



FORMATION EVALUATION LOG



WELL : TREFOIL-2

FROM (m): 2510

TO (m): 3185

SCALE: 1/ 500

Country : AUSTRALIA
Region : TASMANIA
Field : TREFOIL
Permit : T/18P
Well Type : APPRAISAL
Rig Name : KAN TAN 4

POSITION
Latitude : 39 53' 07.93" S
Longitude : 145 22' 14.62" E
X (m) : 360690.389
Y (m) : 5583676.588
RT-Sealevel (m MSL) : 26
RT-Seabed (m) : 95

CASING SHOE SIZE / DEPTH
762mm (30") at (m MDRT) : 153.00
340mm (13 3/8") at (m MDRT) : 930.00
245mm (9 5/8") at (m MDRT) : 2520.00

Spud Date : 06-10-2009
Total Depth Date :
Total Depth (m MDRT) :
Total Depth (m TVSS) :
Status :

ABBREVIATIONS

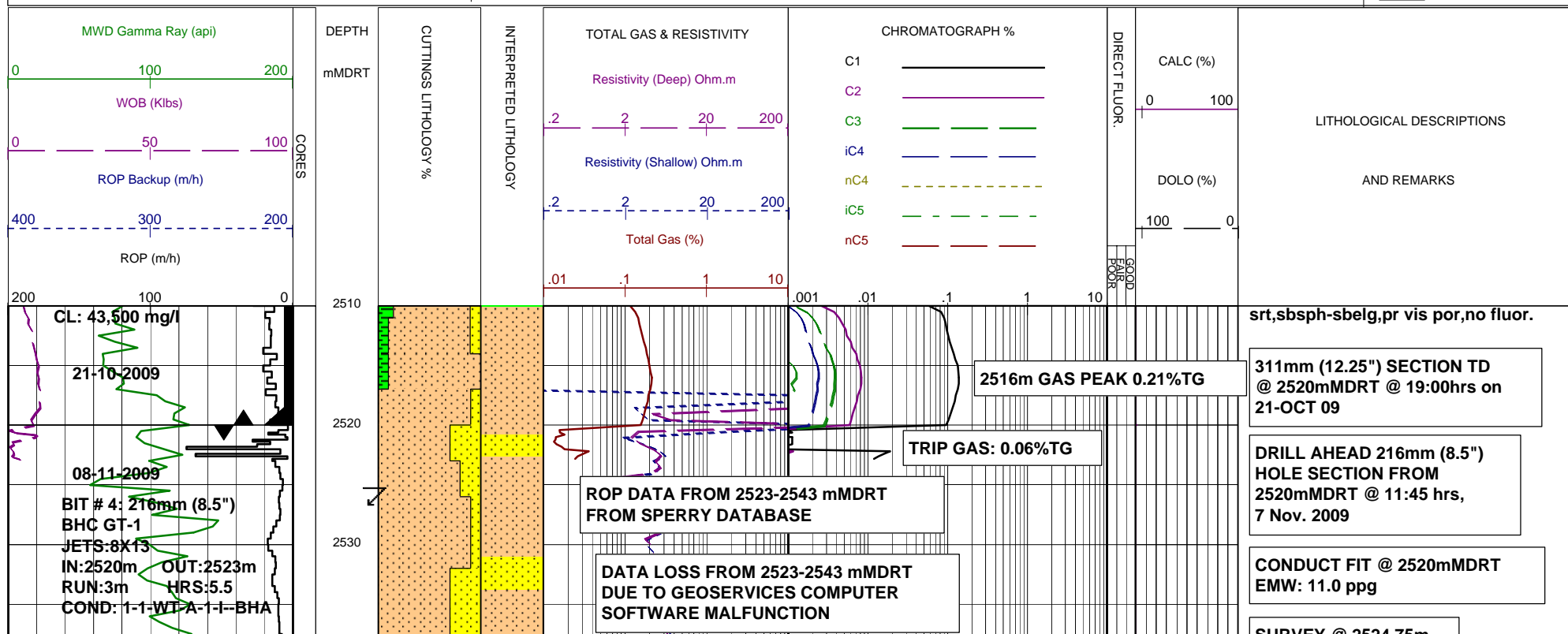
MW MUD WEIGHT NB NEW BIT
FV FUNNEL VISCOSITY RR RERUN BIT
PV PLASTIC VISCOSITY CB CORE BIT
YP YIELD POINT WOB WEIGHT ON BIT
FC FILTER CAKE RPM REVS PER MINUTE
SOL SOLIDS FLC FLOW CHECK
CR CIRCULATE RETURNS WL FILTRATE
SD SAND - % PR POOR RETURNS
S SALINITY - PPM NR NO RETURNS
RM MUD RESISTIVITY BG BACKGROUND 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

