

FORMATION EVALUATION LOG

WELL : MACLEAN 1

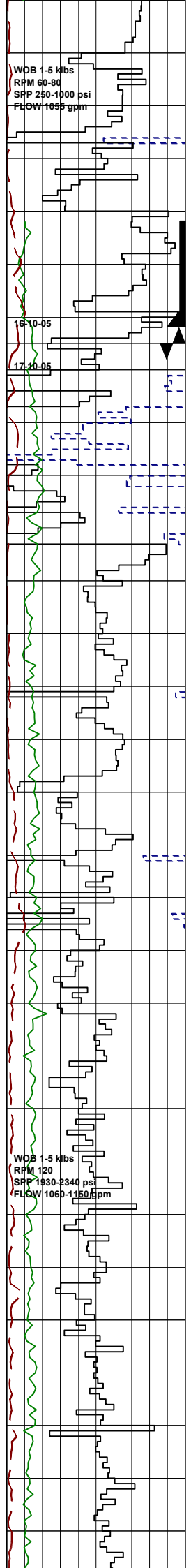


FROM (m): 50 TO (m): 770 SCALE: 1/ 500

Country : AUSTRALIA	Latitude : 38°02'46.32"S	508mm Shoe at (mMDRT) : 110.9m	Spud Date : 16-10-2005
Region : VICTORIA	Longitude : 148°32'52.92"E	340mm Shoe at (mMDRT) : 350.0m	Total Depth Date : XX-10-2005
Field : GIPPSLAND BASIN	X (m) : 620,701.1 mE		Total Depth (mRT) : XXXm
Permit : VIC/P-47	Y (m) : 5,798,512.1 mN		T.V.D. (mSS MSL) : XXXXXm
Well Type : VERTICAL EXPLORATION	RT-MSL (m) : 21.5		Status : STATUS
Rig Name : OCEAN PATRIOT	RT-Seabed (m) : 78.5		

ABBREVIATIONS	LITHOLOGY LEGEND	ENGINEERING LEGEND
MW MUD WEIGHT NB NEW BIT FV FUNNEL VISCOSITY RR RERUN BIT PV PLASTIC VISCOSITY CB CORE BIT YP YIELD POINT WOB WEIGHT ON BIT FC FILTER CAKE RPM REVS PER MINUTE SOL SOLIDS FLC FLOW CHECK WL FILTRATE CR CIRCULATE RETURNS SD SAND - % PR POOR RETURNS S SALINITY - PPM NR NO RETURNS RM MUD RESISTIVITY BG BACKGROUND GAS RMF MUD FILTRATE TG TRIP GAS C CARBIDE TEST STG SHORT TRIP GAS LAT LOGGED AFTER TRIP CG CONNECTION GAS DS DEVIATION SURVEY SG SWAB GAS SVG SURVEY GAS	Limestone Med Sandstone Fine Sandstone Siltstone Claystone Calcarenite Calcsiltite Calclutite Anhydrite Coal Marl Dolomite Carb. Siltstone Calc Claystone Greensand Foraminifera Pyrite Glauconite Mica Ferrous Fossils Calcareous Dolomitic Chert	Deviation Survey Casing Shoe Wiper Trip SWC (rec) SWC (unrec) Core Bit Trip

MWD Gamma Ray (api)	DEPTH	CUTTINGS LITHOLOGY %	INTERPRETED LITHOLOGY	TOTAL GAS & RESISTIVITY	RESERVAL CHROMATOGRAPH	OIL FLUORESCENCE	LITHOLOGICAL DESCRIPTIONS AND REMARKS
0 100 200	MD (m)			Resistivity (Deep) Ohm.m .1 1 10 100 1K	Methane % Ethane % Propane % ISO-Butane % N-Butane % ISO-Pentane % N-Pentane %	CALC (%) DOLO (%)	
WOB (Klbs) 0 30 60	TVD(m)			Resistivity (Shallow) Ohm.m .1 1 10 100 1K			
ROP Backup (m/h) 400 300 200				Total Gas (%) .01 .1 1 10 100			
ROP (m/h) 200 100 0							
	50						
	60						
	70						
	80						



