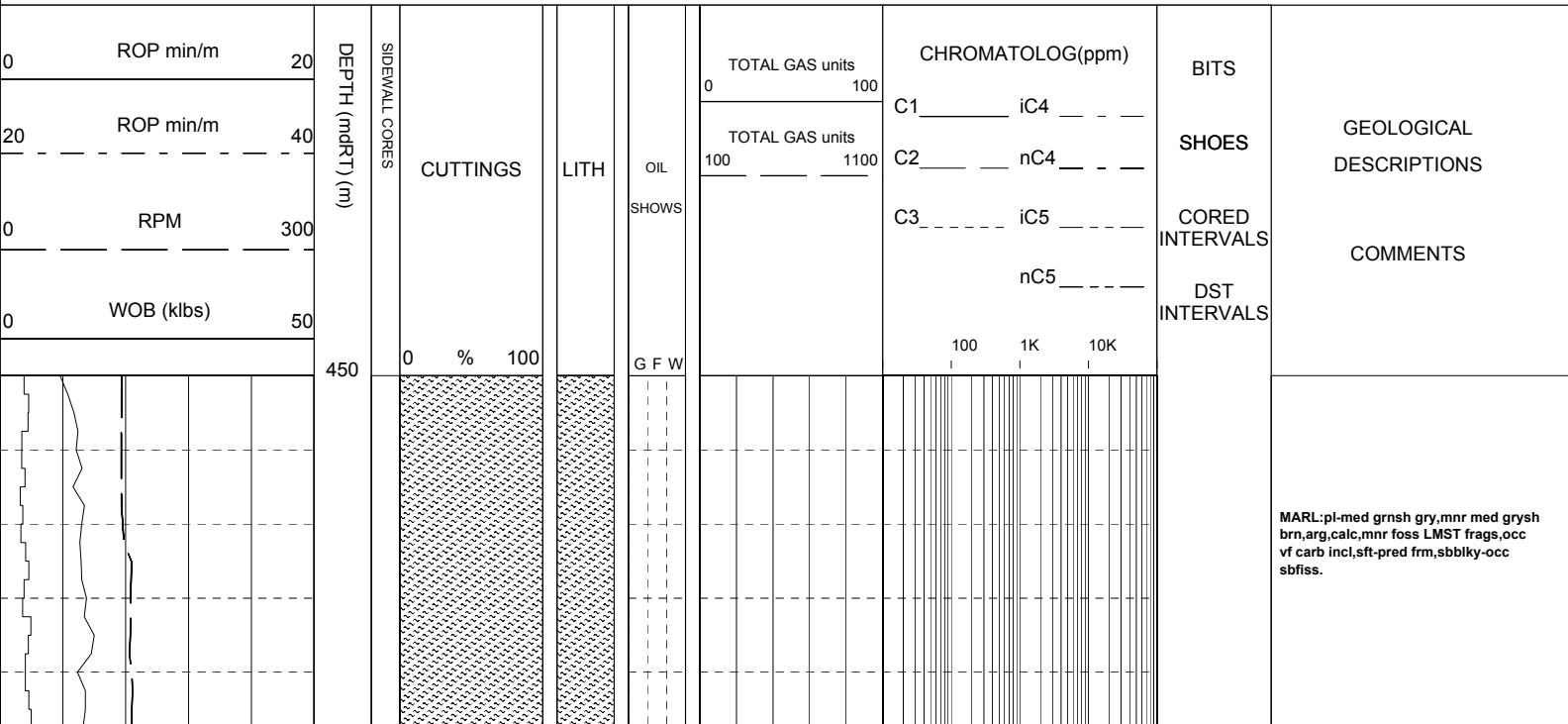


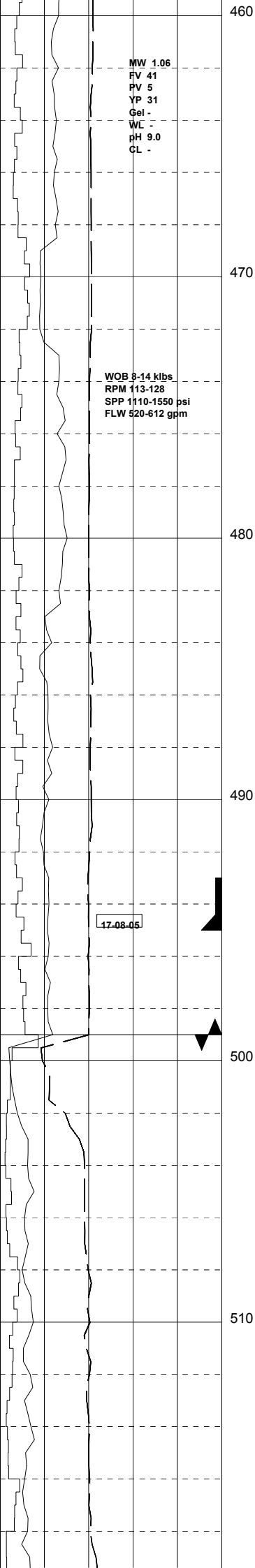
COMPANY	Origin Energy	SPUD DATE	16-08-05
RIG	Century 7	TD DATE	TD date
AREA	PEP 154	TD DRILLER	drlr TD
STATE/COUNTRY	Victoria, Australia	TD WIRELINE	
LOCATION	38ø35'12.30"S      142ø51'33.30"E	LOGGED FROM	SPUD
GROUND LVL	13.0m	LOGGED TO	
RT HEIGHT	5.3m	FINAL STATUS	status
DEPTH REF	ROTARY TABLE		