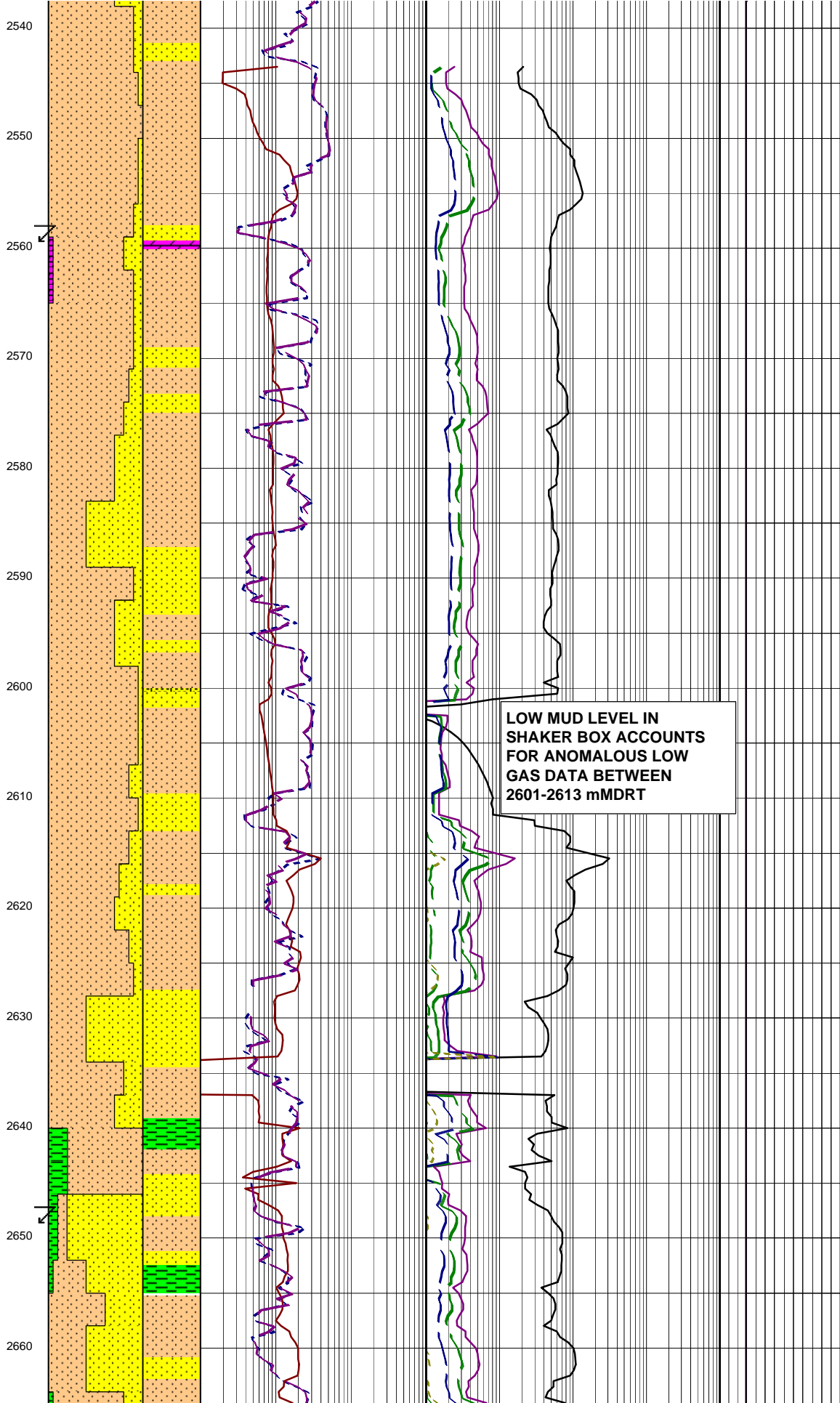
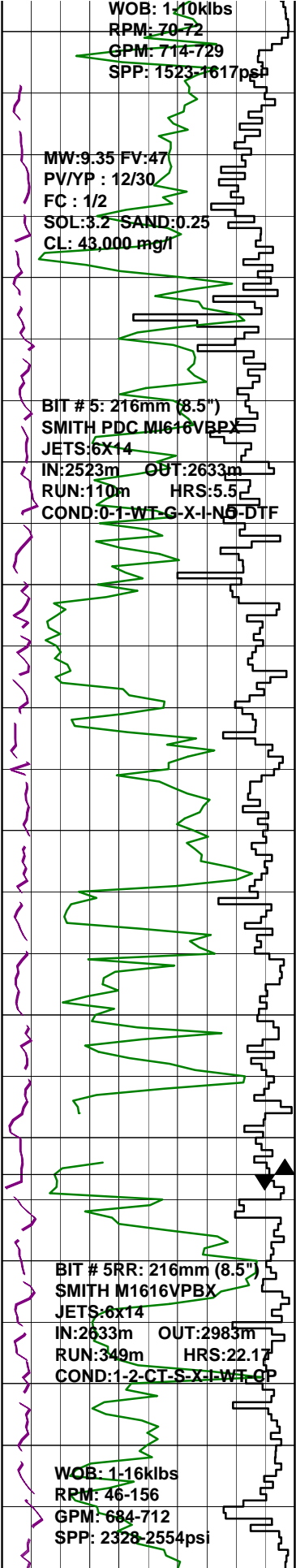
LITHOLOGY LEGEND