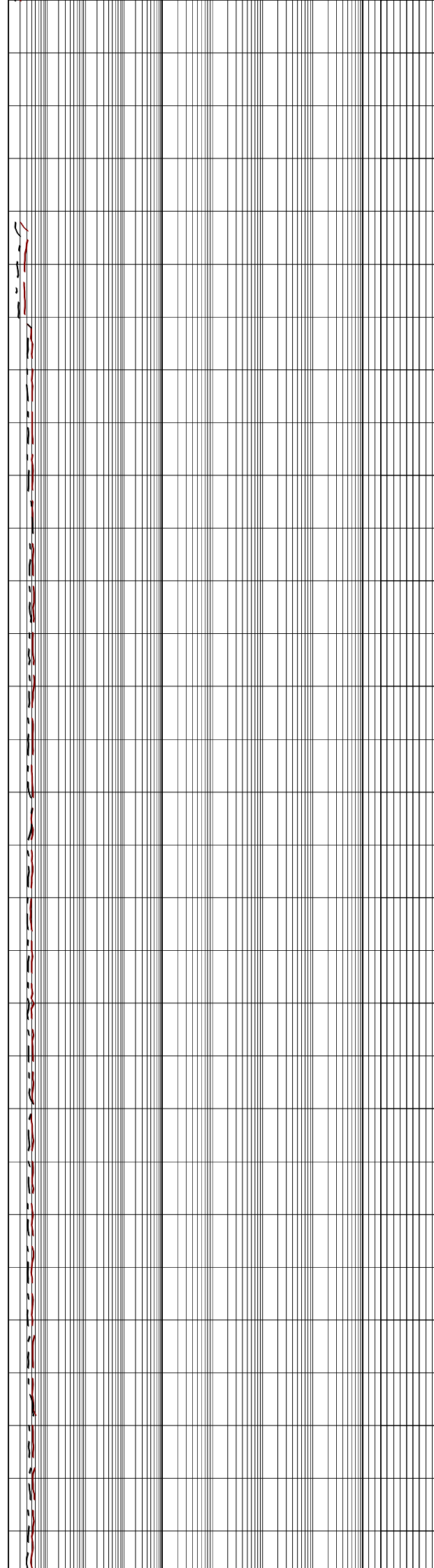
WOB 1-5 klbs
RPM 60-80
SPP 250-1000 psi
FLOW 1055 gpm

16-10-05

17-10-05

WOB 1-5 klbs
RPM 120
SPP 1930-2340 psi
FLOW 1060-1150 gpm

80
90
100
100.03
110
120
130
140
150
150.01
160
170
180
190
200
200
210
220



@ 03:30 HRS ON 16-10-2005

BIT #1: Reed Y11C
SIZE:660mm + 914mm H.O
JETS:3x24
IN: 78.5m OUT:112m
RUN:33.5m HRS:0.8
COND:0-0-NO-A-O-I-NO-TD.

DRILL WITH SEA WATER
RETURNS TO SEABED

508mm (20") Casing Shoe
set @ 110.9 mMDRT

BIT #2: Reed T11
SIZE:444mm
JETS:3x22,1x16
IN:112m OUT:355m
RUN:243m HRS:4.2
COND:0-0-NO-A-O-I-NO-TD.

