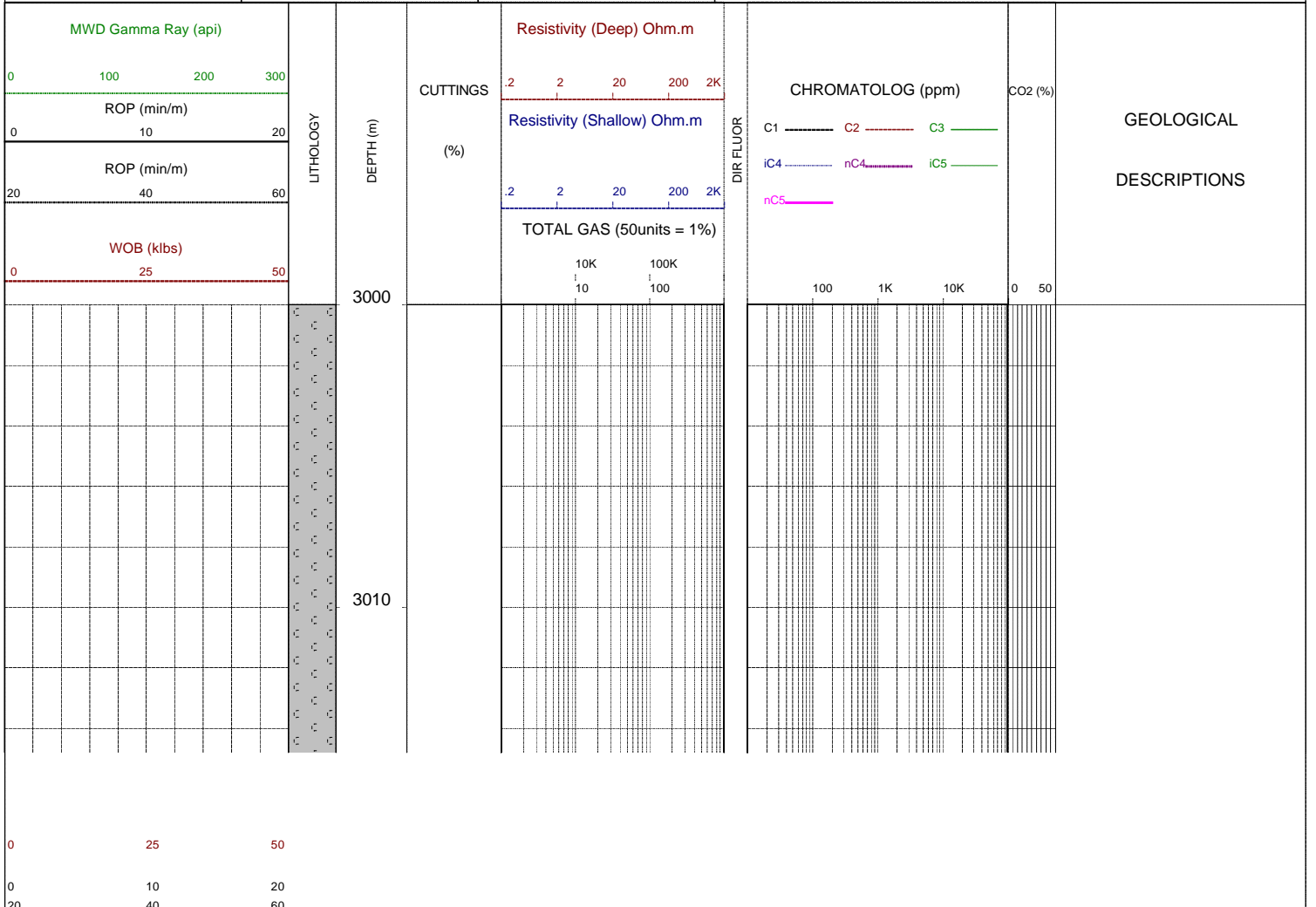


GLENAIRE 1 ST1

Field : aaa	Kelly Bushing : PEP 160	Rig : ENSIGN 32	Open Hole:	Cased Hole:	Loggers : J.SUTTON
Block: bbb	Ground Level : STATUS	Spud Date : 08/09/2006	17.5" (12.25") 307m	13.375" (9.625") 303.5m	N.LUIS
State : VICTORIA	GRS80 Ellipsoid MGA94 Zone54 :	TD Date : XX/XX/2006	12.25" (8.5") 1255m	9.625" (7.0") 1252m	J.TRETHEWEY
Country : AUSTRALIA	Lat. : 37°34'47.03S	Total Depth : jjj	8.5" 3006m	7.0" 2999m	HO MINH HAU
Scale : 1/ 200	Long. : 140°59'52.25E	Final Status : kkk	6.0" eee	hhhh iii	ccc

LITHOLOGY 	ACCESSORIES 	DRILLING DATA MUD DATA MW - Mud Weight (lb/gal) FV - Funnel Viscosity (s/qt) PV - Plastic Viscosity (cps) YP - Yield Point (lb/100ftsq) Gel - Gel Strength (10sec) WL - Water Loss (cc/30min) pH - Acidity / Alkalinity Ck - Cake (32nd/inch) O/W/S - Oil / Water / Solids Cl - Chlorides (mg/L) K+ - Potassium (mg/L) Rmf - Res. Mud Filtrate (ohmm)	ABBREVIATIONS BOPD - Barrels of Oil Per Day BWPD - Barrels of Water Per Day CG - Connection Gas CO - Circulate Out COND - Condensate c/c - Crush Cut DST - Drill Stem Test FLOW - Flow Rate (gal/min) GCM - Gas Cut Mud GCW - Gas Cut Water GTS - Gas To Surface INJ - Injection of Mist (bbls/hr) LCM - Lost Circulation Material MMCFD - Million Cubic Feet / Day NGTS - No Gas To Surface NOTS - No Oil To Surface NFTS - No Flow To Surface OCM - Oil Cut Mud OG - Over Gauge OH - Open Hole OTS - Oil To Surface Q - Flow Rate REC - Recovery FLUOR - Fluorescence ROP - Rate Of Penetration RPM - Revolutions Per Minute RTSTM - Rate Too Small To Measure Rw - Resistivity water r/r - Ring Residue SCFM - Standard Cubic Ft/Min (air) SGCM - Slightly Gas Cut Mud SPM - Strokes Per Minute SPP - Stand Pipe Pressure SWC - Side-Wall Core TG - Trip Gas WOB - Weight On Bit
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WOB: 2-4 klbs
 RPM: 135
 SPP: 2800-3000 psi
 FLW: 248 gpm

MW: 10.2
 FV: 47
 PV: 13
 YP: 9
 Gels: 2/8
 WL: 7.2
 CK: 1
 Sol: 8.5
 pH: 11
 CI: 113k

NO CO2
 NO H2S

GLENAIRE 1 WAS DRILLED TO 3306m
 HOLE WAS SUBSEQUENTLY CEMENTED
 BACK DUE TO EXCESSIVE HOLE
 DEVIATION. TOP OF CEMENT PLUG
 DRESSED TO 3041m. RIH WITH
 DIRECTIONAL DRILLING ASSEMBLY
 WITH MWD TO STEER WELL TO TARGET.

