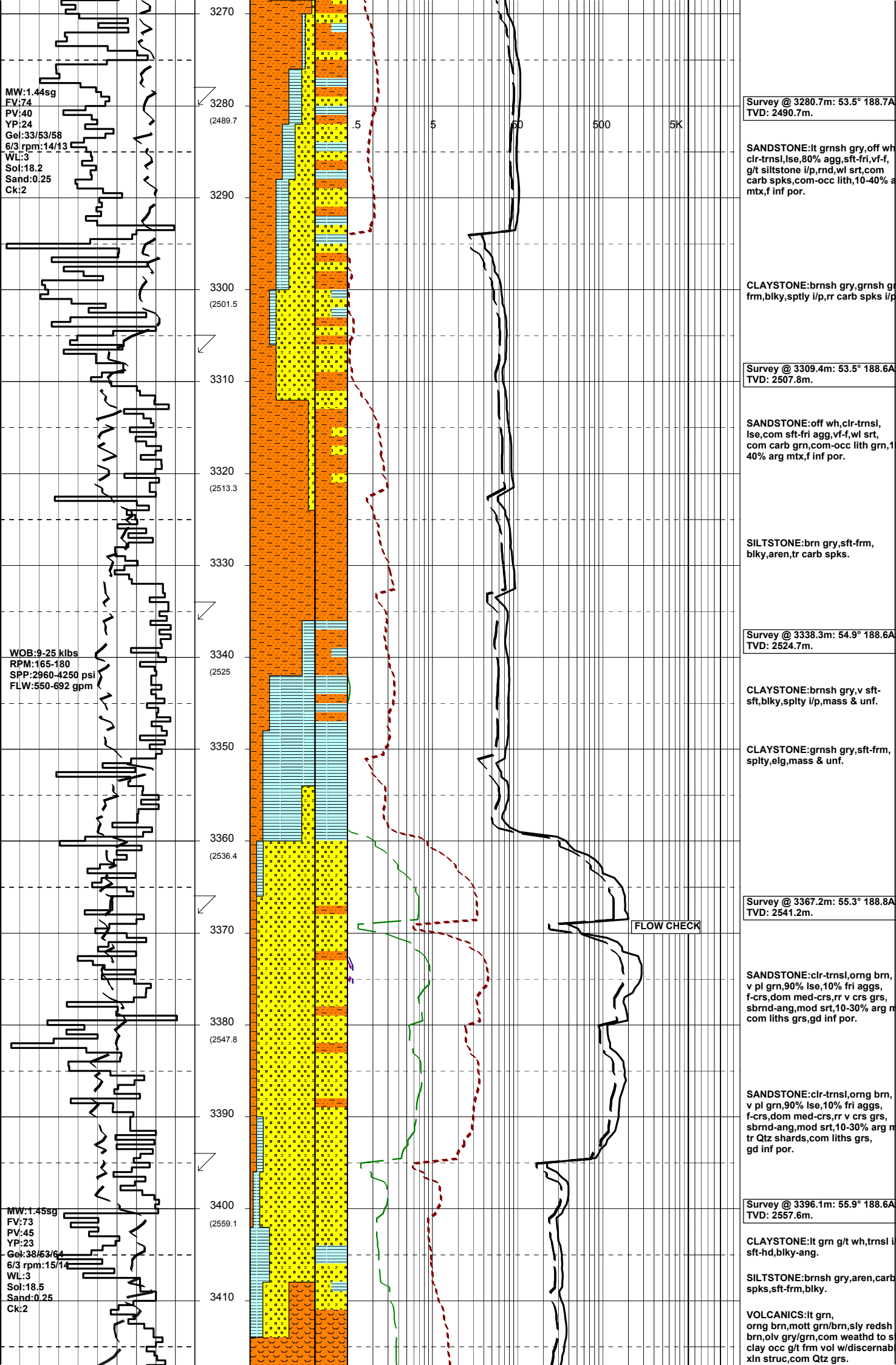
3110

Survey @ 3108.82m: 55.9° 189.2  
TVD: 2392.9m.

SILTSTONE:med gry,v sft, blky,arg,aren i/p, tr carb spks.

3120





MW:1.44sg  
 FV:74  
 PV:40  
 YP:24  
 Gel:33/53/58  
 6/3 rpm:14/13  
 WL:3  
 Sol:18.2  
 Sand:0.25  
 Ck:2

WOB:9-25 klbs  
 RPM:165-180  
 SPP:2960-4250 psi  
 FLW:550-692 gpm

MW:1.45sg  
 FV:73  
 PV:45  
 YP:23  
 Gel:38/63/64  
 6/3 rpm:15/14  
 WL:3  
 Sol:18.5  
 Sand:0.25  
 Ck:2

Survey @ 3280.7m: 53.5° 188.7A  
 TVD: 2490.7m.