WELL CONFIGURATION				LOGGING ENGINEERS		SCALE 1/ 200
BIT SIZE	HOLE DEPTH (m)	CASING SIZE	CASING DEPTH (m)	Rory McLellan		
311mm	top hole dpth	245mm	top hl csg	Ben Morriss		
216mm	main hl dpth	178mm	main hl csg	W.S.G. John Hobday		

SYMBOLS		ABBREVIATIONS		MUD DATA	
NEW BIT RUN NEW CORE BIT RUN CASING SHOE LINER HANGER MUD LOSS / MUD GAIN Recovered SIDEWALL CORES Not Recovered	CORED INTERVAL DST INTERVAL	 NO SHOW WEAK SHOW FAIR SHOW GOOD SHOW	NB NEW BIT NCB NEW CORE BIT RRB RE-RUN BIT CS CASING SHOE SWC SIDE WALL CORE EL ELECTRIC LOG WOB WEIGHT ON BIT RPM REVOLUTIONS/MINUTE SPP STAND PIPE PRESSURE SPM STROKES/MINUTE CR CIRCULATED RETURNS PR POOR RETURNS NR NO RETURNS TG TRIP GAS CG CONNECTION GAS WTG WIPER TRIP GAS SG SWAB GAS	DS DIRECTIONAL SURVEY WT WIPER TRIP POOH PULL OUT OF HOLE RIH RUN IN HOLE AZI AZIMUTH INCL INCLINATION LCM LOST CIRCULATION MATERIAL DC DEPTH CORRECTION DST DRILL STEM TEST RMG REAMING ML MUD LOSSES FR FLOW RATE FC FLOW CHECK BR BIT RUN MMCFD Million Cubic Feet/Day U UNITS OF GAS FLUOR FLUORESCENCE	MW MUD WEIGHT      sg(kg/l) MG MUD GRADIENT    KPA/mt FV FLUID VISCOSITY    sec PV PLASTIC VISCOSITY    Cp YP YIELD POINT        lb/cf2 Gel GEL STRENGTH      lb/cf2 pH ACIDITY F FILTRATE              cm3/30 Ck CAKE THICKNESS    cm/32 S SALINITY              kg/m3 SD SAND CONTENT      % O OIL CONTENT         % WL WATER LOSS        cm3/30 Sol SOLIDS CONTENT    % Cl CHLORIDES KCl POTASSIUM CHLORIDE mg/l Ca CALCIUM CONTENT

CLAYSTONE	MEDIUM SST	LIMESTONE	GYPSUM	TUFF	FERRUGINOUS	CALCAREOUS	GLAUCONITE	MICROFOSSILS
SILTSTONE	FINE SANDSTONE	DOLOMITIC LIME	HALITE	VOLCANIC ROCK	FORAMINIFERA	DOLOMITIC	MICACEOUS	FOSSILS
CONGLOMERATE	VF SANDSTONE	DOLOMITE	CEMENT	IGNEOUS ROCK	BRYOZOA	CARBONACEOUS	PYRITE	LITHICS
COARSE SST	BRECCIA	COAL	CALCARENITITE	METAMORPHICS	FELDSPAR	CHERTY	BROKEN FOSSILS	SIDERITE





MW 1.06  
 FV 41  
 PV 5  
 YP 31  
 Gel -  
 WL -  
 pH 9.0  
 CL -

WOB 9-14 klbs  
 RPM 113-128  
 SPP 1110-1550 psi  
 FLW 520-612 gpm

17-08-05

NO GAS

CARBIDE LAG CHECK @ 472m  
 THEOR. STKS : 2990  
 ACTUAL STKS : 3296  
 OPEN HOLE O/G: 10%

MARL:pl-med grnsh gry,med grysh brn  
 i/p,calc,arg occ grd to aren,occ brnsh  
 orng foss frags,tr vf disse carb spks,  
 sft frm,sbbiky-sbfiss.

SURVEY @ 489m: 1.00°

MARL:lt-med gry,pl grnsh gry,rr lt  
 brn,dk gry,v calc,arg,com off wh foss  
 frags,occ orngsh brn liths,sft-pred  
 frm,sbbiky-sbfiss.