Bit 6 : SECURITY XN4
 Size: 6" Jets:3x20
 In: 3042m Out: 3119m
 Run: 77m Hrs: 41.0 hrs
 Cond: 3-5-WT-A-F-1-FC-BC

SURVEY @ 3053.34m: 7.67° 343.28T

100 % Cement

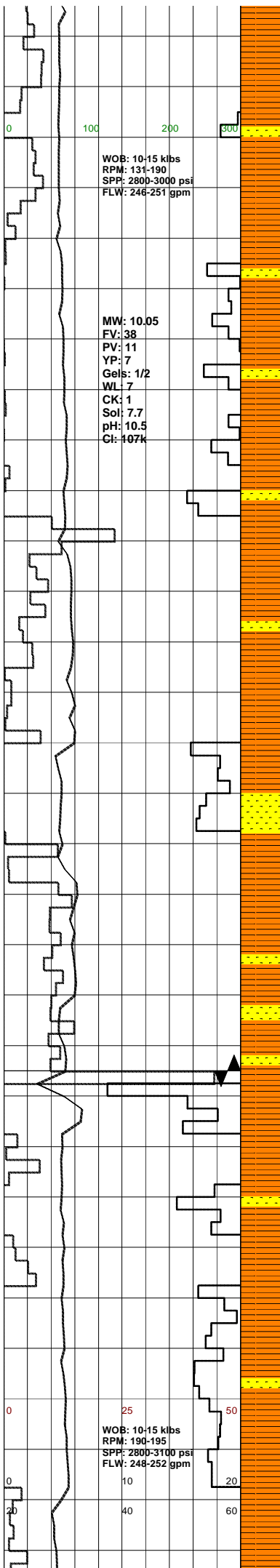
SANDSTONE:lt-med brn/gry.lt gry,
 vf-f,wl srt,sbrnd,com mod wk calc
 cmt,com strg sil cmt,mnr off wh arg
 mtx i/p,com blk,wh,tn,grn,rd liths,hd-
 v hd,ti-nil vis por,min fluor only.

SILTY CLAYSTONE:med gry,dk brn
 gry,arg,aren ip,te liths,tr carb spks,
 sft,sbbiky.

81/7/4/4/4

83/7/5/3/2

82/8/5/5



WOB: 10-15 klbs
 RPM: 131-190
 SPP: 2800-3000 psi
 FLW: 246-251 gpm

MW: 10.05
 FV: 38
 PV: 11
 YP: 7
 Gels: 1/2
 WL: 7
 CK: 1
 Sol: 7.7
 pH: 10.5
 Cl: 107k

WOB: 10-15 klbs
 RPM: 190-195
 SPP: 2800-3100 psi
 FLW: 248-252 gpm

3080
 3090
 3100
 3110
 3120
 3130

84/8/6/2

83/9/5/2/1

83/9/5/2/1

85/8/2/2/1

85/7/5/3/Tr

80/8/5/4/3

82/8/7/3

82/8/6/3/1

80/9/8/2/1

81/8/6/3/2

SURVEY @ 3082.26m: 4.78° 5.59T

SILTY CLAYSTONE: med gry, lt-med brn, occ lt gry, arg, aren i/p, tr carb spks, sft-occ mod hd, sbbiky.

NO CO2
 NO H2S

SANDSTONE: (Tr) med brn/gry, med gry, vt, v wl srt, sbrnd, com mod strg calc cmt, occ mod wk sil cmt, occ pl gry slty mtx, com blk, tn, off wh, grn liths, mod hd, ti-nil vis por, min fluor only.

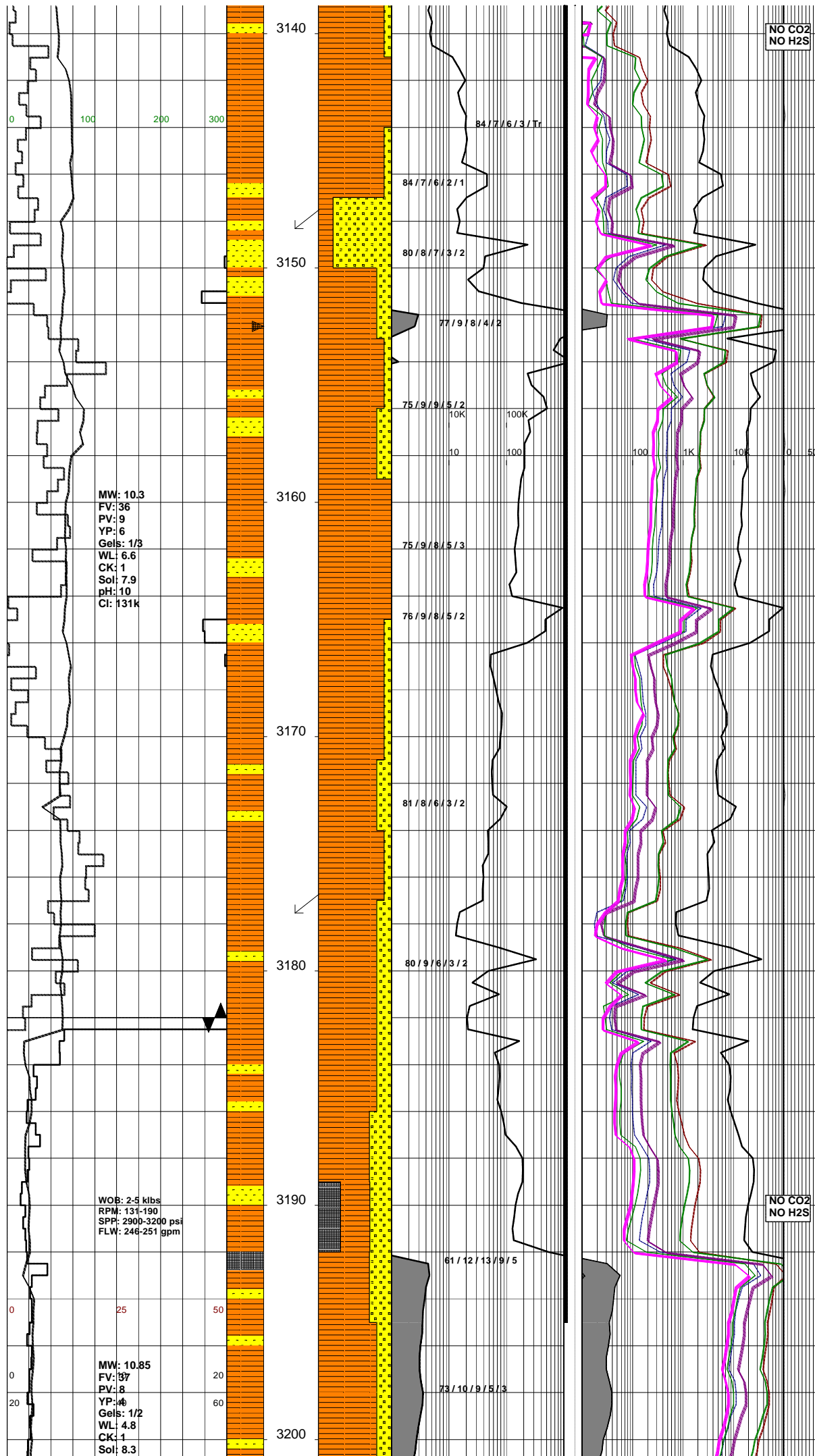
SURVEY @ 3104.18m: 2.52° 30.28T

SILTY CLAYSTONE: med brn/gry, med gry, med brn, mnr lt gry, arg, aren i/p, com carb spks, com off wh & tn liths, sft-frn, occ disp, sbbiky, amorph i/p.

SURVEY @ 3120.27m: 2.04° 111.74T

Bit 7 : SMITH XR+
 Size: 6" Jets: 3x24
 In: 3119m Out: 3182m
 Run: 63m Hrs: 25.43 hrs
 Cond: 1-1-CT-S-X-I-NO-PP

SILTY CLAYSTONE: med-dk gry, occ lt gry, occ lt-med brn, arg, aren i/p, mod calc, micmic, tr liths, tr carb spks, sft-mod hd, sbbiky.



NO CO2
NO H2S

SURVEY @ 3148.67m: 2.72° 152.37'

SANDSTONE:lt-med gry,pl brn/gry, vi-f, wl srt,sbrnd,com strg calc cmt, mnr mod wk sil cmt,occ-mnr off wh arg mtz,com off wh,blk,grn,tn liths, mod hd-hd,ti-nil vis por,min fluor only.

COAL:(Tr)blk,svbit-vit,brit,sbfiss, evn-ang.