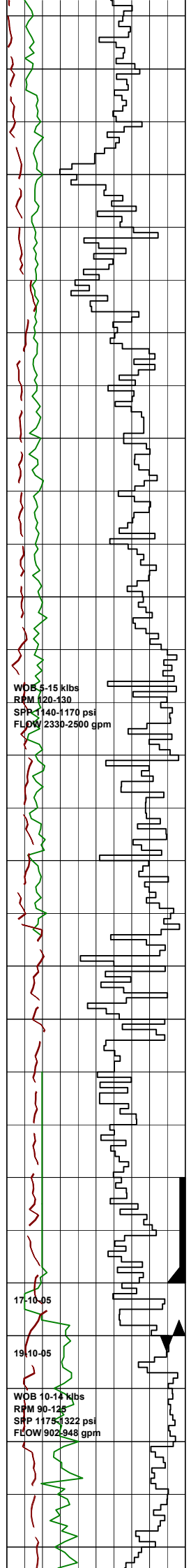
Survey @ 129.21m: 1.28°,306.65Az

Survey @ 156.69m: 1.22°,294.94Az

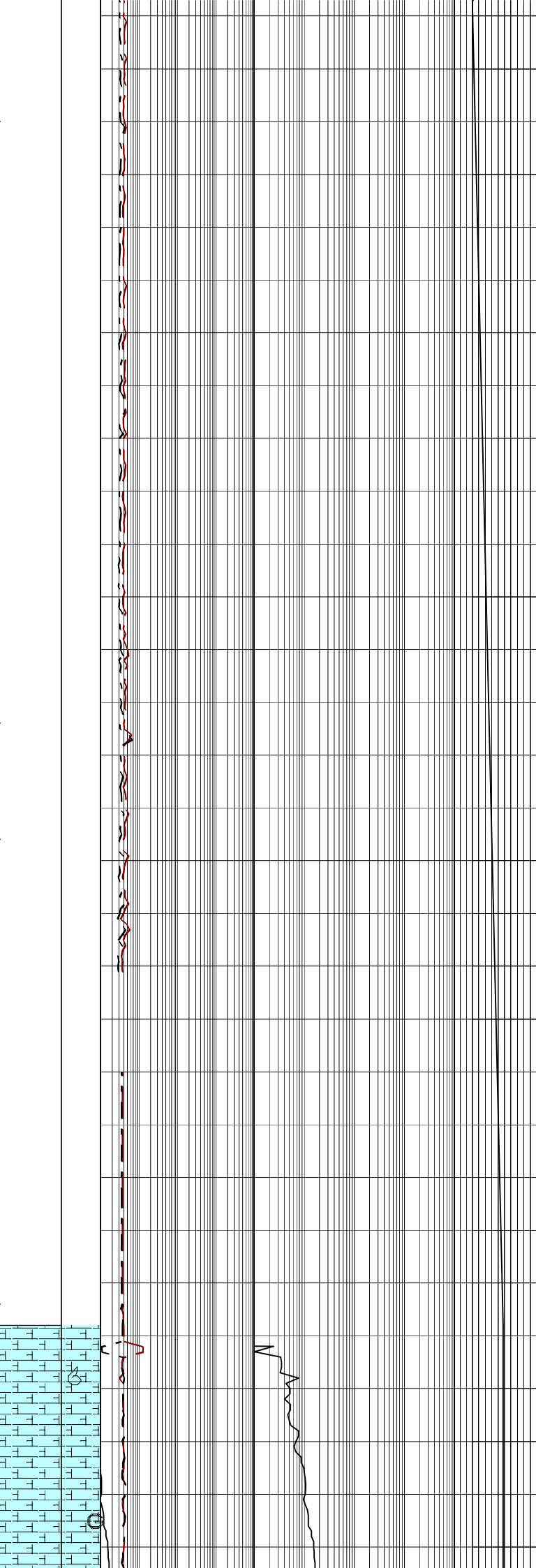
Survey @ 185.04m: 1.06°,302.99Az

DRILL WITH SEA WATER
RETURNS TO SEABED

Survey @ 213.59m: 1.11°,298.82Az



230
240
250
250.04
260
270
280
290
300
300
340
320
330
340
350
350.07
360
370



Survey @ 242.12m: 0.77°,292.08Az

Survey @ 299.14m: 0.74°,296.01Az

Survey @ 310.49m: 0.70°,293.91Az

DRILL WITH SEA WATER
RETURNS TO SEABED

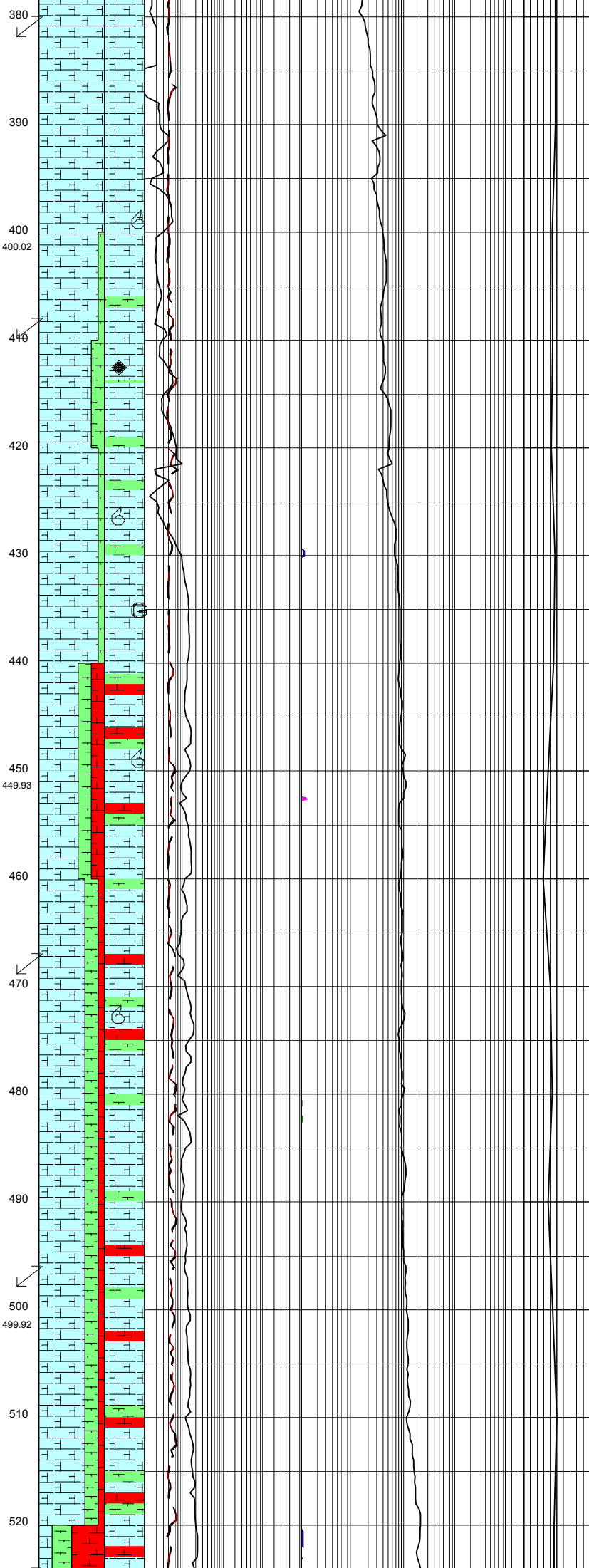
340mm (13.375") Casing Shoe
set @ 350 mMDRT

Survey @ 353.42m: 0.56°,292.19Az

BIT #3:Reed EHP41HKPR
SIZE:311mm
JETS:1x28.2x24
IN:355m OUT: m
RUN:m HRS:
COND:

FIT @ 358 m: EMW= 1.66sg (13.8ppg)

CALCILUTITE:v lt-med lt gry,sft,
amorph,arg i/p,tr shell frags.



Survey @ 382.03m: 0.36°,299.13Az

CALCILUTITE:v lt-med lt gry,sft, amorph,arg i/p,tr-occ shell frags.

Survey @ 410.88m: 0.47°,307.1Az