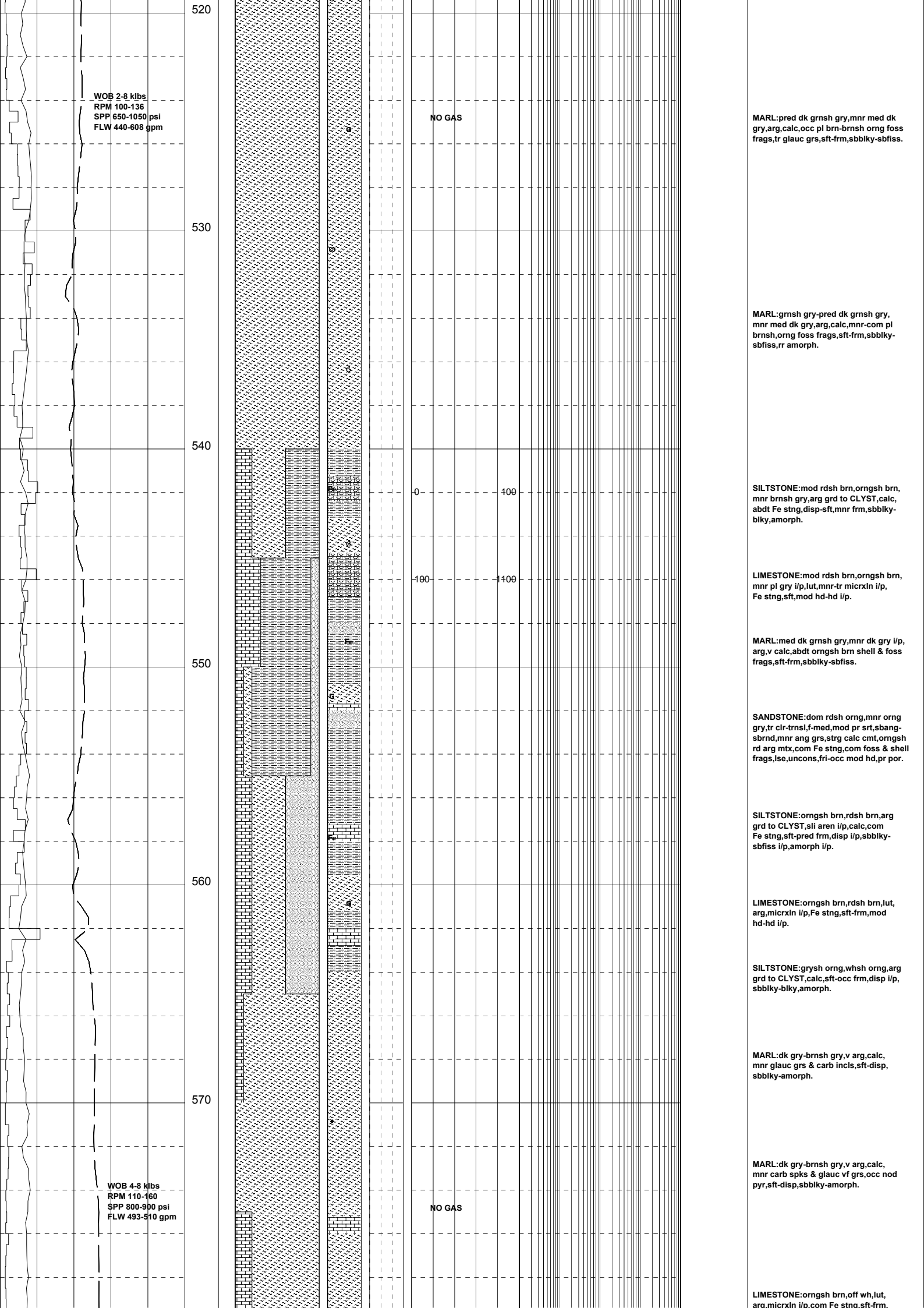
9 5/8" SURFACE CASING  
 SET @ 495m

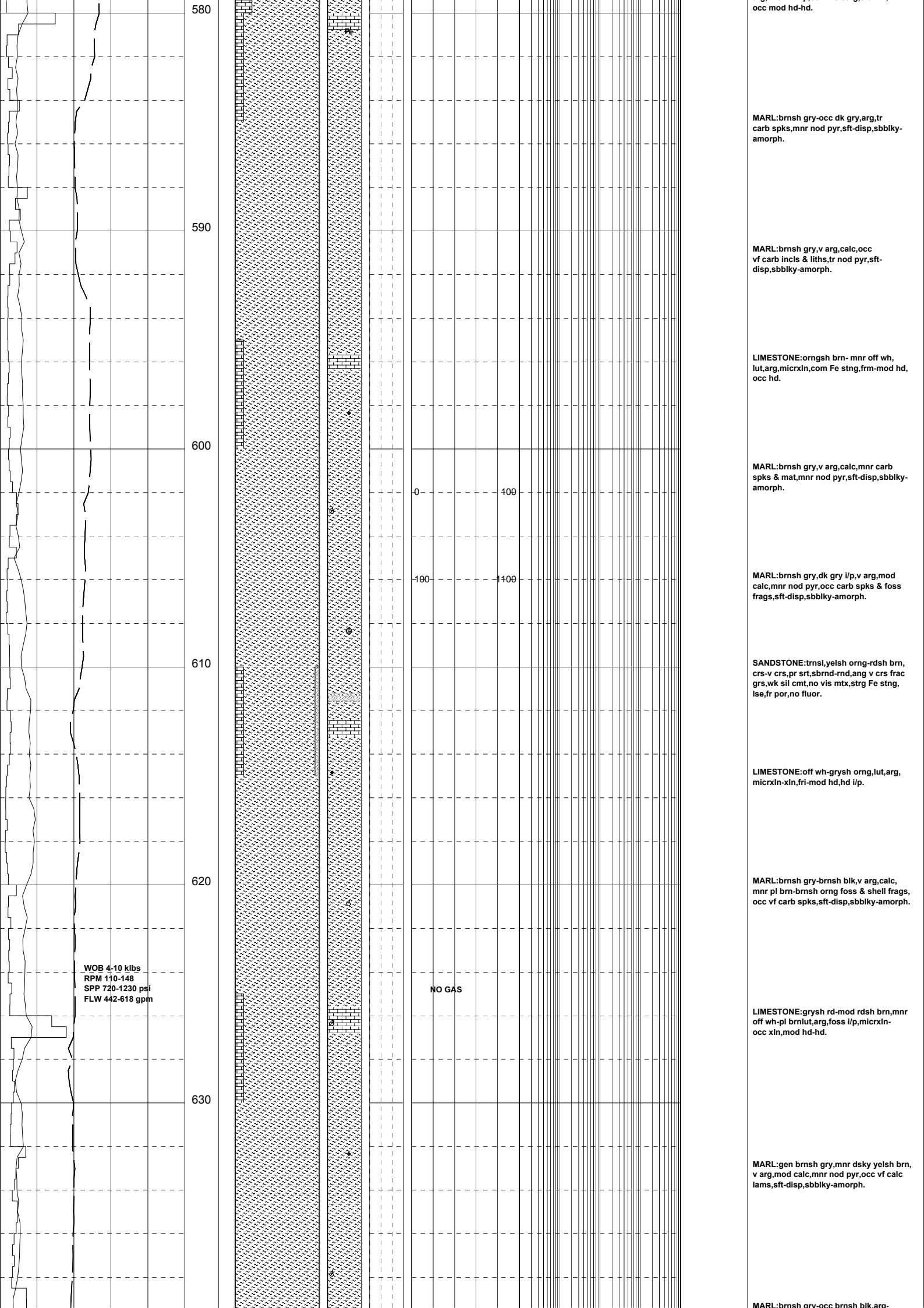
BIT 2 SMITH M90 PDC  
 SIZE: 209mm JETS: 7x12  
 IN: 499m OUT:  
 RUN: HRS:  
 COND:

FIT @ 502m: EMW= 16.8 ppg

MARL:med-dk grnsh gry,mnr pl gry,  
 arg,v calc,oc pl brn foss frags,sft frm,  
 sbbiky-sbfiss.

MARL:gen dk grnsh gry,arg,calc,mnr  
 foss LMST frags,sft frm,occ disp,sbbiky-  
 occ amorph.





occ mod hd-hd.

MARL:brnsh gry-occ dk gry,arg,tr carb spks,mnr nod pyr,sft-disp,sbbiky-amorph.

MARL:brnsh gry,v arg,calc,occ vf carb inclcs & liths,tr nod pyr,sft-disp,sbbiky-amorph.

LIMESTONE:ornsh brn- mnr off wh, lut,arg,micrxln,com Fe stng,frm-mod hd, occ hd.

MARL:brnsh gry,v arg,calc,mnr carb spks & mat,mnr nod pyr,sft-disp,sbbiky-amorph.

MARL:brnsh gry,dk gry i/p,v arg,mod calc,mnr nod pyr,occ carb spks & foss frags,sft-disp,sbbiky-amorph.

SANDSTONE:trnsi,yelsh orngr-dsh brn, crs-v crs,pr srt,sbrnd-md,ang v crs frac grs,wk sil cmt,no vis mtx,strg Fe stng, lse,fr por,no fluor.

LIMESTONE:off wh-grysh orngr,lut,arg, micrxln-xln,fr-mod hd,hd i/p.

MARL:brnsh gry-brnsh blk,v arg,calc, mnr pl brn-brnsh orngr foss & shell frags, occ vf carb spks,sft-disp,sbbiky-amorph.