SILTCLAYSTONE:med-dk gry,occ lt gry,occ lt-drk brn,arg,aren i/p,mod calc,micmic,tr liths,tr carb spks, sft-mod hd,sbbkly.

INFLUX OF OIL WHEN POOH @ 3182m,PROBABLY DUE TO SANDSTONES AND SMALL FRACTURES FROM 3149m TO TD RECEIVED 4154 UNITS OF GAS RIH TO WEIGHT UP TO 10.45 ppg

SURVEY @ 3177.31m: 3.53° 168.37'

Bit 8 : HYCALOG DSX 516M-B1
Size: 6" Jets:5x15
In: 3182m Out: 3507m
Run: 325m Hrs: 57.6 hrs

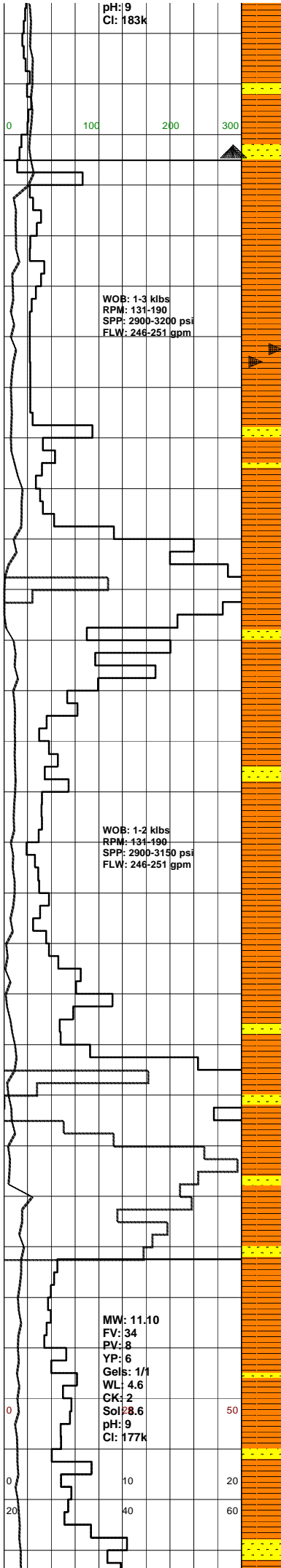
SILTY CLAYSTONE:med-dk gry,med brn,abdt alt feld i/p,tr carb spks, v carb i/p,comm micmic,hd,sbfiss.

NO CO2
NO H2S

COAL:blk-v dk gry,v arg i/p,ea-svbit,irregular/contused frac,hd, brit.

WELL BEGAN FLOWING OIL/GAS CUT MUD.THE CRUDE IS GREEN WAXY (SOLIDIFIES AT SURFACE TEMP)AND IS ON THE HEAVIER END OF A LIGHT CRUDE.BRIGHT PALE GREENISH YELLOW WHITE FLOUR WITH MILKY WHITE CUT NO FLOUR OBSERVED IN THE SAND AND THE SAND VISUALLY HAD NO DISCERNABLE INTER GRANULAR POROSITY.

pH: 9
Cl: 183k



77/8/6/5/4

TG=4708 units

3210

60/12/15/9/4

3220

10K 100K

10 100

3230

57/11/14/11/7

59/11/14/10/6

3240

83/7/5/2/3

79/8/6/4/3

3250

85/6/3/3/3

58/11/14/11/6

77/8/6/5/4

80/11/13/10/6

3260

79/8/6/4/3

84/10/11/9/6

SURVEY @ 3206.34m: 1° 172.45T

SANDSTONE: off wh-lt brn, slty-f, dom v f, sbang-sbrnd, mod srt, strng sil & calc cmt, abdt arg mt, abdt alt fld, tr grn, gry, brn, red, blk liths, tr qtz grns, te mica, tr carb det, hd, no vis por, no oil flour.

POOH TO REMOVE SALT SATURATION BLOCKAGE IN DRILL STRING

SILTY CLAYSTONE: lt-med gry, occ dk gry, arg, aren i/p, grd to SLTST, occ carb, tr liths, sft-mod hd, occ hd, sbbiky.

ADD BARITE TO MUD

SANDSTONE: lt gry, occ med gry, vf-f, wl srt, sbrnd, occ mod strg calc cmt, occ lt-med gry slty mt, occ tn, blk, grn liths, mod hd-fri, v pr vis por, min flour only.

SURVEY @ 3234.67m: 0.69° 350.93T

SILTY CLAYSTONE: med-dk gry/brn, med brn, aren, arg i/p, com off wh, tn, blk liths, micmic, mod hd-hd, sbfiss-sbbiky.

NO CO2
NO H2S

SLIDING FROM 3243m TO 3250.5m

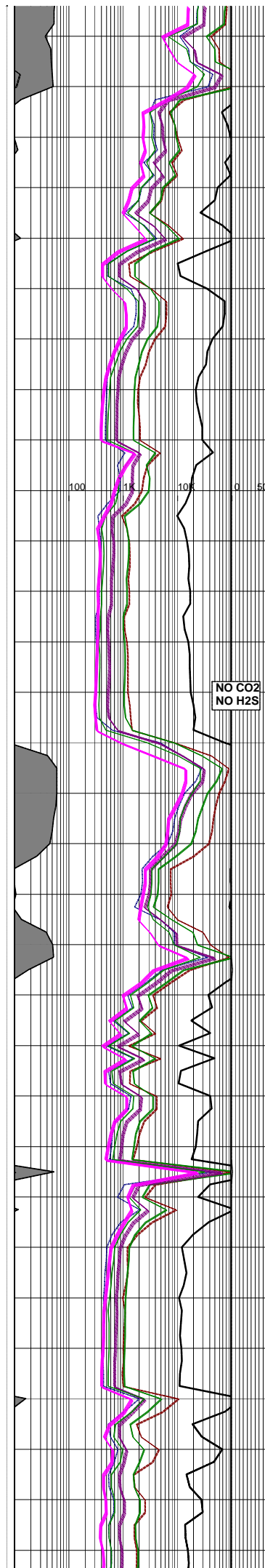
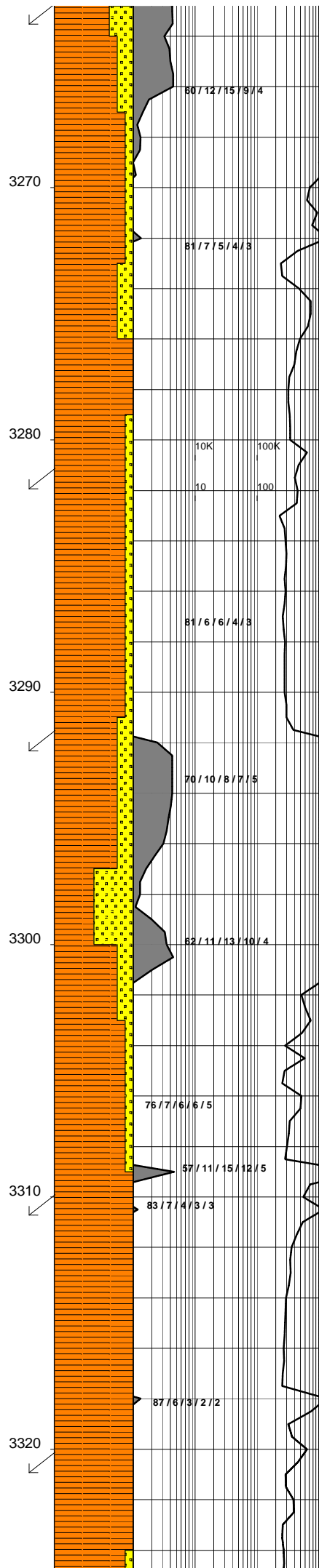
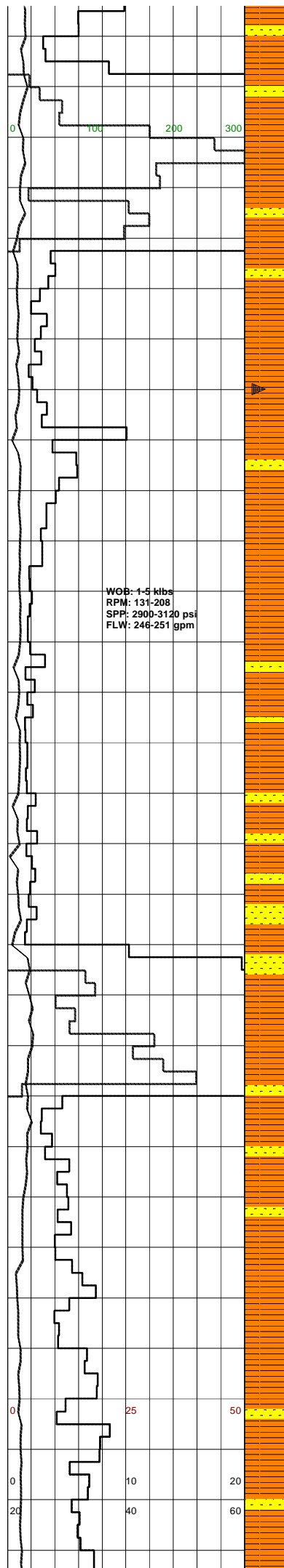
SANDSTONE: lt gry, occ med gry, vf, occ f wl srt, sbrnd, occ mod strg calc cmt, occ lt gry arg mt, mnr blk, tn, grn liths, mod hd, v pr-ti vis por, min flour only.