MARL:med dk gry,v sft,disp,amorph, arg mtx g/t ARG CALCILUTITE,tr CALCISILT,tr vf dk grn dissem glauc,tr foss frags.

CALCAREOUS CLAYSTONE:med dk-dk gry, sft,amorph,disp,com calc mtx g/t MARL, tr vf dk grn dissem glauc,tr foss frags,tr f pyr & crs nod pyr.

Survey @ 468.63m: 0.51°,324.3Az

ARGILLACEOUS CALCILUTITE:med gry-med dk gry,v sft,amorph,disp,com arg mtx g/t CALCILUTITE,tr glauc, tr f pyr & crs nod pyr.

Survey @ 497.69m: 0.48°,307.6Az

CALCAREOUS CLAYSTONE:v lt-med lt gry, v sft,amorph,disp,30% arg mtx g/t CLCLUT,tr vf dk gn glauc grns,tr f dk gn dissem & nod glauc,tr f pyr & crs nod pyr.

WOB 19 kibs
RPM 130
SPP 124 ksi
FLOW 983 gpm

Survey @ 526.41m: 0.52°,316.1Az

MARL:lt med gy,v sft,disp,amorph, cly mtx g/t CALC CLYST,tr vf dk gn dissem and crs nod pyr,tr f pyr.

Survey @ 555.05m: 0.28°,329.6Az

CALCAREOUS CLAYSTONE:med gy-med dk gy, mnr dk grn/gy & brn/gy,sft,amorph, disp-sli frm,blk,calc mtx g/t MARL, tr CLCSILT,tr f dk gn dissem & crs nod glauc,tr foss frags & forams,tr f pyr & crs nod pyr.