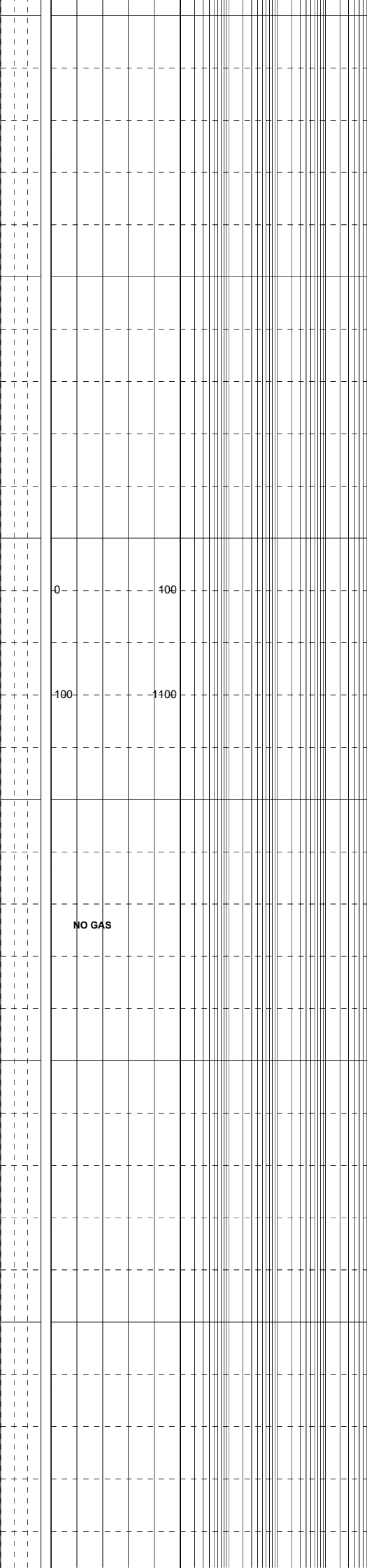
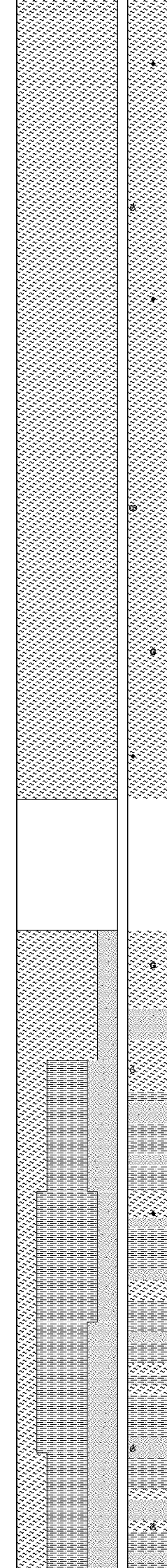
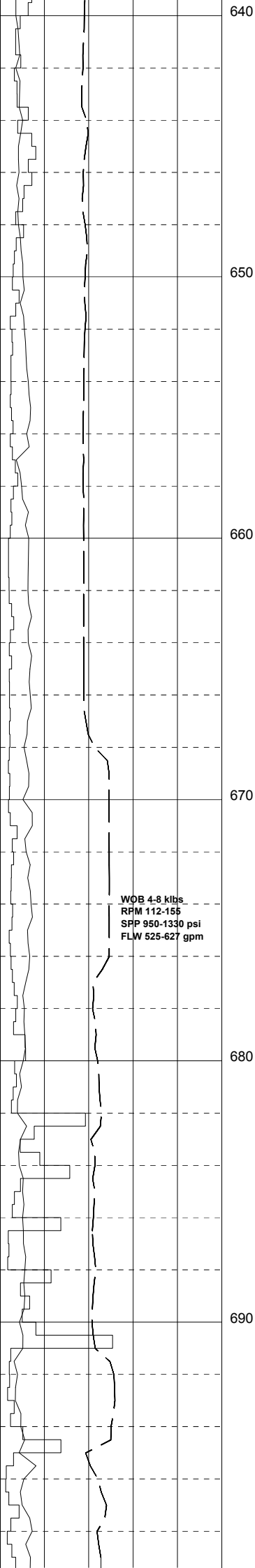
NO GAS

LIMESTONE:grysh rd-mod rdsh brn,mnr off wh-pl brnlut,arg,foss i/p,micrxln-occ xln,mod hd-hd.

MARL:gen brnsh gry,mnr dsky yelsh brn, v arg,mod calc,mnr nod pyr,occ vf calc lams,sft-disp,sbbiky-amorph.

MARL:brnsh gry-occ brnsh blk,arg-

WOB 4-10 klbs  
RPM 110-148  
SPP 720-1230 psi  
FLW 442-618 gpm



v arg,calc,mnr foss LMST frags,occ nod pyr,sft-frm,sbbiky-amorph.

MARL:pred brnsh gry,v arg,calc,mnr vf glauc grs,occ nod pyr,sft-disp,sbbiky-amorph.

MARL:pl brnsh gry-pred brnsh gry,v arg,calc,mnr nod & dissep pyr,occ carb spks & calc frags,sft-disp,sbbiky-amorph.

**SURVEY @ 657m: 2.0°**

MARL:brnsh gry-mnr brnsh blk,v arg,calc,mnr-loc com glauc grs,occ nod pyr & foss frags,sft-disp,sbbiky-amorph.

**SURVEY @ 666m: 2.0°**

MARL:off wh-brnsh gry,arg,calc,com glauc grs,mnr nod pyr,sft-disp,sbbiky-amorph.