SURVEY @ 3249.34m: 0.92° 242.06T

SILTY CLAYSTONE: med gry, med gry/brn, med brn, arg, aren i/p, com off wh, tn, blk liths, micmic, frm-mod hd, sbfiss-sbbiky i/p.

SURVEY @ 3263.57m: 1.48° 232.27T

GAS/OIL INFLUX FROM 3192m.



SILTY CLAYSTONE: med gry, med gry/brn, med brn, arg, aren i/p, com off wh, tn, blk liths, micmic, frm-mod hd, sbfiss-sbbkly i/p.

SLIDING FROM 3265m TO 3272m

SILTY CLAYSTONE: lt-med gry, occ dk gry, aren i/p, grd to SLTST, micmic, tr liths, tr carb spks, sft-mod hd, occ hd, sbbkly.

SURVEY @ 3282.64m: 2.6° 228.6T

SILTY CLAYSTONE: lt-med gry, occ dk gry, aren i/p, grd to SLTST, micmic, tr liths, tr carb spks, sft-mod hd, occ hd, sbbkly.

SURVEY @ 3292.43m: 1.86° 259.15T

SANDSTONE: wh, off wh, occ lt gry, f-med, pr-mod srt, sbang-sbrnd, strng calc cmt, mod sil cmt, arg mtx, tr feld, abdt blk, brn, gry, red, grn liths, mod hd-hd, occ v hd, ti por, min flour only.

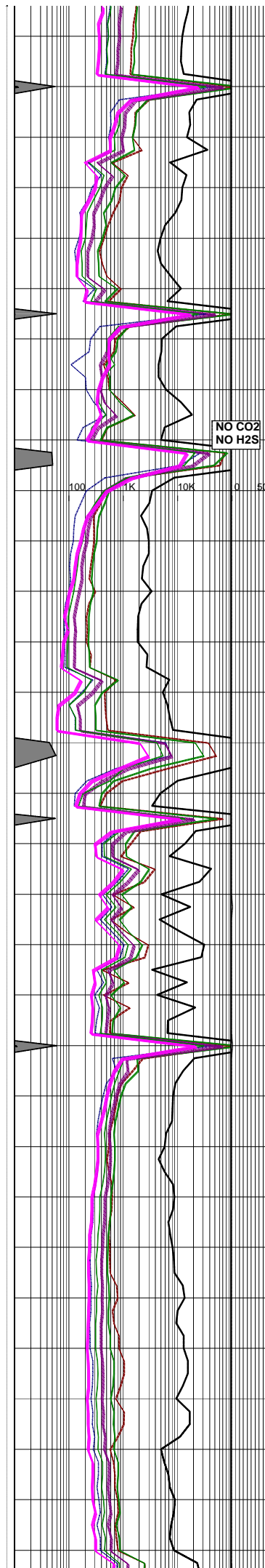
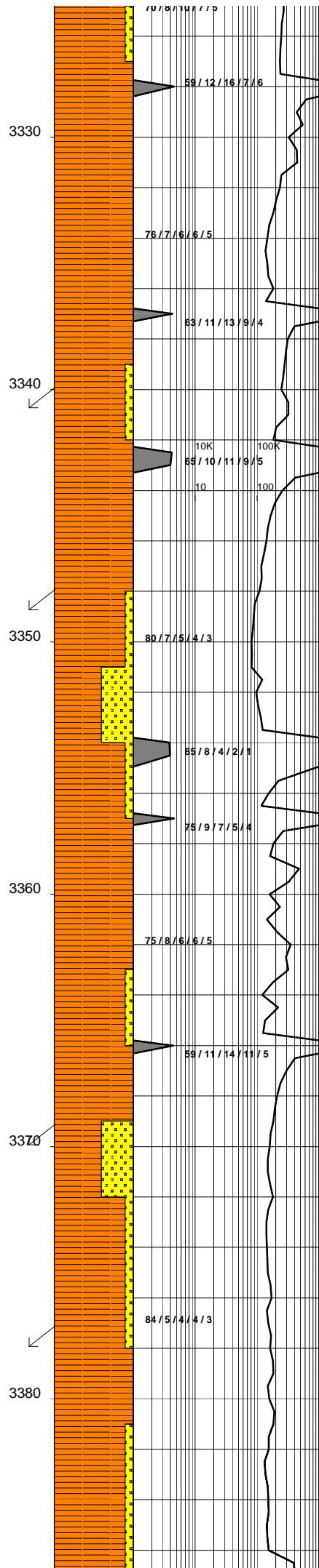
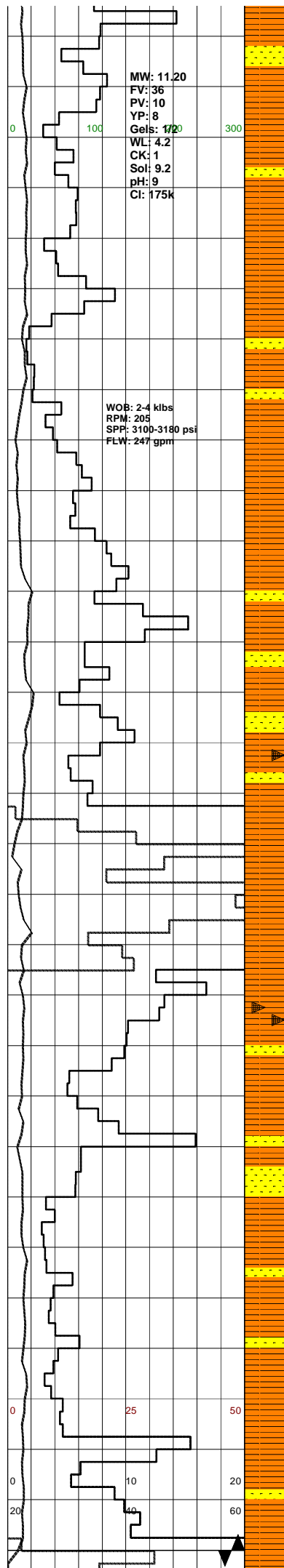
SLIDING FROM 3300m TO 3306m

SURVEY @ 3311.56m: 2.89° 223.60T

SILTY CLAYSTONE: dk-med brn/gry, med gry, arg, aren i/p, com off wh, blk, tn liths, micmic, mod hd-hd, sbfiss-sbbkly i/p.

SURVEY @ 3321.13m: 2.66° 227.71T

SANDSTONE: lt gry, occ med gry, vf-f, wl srt, sbrnd, occ mod strg calc cmt, com off wh arg mtx, occ blk, tn, off wh liths, mod hd-fri, v pr vis por, min flour only.