CARBIDE LAG CHECK @ 566m: HOLE IS IN GAUGE

Survey @ 583.55m: 0.27°,340.51Az

588m-651m: Gas data obtained using auxiliary degasser

SANDSTONE:med yell/bn,dk bn/gy,lt gy-bn/blk i/p,frm,fri-sft,lse,v hd i/p,vf-f, sbang-sbrnd,lith grns,mod wl srt, cly mtx,tr f and crs mod pyr i/p,pr inf por,no fluor.

Survey @ 611.79m: 0.20°,330.07Az

CLAYSTONE:med-dk yl/bn & gy/bn,mod red.bn & dsky yel/org,gn/gy i/p, sft-sli frm,amorph-blky,hd i/p,wl rnd f-crs glauc,g/t GLAUC CLYST i/p,tr nod pyr.

SANDSTONE:med yell/bn,dk bn/gy,lt gy-bn/blk i/p,frm-v hd,fri-sft,lse i/p,vf-f, sbang-sbrnd,lith grns,mod wl srt, cly mtx,tr f and crs mod pyr i/p,pr inf por,no fluor.

Survey @ 640.29m: 0.06°,295.87Az

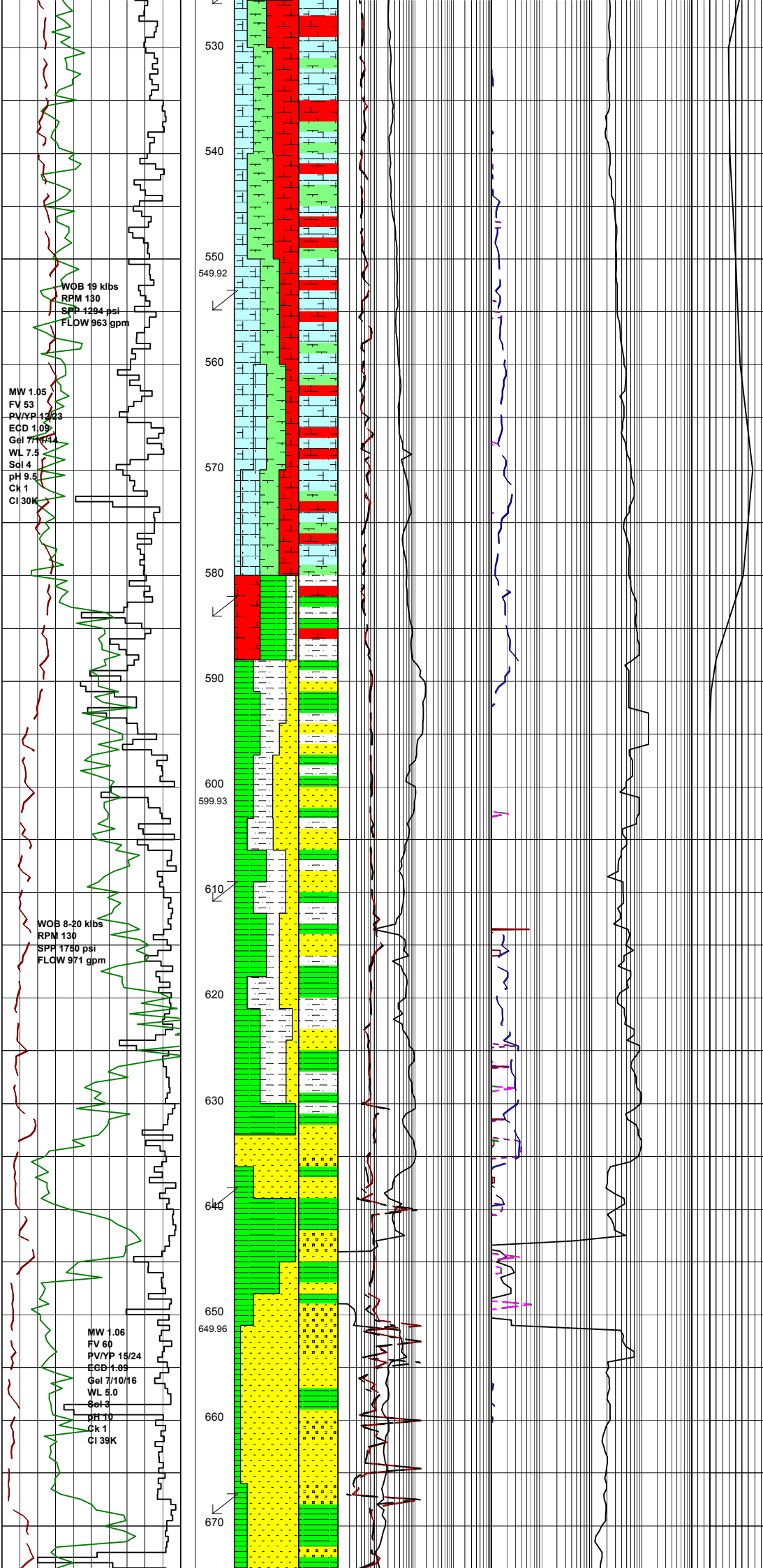
643m-651m: No gas data obtained due to blocked gas line.