**SAMPLE UNABLE TO BE COLLECTED FROM 670m-675m DUE TO MUD LOSSES OVER THE SHAKERS**

**NO GAS**

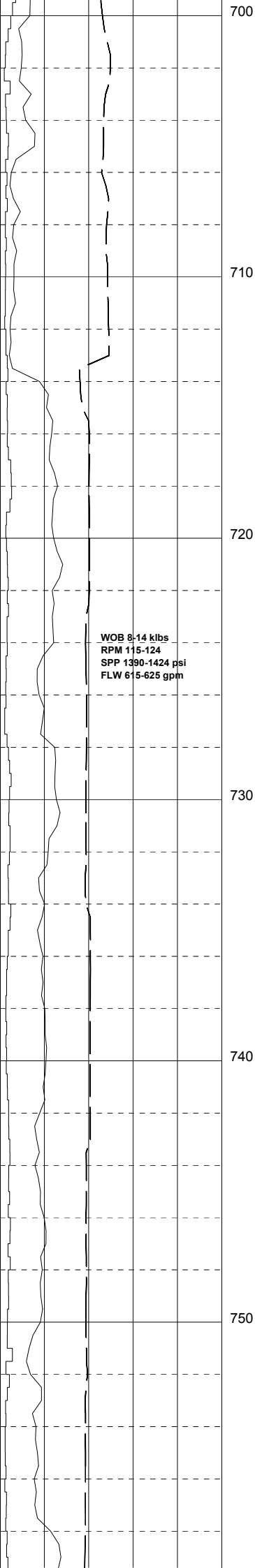
**SURVEY @ 676m: 2.0°**

SANDSTONE:trnsi-yel,mnr cl-frstd,crs-v crs,mod srt,grn sbrnd-rnd,occ sbang-ang,wk sil cmt,cln & uncons,gd inf por,no fluor.

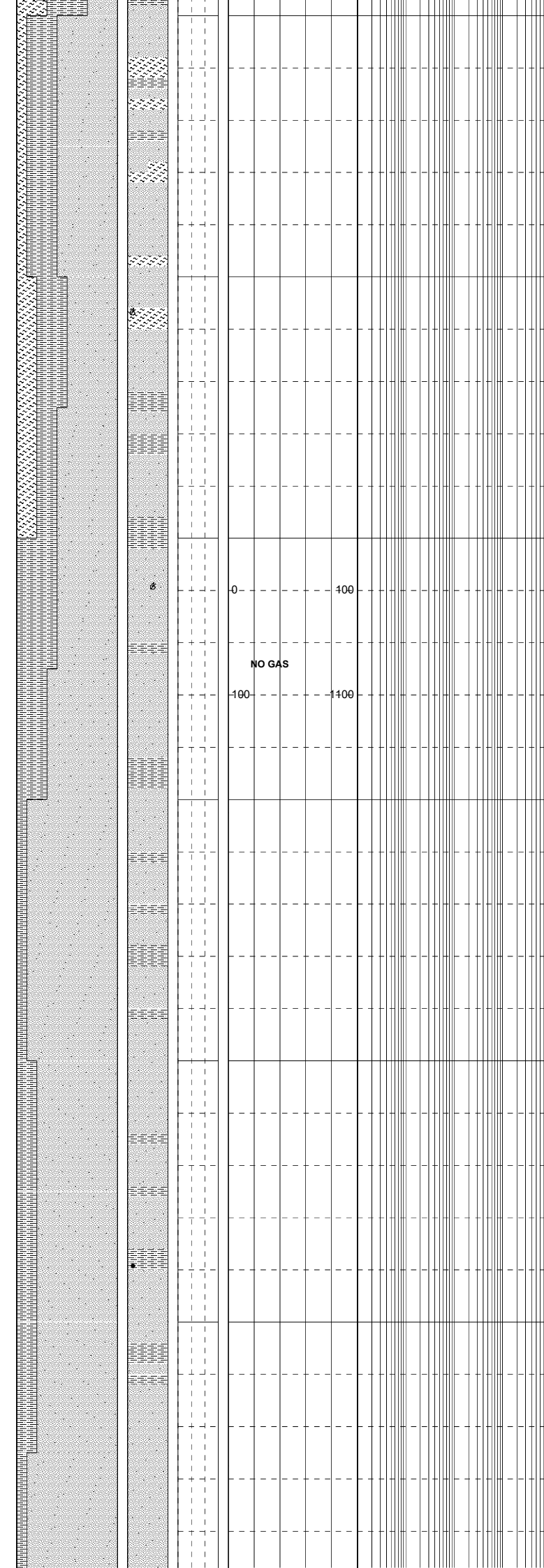
SILTSTONE:off wh-wh,v arg grd to CLYST,calc,v sft-disp,sbbiky-pred amorph.

MARL:brnsh gry,v agr,calc,mnr vf dissep carb spks,occ nod pyr,sft-disp,sbbiky-sbflss.

SANDSTONE:trnsi-lt brn,off wh,f-med,com crs,mod srt,sbang-sbrnd,com strg calc,loc wh-off wh arg mtx,com dk brn & liths,occ glauc,fr,pr vis por,no fluor.



WOB 8-14 klbs  
 RPM 115-124  
 SPP 1390-1424 psi  
 FLW 615-625 gpm



0 100  
 NO GAS  
 100 1400

SANDSTONE:trnsi-pl brn,mnr Fe stn,  
 f-v crs,dom crs,sbang-rnd,pr srt,  
 mod-loc strg calc cmt,tr brn arg  
 mtx,com liths,tr glauc,rr fri aggs,  
 dom lse grs,pr vis por,fr inf por,  
 no fluor.

SILTSTONE:it-med brn,dk brn i/p,  
 arg,calc,tr carb spks,grn liths,  
 sft-disp,sbbiky-amorph.