SILTY CLAYSTONE:dk-med brn/gry, med gry,arg,aren i/p,com off wh,blk, tn liths,micmic,mod hd-hd,sbfiss-sbbkly i/p.

SURVEY @ 3341.07m: 1.99° 256.98T

SANDSTONE:off wh-lt gry,f,wl srt, sbang,sbrnd i/p,mod st sil cmt,calc cmt i/p,pl-off wh arg mtx,occ wh sil mtx,tr-com carb spks,occ lt-med brn,tr grn liths,mod hd,no vis por,min flour only.

SLIDING FROM 3356m TO 3363m

SURVEY @ 3349.72m: 1.86° 275.69T

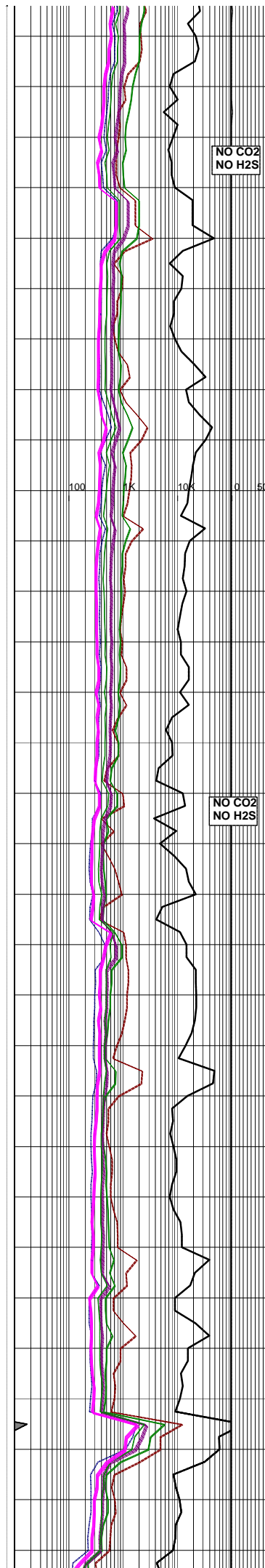
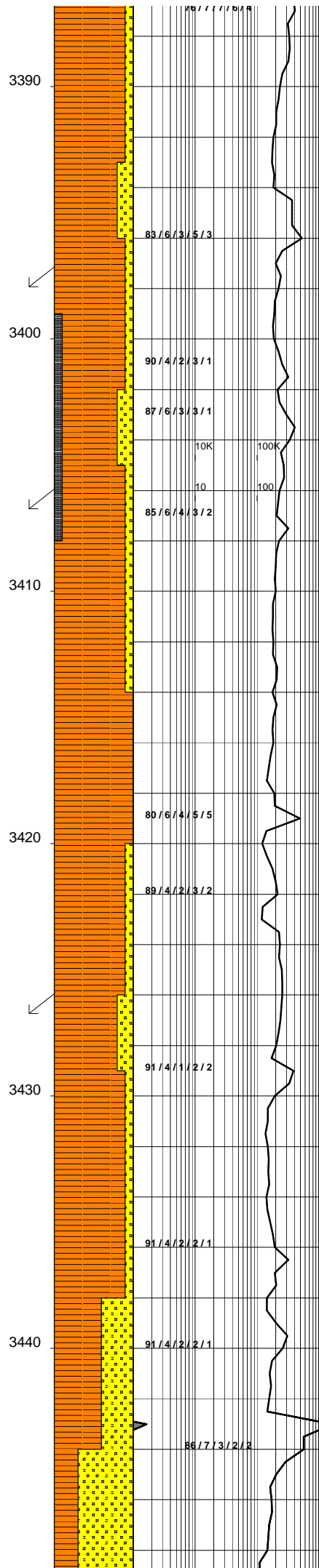
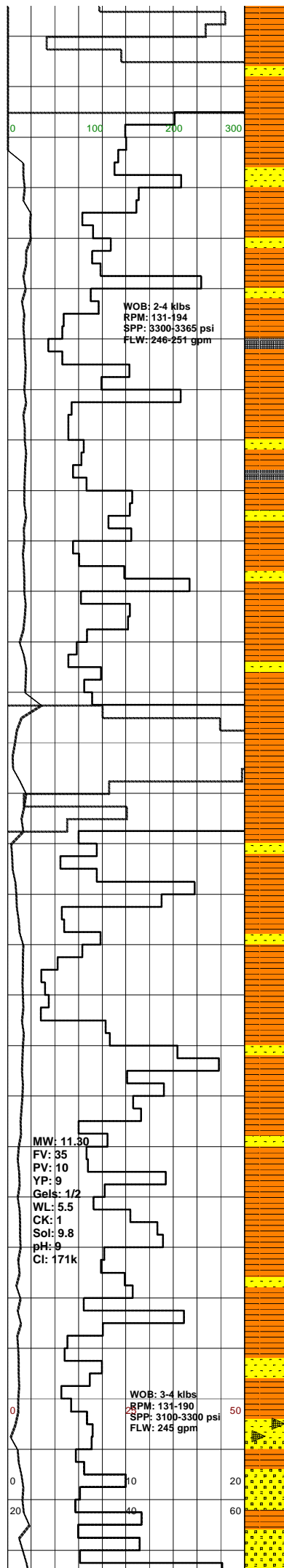
SILTY CLAYSTONE:dk-med brn/gry, med gry,arg,aren i/p,com off wh,blk, tn liths,micmic,mod hd-hd,sbfiss-sbbkly i/p.

SURVEY @ 3370.03m: 3.00° 232.77T

SILTY CLAYSTONE:lt med gry,occ dk gry,arg,aren i/p grd to SLTST,occ carb spks,abdt micmic,tr-com lt,brn liths,frm,occ hd,sbbkly.

SURVEY @ 3378.51m: 2.48° 244.84T

14 STANDS WIPER TRIP @3386m TO SHOE @2998m



SILTY CLAYSTONE:lt med gry,occ dk gry,arg,aren i/p grd to SLTST,occ carb spks,abdt micmic,tr-com lt,brn liths,frm,occ hd,sbbkly.

SLIDING FROM 3386m TO 3392m

SURVEY @ 3398.34m: 3.21° 204.46T

COAL:blk,dk brn i/p,vit,occ sbvit,arg, striat,sft,brit i/p,sbfiss,occ,unevn.