COAL:(Tr) bn/blk,blk,sft-frm,brit fibr,vf-ig frags.

SANDSTONE:clr,frstd,trnsl,wh-lt gy, med dk gy,lse,crs-v crs.conglom,ang-wl rnd,pr srt,tr arg mtx,tr nod pyr & pyr cmt,tr lith,tr rnd carb frags,v gd inf por,no fluor.

Survey @ 669.26m: 0.22°,352.26Az

CLAYSTONE:wh-v lt gy,sft-disp,wash out 5-10% silt to vf snd in mtx.tr

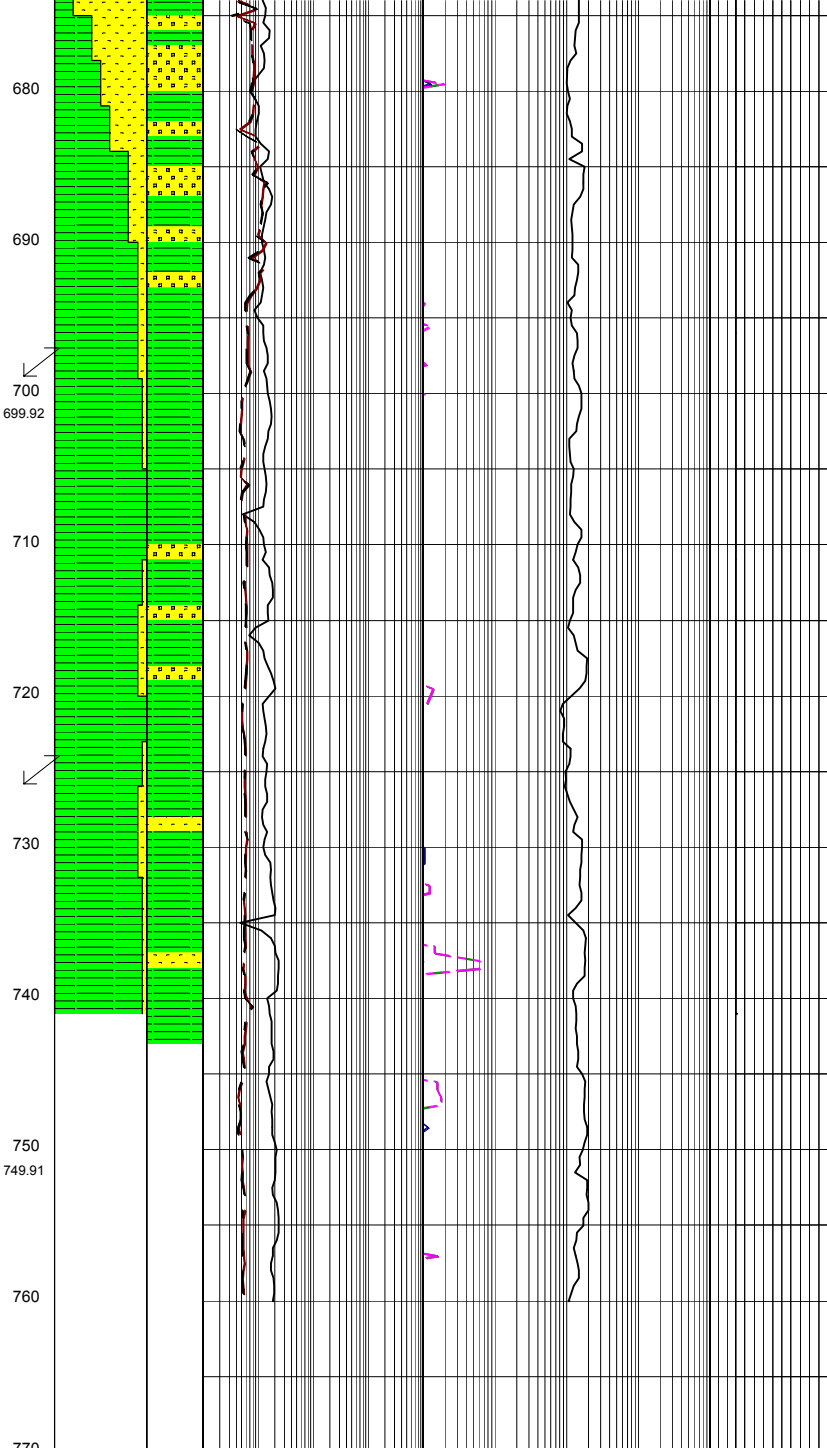
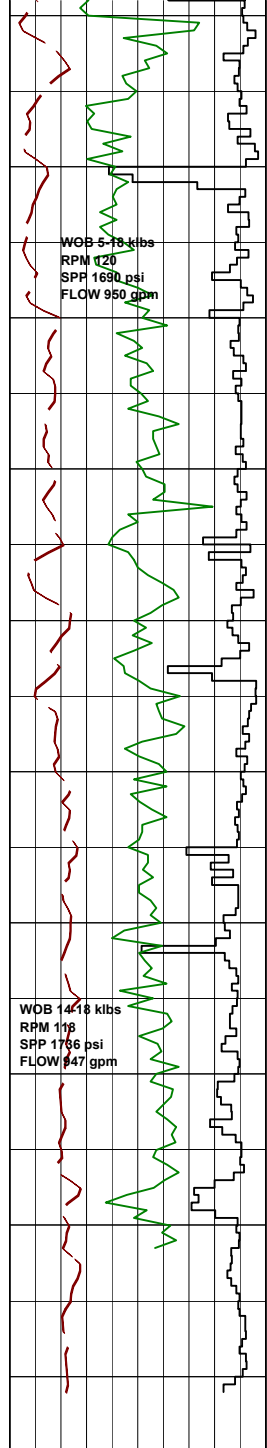