SURVEY @ 713m: 0.00°

MARLmed gry,blush gry,dk brn i/p,  
 arg,calc,occ foss mat,sft-frn,  
 disp i/p,sbbiky-sbfiss.

SILTSTONE:med-occ dk brn,grysh  
 brn i/p,arg,loc strg calc,occ  
 carb spks,tr foss frags,sft-  
 disp,occ frn,sbbiky-biky.

SANDSTONE:trnsi brn,opq brnsh yel,  
 frstd,mnr clr,f-v crs,pred crs-v crs,  
 sbrnd-sbang,com crs-v pr srt,dom  
 mnr ang frac v crs grs,crs rnd grs,  
 wk-loc modsil cmt,tr brn arg mtx,  
 loc com pyr nods,tr Fe stng,dom lse,  
 unconc,pr-loc fr por,no fluor.

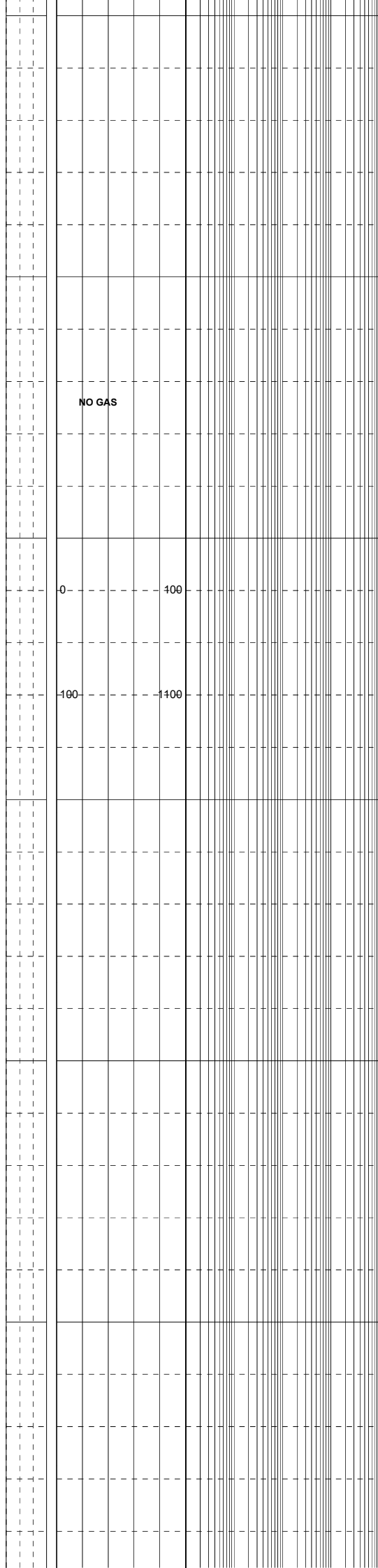
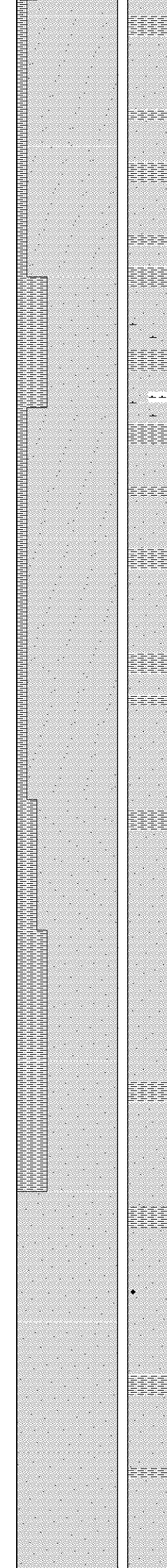
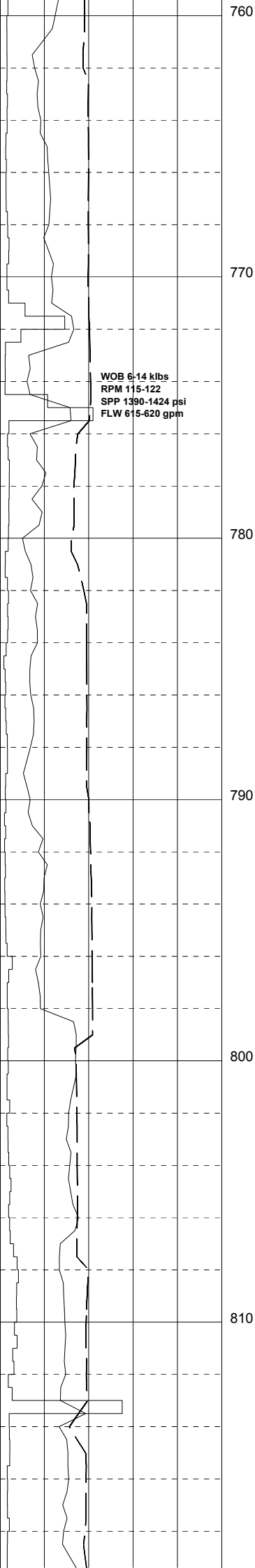
SILTSTONE:med-dom dk brn,grysh brn,  
 arg,aren i/p,loc strg strg calc cmt,  
 tr micmic,pred biky,sbbiky-sbfiss i/p.