SURVEY @ 3407.21m: 2.92° 211.58T

SLIDING FROM 3414m TO 3419m

NO CO2
NO H2S

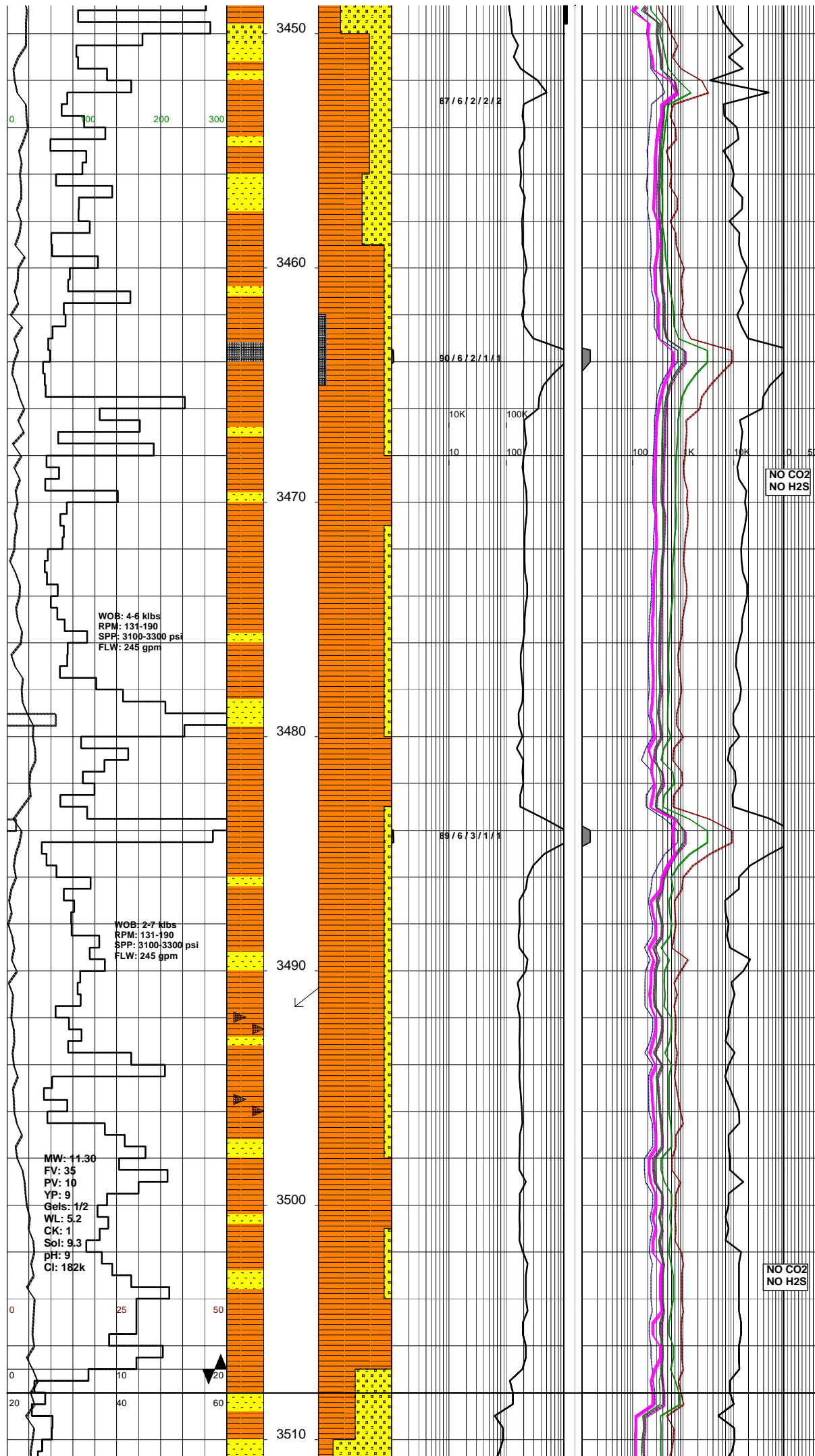
SANDSTONE:lt gry,occ off wh,vf-f, mod srt,sbang,sbrnd i/p,mod arg cmt, wh-off wh sil cmt,mod-wk calc cmt tr carb spks,tr lt brn,liths,mod hd,no vis por,pr inf por,no flour.

SURVEY @ 3427.02m: 2.99° 169.22T

SILTY CLAYSTONE:med-dk gry,arg, com,micmic,tr carb spks,tr lt brn liths fm-mod hd i/p,sbbkly,sbfiss i/p

FLUOR:3441m-3450m:Tr-10%
The fracture infill material has dull yellow mineral flour and trace dull to moderate bright very pale yellow white oil flour giving weak dull milky white crush cut flour.The Sandstone has no intergranular oil flour. The Coaly material has no flour but gives a very weak pale yellow crush cut.

SANDSTONE:off wh,slty-f,dom vf, sbang-sbrnd,mod srt,abdt wh arg mtx.v strna calc cmt,mod sil cmt.



tr liths,comm qtz grns,rr calcite lined frac,v hd,no vis por,no intergranular oil flour.

SANDSTONE:off wh,silty-f,dom vf, sbang-sbrnd,mod srt,abdt wh arg mt,x,v strng calc cmt,mod sil cmt, tr liths,comm qtz grns,rr calcite lined frac,v hd,no vis por,no intergranular oil flour.

COAL:blk,dk brn/blk,svvit,ea i/p, mnr silty,mod hd-hd,sbbkly,hckly.

SURVEY @ 3464.6m: 1.56° 154.76T

NO CO2
NO H2S

SILTY CLAYSTONE:med-dk gry,dk gry/brn,aren i/p,com micmic,tr carb spks, & off wh liths,pred frm,mod hd-hd i/p,sbbkly,sbfiss i/p.

SILTY CLAYSTONE:med-dk gry,med brn/gry,aren i/p,com micmic,tr carb spks & off wh liths,frm-mod hd, sbbkly.

SURVEY @ 3491.68m: 1.37° 50.64T

SANDSTONE:off wh,silty-f,dom vf, sbang-sbrnd,mod srt,abdt wh arg mt,x,v strng calc cmt,mod sil cmt, tr liths,comm qtz grns,rr calcite lined frac,v hd,no vis por,no intergranular oil flour.

SILTY CLAYSTONE:med-dk gry,occ brn,abdt vf alt feld grns,tr carb fiks,rr calcite lined fracs,micmic, hd,sbfiss.

NO CO2
NO H2S

PRETTY HILL FORMATION:
3508m (-3432mSS).

WOB: 4-6 kibs
RPM: 131-190
SPP: 3100-3300 psi
FLW: 245 gpm

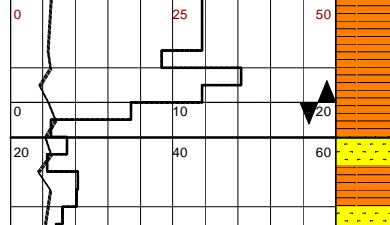
WOB: 2-7 kibs
RPM: 131-190
SPP: 3100-3300 psi
FLW: 245 gpm