SANDSTONE:lt grnsh gry,off wh  
 clr-trnsl,lse,80% agg,sft-fri,vf-f,  
 g/t siltstone i/p,rnd,wl srt,com  
 carb spks,com-occ lith,10-40% a  
 mtx,f inf por.

CLAYSTONE:brnsh gry,grnsh g  
 frm,blky,spty i/p,rr carb spks i/p

Survey @ 3309.4m: 53.5° 188.6A  
 TVD: 2507.8m.

SANDSTONE:off wh,clr-trnsl,  
 lse,com sft-fri agg,vf-f,wl srt,  
 com carb grn,com-occ lith grn,1  
 40% arg mtx,f inf por.

SILTSTONE:brn gry,sft-frm,  
 blky,aren,tr carb spks.

Survey @ 3338.3m: 54.9° 188.6A  
 TVD: 2524.7m.

CLAYSTONE:brnsh gry,v sft-  
 sft,blky,spty i/p,mass & unf.

CLAYSTONE:grnsh gry,sft-frm,  
 spty,elg,mass & unf.

Survey @ 3367.2m: 55.3° 188.8A  
 TVD: 2541.2m.

FLOW CHECK

SANDSTONE:clr-trnsl,orgn brn,  
 v pl grn,90% lse,10% fri aggs,  
 f-crs,dom med-crs,rr v crs grs,  
 sbrnd-ang,mod srt,10-30% arg m  
 com liths grs,gd inf por.

SANDSTONE:clr-trnsl,orgn brn,  
 v pl grn,90% lse,10% fri aggs,  
 f-crs,dom med-crs,rr v crs grs,  
 sbrnd-ang,mod srt,10-30% arg m  
 tr Qtz shards,com liths grs,  
 gd inf por.

Survey @ 3396.1m: 55.9° 188.6A  
 TVD: 2557.6m.

CLAYSTONE:lt grn g/t wh,tnsl i  
 sft-hd,blky-ang.

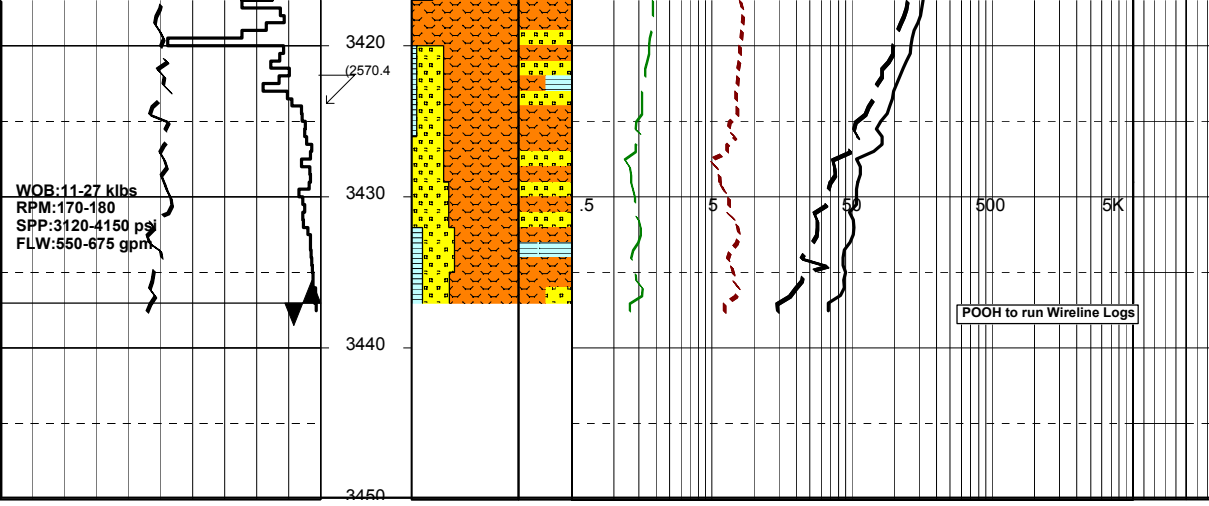
SILTSTONE:brnsh gry,aren,carb  
 spks,sft-frm,blky.

VOLCANICS:lt grn,  
 orgn brn,mott grn/brn,sly redsh  
 brn,olv gry/grn,com weathd to s  
 clay occ g/t frm vol w/discernab  
 xln struc,com Qtz grs.

Survey @ 3423.7m: 55.6° 188.4A  
TVD: 2573.1m.

**VOLCANICS:** grn, mot grn, grn spkid blk, brn, com weathered clay with no discernable crystal structure, un-weathered sample hd, micrxin or vf-f xin & com qtz, wh feld com weathered-clay & tr blk mafic minerals, v rr they disp an indistinct flow structure, secondary clay become more co with weathering & the mafic

component disappears, qtz shards & orgn brn chalcedony shards present.



WOB: 11-27 klbs  
RPM: 170-180  
SPP: 3120-4150 psi  
FLW: 550-675 gpm

POOH to run Wireline Logs