SANDSTONE:trnsi-clr,opq pl brn,  
 frstd,mnr mlky,f-v crs,dom crs-  
 v crs,mod wl srt,sbang-sbrnd,com  
 rnd v crs grs,wk sil cmt,rr brn  
 arg mtx,loc com pyr nods,lse,mnr  
 unconc,fr por,no fluor.

SANDSTONE:trnsi-clr,opq,occ  
 pl brn-frstd,f-v crs,dom crs-  
 v crs,mod wl srt,sbang-sbrnd,occ  
 rnd,wk-mod calc cmt,occ v crs  
 grs w Fe stn,mnr-com mic flks,  
 tr dk brn, arg mtx,dom lse-  
 unconc,fr-gd inf por,no  
 fluor.

SILTSTONE:med-dk brn,grysh brn  
 i/p,arg,aren,occ nod pyr,tr  
 blk lith spks,sft-disp,loc frn,  
 sbbiky-amorph i/p.

SANDSTONE:trnsi-clr,opq,rr pl  
 brn,mlky,f-v crs,dom crs,pr srt,  
 sbang-sbrnd,wk calc cmt,mnr pl-  
 med brn arg mtx,com nod pyr,occ  
 Fe stn,rr mic,dom lse-unconc,occ  
 fri aggs,pr vis por,fr inf por,  
 fo fluor.



SILTSTONE:lt-med brn,occ dk brn, dom arg,mnr aren,occ micmic,carb spks,sft-disp,occ frm,sbbkly, amorph i/p.

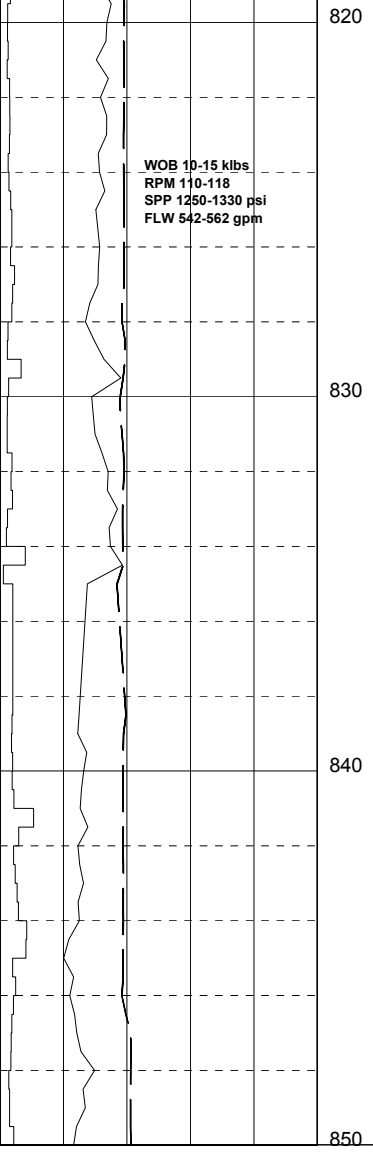
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SANDSTONE:trnl-clr,mky-opq,pl brn i/p,f-v crs,dm crs,sbang-sbrnd,occ ang,wk-loc v strg calc cmt,com off wh-pl brn arg mtx, com nod pyr,mnr ang frac qtz grs, lith spks,tr foss mat,dm lse,loc fri aggs,pr vis por,fr inf por, no fluor.

SILTSTONE:med dk gry,dm arg,sl aren i/p,com micmic,occ carb spks, dm sl,rr loc frm, sbbkly-blky, amorph i/p.

SANDSTONE:trnsi-clr,off wh,opq,vf-crs,dm crs,pr srt,sa-sr, tr wk sil cmt,com pl brn arg mtx, occ nod pyr,tr grn & blk liths, dm cin & lse,occ fri aggs,pr vis & inf por,no fluoro.

SANDSTONE:trnsi-clr,opq,frstd, dm med,mod wl srt,sbang-sbrnd, tr wk calc cmt,mnr sil cmt,tr pl brn arg mtx,tr nod pyr,pred cin & lse,fr-gd por,no fluor.



WOB 10-15 klbs  
 RPM 110-118  
 SPP 1250-1330 psi  
 FLW 542-562 gpm

NO GAS

SANDSTONE:trnsi-clr,opq,frstd,  
 dom med,mod wl srt,sbang-sbrnd,  
 tr wk calc cmt,mnr sil cmt,tr  
 pl brn arg mtx,tr nod pyr,ang  
 frac qtz grs,pred cin & lse,  
 fr-gd por,no fluor.

SILTSTONE:lt-med brn,dk brn i/p,  
 arg,com loc aren,occ blk & pl  
 grn liths,sft-disp,tr loc frm,  
 sbbiky-amorph.

SANDSTONE:trnsi-clr,opq,frstd,  
 f-crs,dom med,mod wl srt,sbang-  
 sbrnd,tr wk calc cmt,sil cmt,  
 pl brn arg mtx,occ org & grn  
 liths,tr ang frac qtz grs,  
 pred cin & lse,fr por,no fluor.

CARBIDE LAG CHECK @ 853m