MW: 11.30
FV: 35
PV: 10
YP: 9
Gels: 1/2
WL: 5.2
CK: 1
Sol: 9.3
pH: 9
Cl: 182k

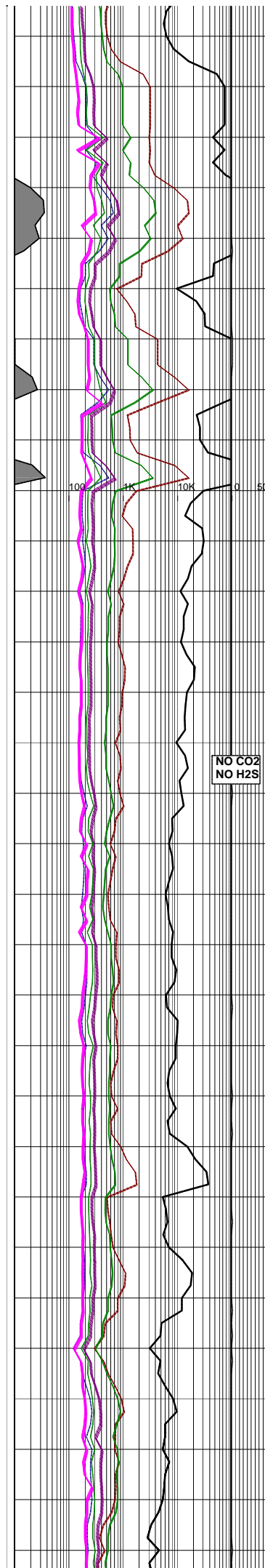
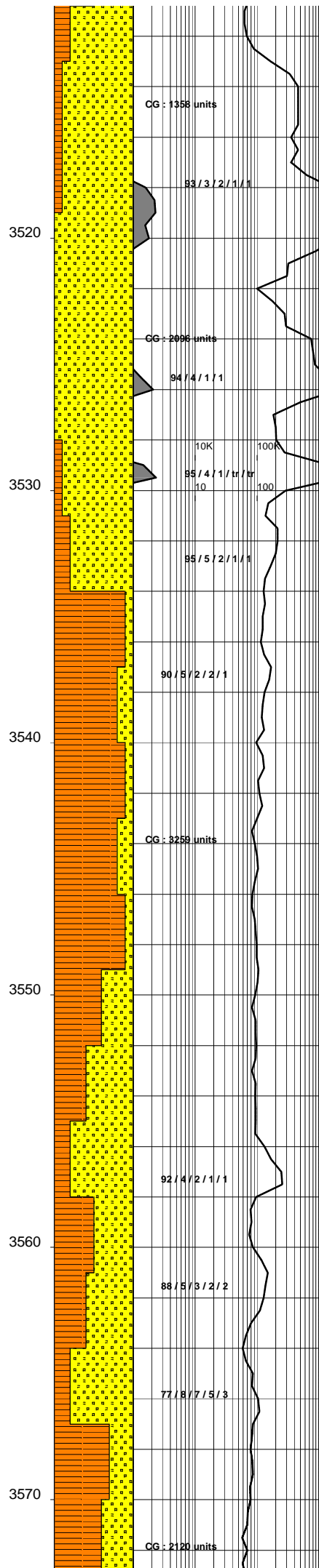
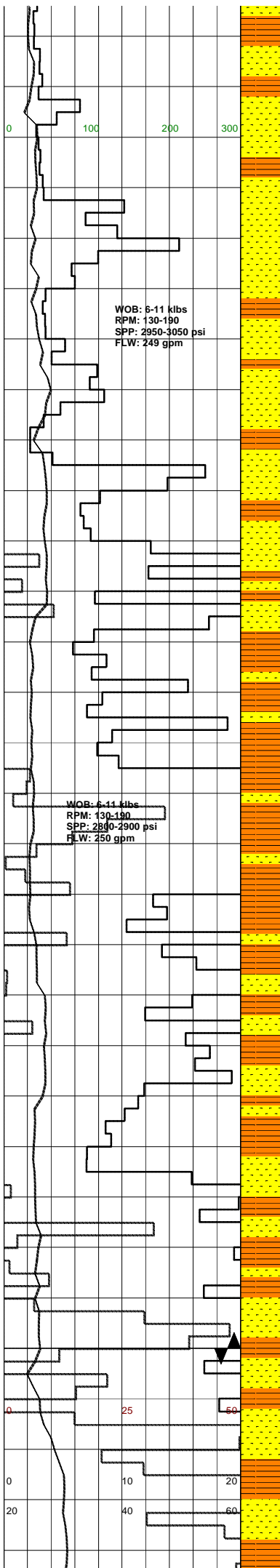
87/6/2/2/2

89/6/2/1/1

89/6/3/1/1



Bit 9RR : HYCALOG DSX 516M-B1
 Size: 6" Jets:5x15
 In: 3507m Out: 3564m
 Run: 57m Hrs: 12.7 hrs
 Cond: 1-4-CT-S-X-I-NR-PR



SANDSTONE:wh,off wh,v f-med,dom
 f,occ vf-crs,pr srt,sbang-sbrnd,
 wk calc cmt, string sil cmt,mtx supp,
 tr qtz grns,tr blk,brn,gry,red
 liths,no vis por,comm alt feld,
 min flour only.

SANDSTONE:wh,off wh,f-med,dom
 f,occ med-crse,pr srt,sbang-sbrnd,
 wk calc cmt,string sil cmt,comm wh
 arg mtx,tr qtz grns,tr blk,brn,gry,
 red liths,no vis por,min flour only.

SILTY CLAYSTONE:med-dk brn,occ
 dk gry,occ f alt feld,comm micmic,
 tr liths,tr carb spks,sft-mod
 hd,occ hd,sbfiss.

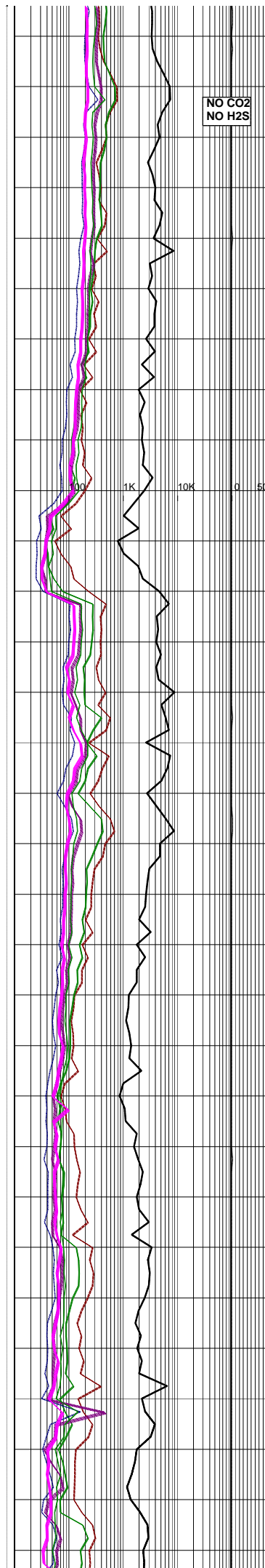
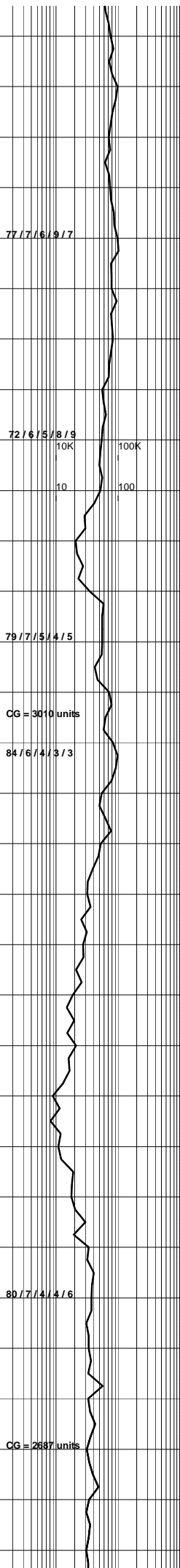
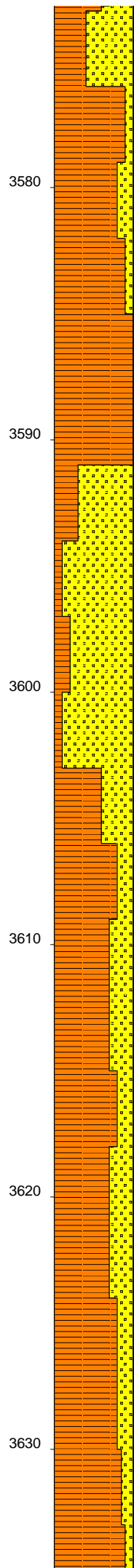
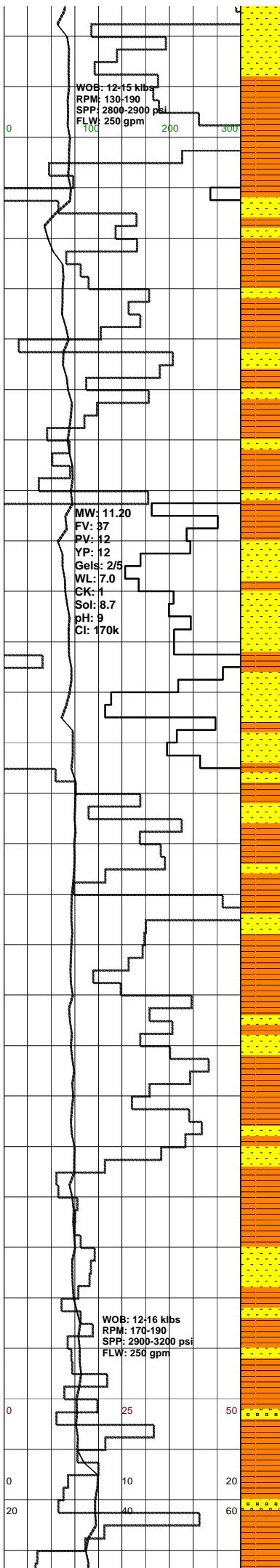
NO CO2
 NO H2S

SILTY CLAYSTONE:med-dr brn,med-dk
 gry,tr carb spks,micmic,occ f alt
 feld,sft-mod hd,occ hd,sbfiss.