WOB 19 kibs
RPM 130
SPH 1294 psi
FLOW 963 gpm

MW 1.05
FV 53
PV/YP 12/14
ECD 1009
Gel 7/10/14
WL 7.5
Sol 4
pH 9.5
Ck 1
CI 30K

WOB 8-20 kibs
RPM 130
SPH 1750 psi
FLOW 971 gpm

MW 1.06
FV 60
PV/YP 15/24
ECD 109
Gel 7/10/16
WL 5.0
Sol 3
pH 10
Ck 1
CI 39K



vf carb grns.

SANDSTONE:clr,frstd,trnsl,wh-lt gy, med dk gy,lse,crs-v crs,gran,conglom ang-wl rnd,pr srt,tr arg mtx,tr nod pyr & pyr cmt,tr lith,tr rnd carb frags,v gd inf por,no fluor.

Survey @ 698.11m: 0.31°,59.85Az

CLAYSTONE:wh-v lt gy,sft-disp,wash out,5-10% silt to vf snd in mtx,tr vf carb grns.

SANDSTONE:clr,frstd,trnsl,wh-lt gy, med dk gy,lse,crs-v crs,gran,conglom ang-wl rnd,pr srt,tr arg mtx,tr nod pyr & pyr cmt,tr lith,tr rnd carb frags,v gd inf por,no fluor.

CLAYSTONE:v lt gy,sft,disp,mnr silt-vf sand disp in mtx,tr vf carb grns.

Survey @ 726.82m: 0.44°,78.01Az

SANDSTONE:clr,frstd,trnsl,wh-lt gy, med dk gy,lse,crs-v crs,gran,conglom ang-wl rnd,pr srt,tr arg mtx,tr nod pyr & pyr cmt,tr lith,gd inf por,no fluor.

CLAYSTONE:lt gy-bn.gy,sft,disp,mnr silt-vf sand disp in mtx,tr vf carb grns.

770

760

750
749.91

740

730

720

710

700
699.92

690

680