SANDSTONE:off wh,f,occ med,pr srt,
 occ mod srt,sbang-sbrnd, str sil cmt,
 tr-com off wh sil mtx,tr carb spks, tr
 lt brn liths,hd,v-pr inf por,no flour

Bit 10 : REED DSX111
 Size: 6" Jets:4x20 3X10
 In: 3564m Out: xxxm
 Run: xxxm Hrs: xxx hrs
 Cond: x-x-xx-x-x-x-xx-xx

SILTY CLAYSTONE:dk gry,occ dk
 grn,arg,occ micmic,tr-com lt brn liths,
 tr-com carb spks,mod hd occ fm,
 sbfiss, occ sbkly.



SANDSTONE: off wh, pl gry i/p, vf-f, mod wl srt, sbang, com mod strg sil cmt, abdt pl gry/off wh arg mtx, tr lt brn liths & carb spks, fri, r lse grs, pr vis & inf por, no fluor.

SILTY CLAYSTONE: med-dk brn, dom med brn, occ lt gry, aren i/p, grd to SLTST, comm shale frag, tr liths, tr carb spks, mod hd, occ v hd, sbfiss.

KAOLINITIC SANDY CLAYSTONE: off wh, mod calc, comm-abdt vf-f qtz grns, tr blk coaly lams, frm, non fiss, v pr inf por.

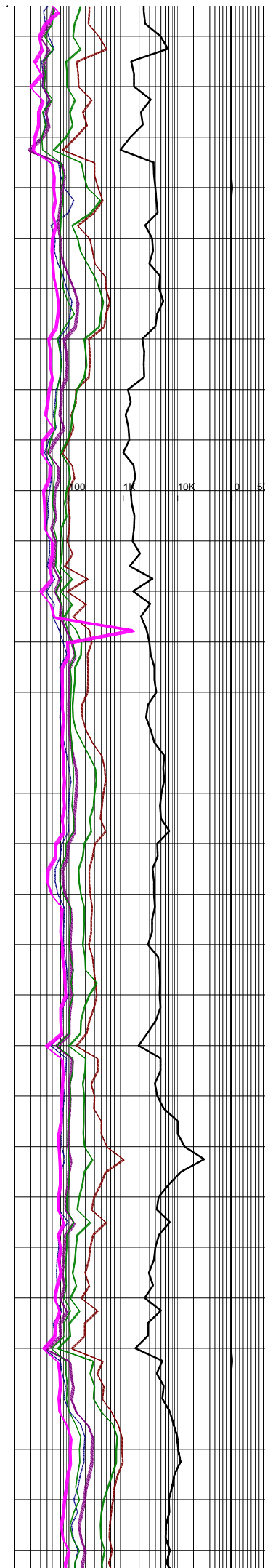
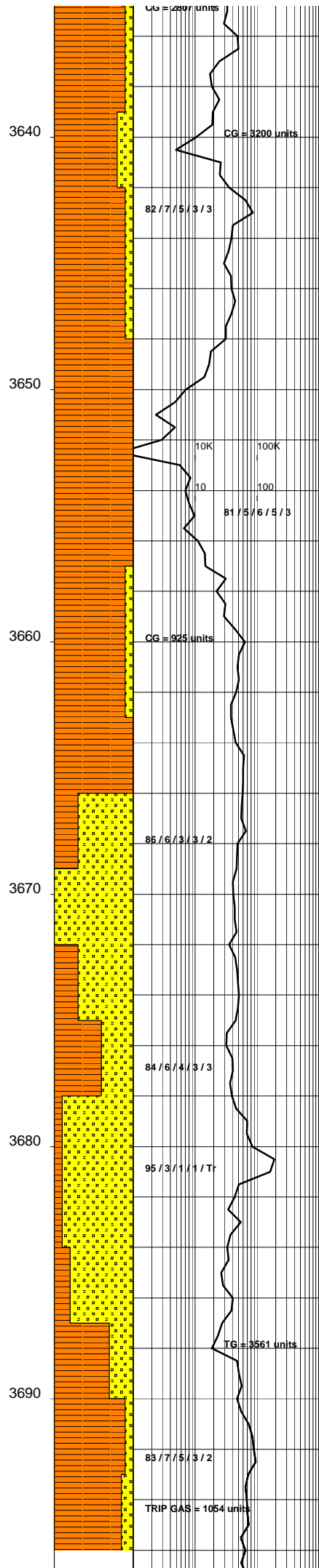
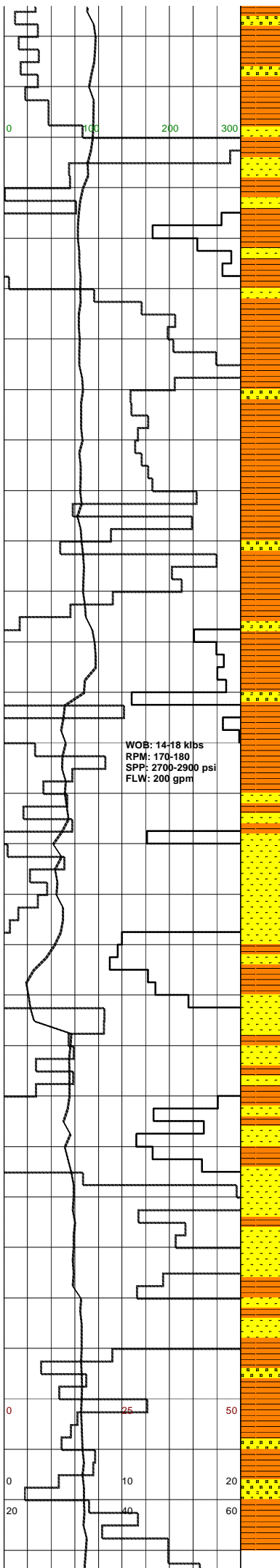
KAOLINITIC SANDSTONE: off wh, mod calc, abdt vf-f qtz grns disp through wh kaol clay mtx, comm blk coaly lams, mod hd, v pr intergranular flour.

FLOURESCENCE: THE KAOLINITE HAS 50% VERY DULL PATCHY MEDIUM OIL FLOUR, GIVING A WEAK DULL PALE YELLOW CRUSH CUT.

SANDSTONE: off wh, pl gry, lt brn i/p, vf-f, mod wl srt, sbang, mnr mod strg sil cmt, com pl gry/brn arg mtx, tr carb spks & lt brn liths, fri, occ lse, v pr vis & inf por, no fluor.

SILTY CLAYSTONE: med-dk brn/gry, mnr dk gry, aren i/p, occ micmic, mnr carb spks, tr off wh liths, mod hd-hd, sbbly.

SANDSTONE: med dk gry, dk gy, tr pl gry, lt gy, vf-crs grs, pr srt, sbang -shrd are mtx tr sli calc cmt tr carb



spks, tr liths, tr micmic, pr vis & inf por, no fluor.

SILTY CLAYSTONE: dk-v dk gry, dk gry, brn, occ med brn, aren i/p, mnr micmic, occ-com carb incl, tr off wh liths, frm-mod hd, occ hd-v hd, sbbiky-sbfiss.

SANDSTONE: med lt gry, med gy, pl gry trnsp-trnst, vf-med grs, pr srt, sbang -sbrnd, arg mt, tr sil calc cmt, tr carb spks, occ micmic, pr vis por, no fluor.

KAOLANITIC SANDSTONE: off wh, pl gry, vf-f, occ med-crs lse grs, sbang, mnr mod wk sil cmt, abdt off wh kaol mt, tr brn liths & carb spks, fri-lse, v pr vis & pr inf por, no fluor.

SILTY CLAYSTONE: dk gry, blk, dk brn, occ med brn, lt gry, aren i/p, com carb mat, mnr micmic, calc i/p, mod hd, occ hd-v hd, tr frm, sbbiky-blky, occ sbfiss.