	Dolomite		Claystone		Argil Siltstone		Calcareous
	Calcurudite		Siltstone		Sandy Siltstone		Dolomitic
	Calcarenite		Sandstone		Calcareous Siltstone		Fossils
	Calcsiltite		Coal		Argil Sandstone		Foraminiferae
	Calclutite		Intrusive Volcanics		Calcareous Sandstone		Carbonaceous
	Sandy Claystone		Volcaniclastics		Dolomitic Sandstone		Chert
	Silty Claystone		Tuff		Silty Sandstone		Pyrite
	Calcareous Claystone		Cement				Glauconite
	Argil Calclutite						Mica

ENGINEERING

	Test
	FIT or LOT
	Mud loss
	Mud gain
	Deviation survey
	Core
	Shoe
	Calcmety





SURVEY @ 2524.75m
Incl 1.00° AZI: 97.22°
TVD: 2524.47m

SANDSTONE: yelsh gry, v lt gry, olv gry, 20% vf, 50% f, 30% med grs, tr crs grs, clr qtz grs, pr-mod srt, sbang-sbrnd, sbsph-sbelg, 10% sil cmt, 10% wh cly mtx, tr lithic frags, tr carb mat, pr inf vis por, no fluor.

SURVEY @ 2557.55m
Incl 1.13° AZI: 91.00°
TVD: 2557.30m

DOLOMITE: brnsh gry, frm-mod hd, sbblky w/- conch frac i/p.

SILTSTONE: pred brnsh blk, tr olv gry & brnsh gry, sft-frm, blk-y-sbblky, tr carb spks & lam, tr micmic & lam mica flks.

SANDSTONE: v lt gry, olv gry, tr yelsh gry, tr lt olv gry, 20% vf, 50% f, 30% med grs, clr qtz grs, lse-frm, pr-mod srt, sbrnd-ang, sbsph-sbelg, 10% wh cly mat, tr lithic frags, tr carb mat, tr pyr, pr inf vis por, no fluor.

SURVEY @ 2588.22m
Incl 1.30° AZI: 90.35°
TVD: 2587.90m

SANDSTONE: v lt gry-lt gry-clr-opq, olv gry, 5% vf, 30% f, 40% med, 20% crs, 5% v crs grs, lse-frm, pr-mod srt, sbrnd-ang, sbsph-sbelg, tr sil cmt, tr pyr cmt, tr calcite cmt, incr in lse, clr v crs qtz grs, tr lithic frags, tr carb mat, tr glauc, tr nod pyr, gd inf por, no fluor.

SILTSTONE: brnsh gry, brnsh blk, olv blk, olv gry, sft-frm, blk-y-sbfiss, tr carb mat, tr lithic frags, tr coal, micr.

CARBIDE LAG CHECK @ 2630m
THEOR STKS: 4148
ACTUAL STKS: 4299
INGAUGE HOLE.

SANDSTONE: v lt gry-lt gry-clr-opq, tr yelsh gry, 5% vf, 35% f, 30% med, 30% crs grs, lse-frm, pr-mod srt, sbrnd-sbang, sbsph-sph, tr sil cmt, tr calcite cmt, tr lithic frags, tr carb mat, tr nod pyr, tr glauc, pr inf vis por, no fluor.

POOH @ 2633 mMDRT DUE TO LWD 'PULSER' FAILURE. P/U COMPLETE LWD TOOL STRING

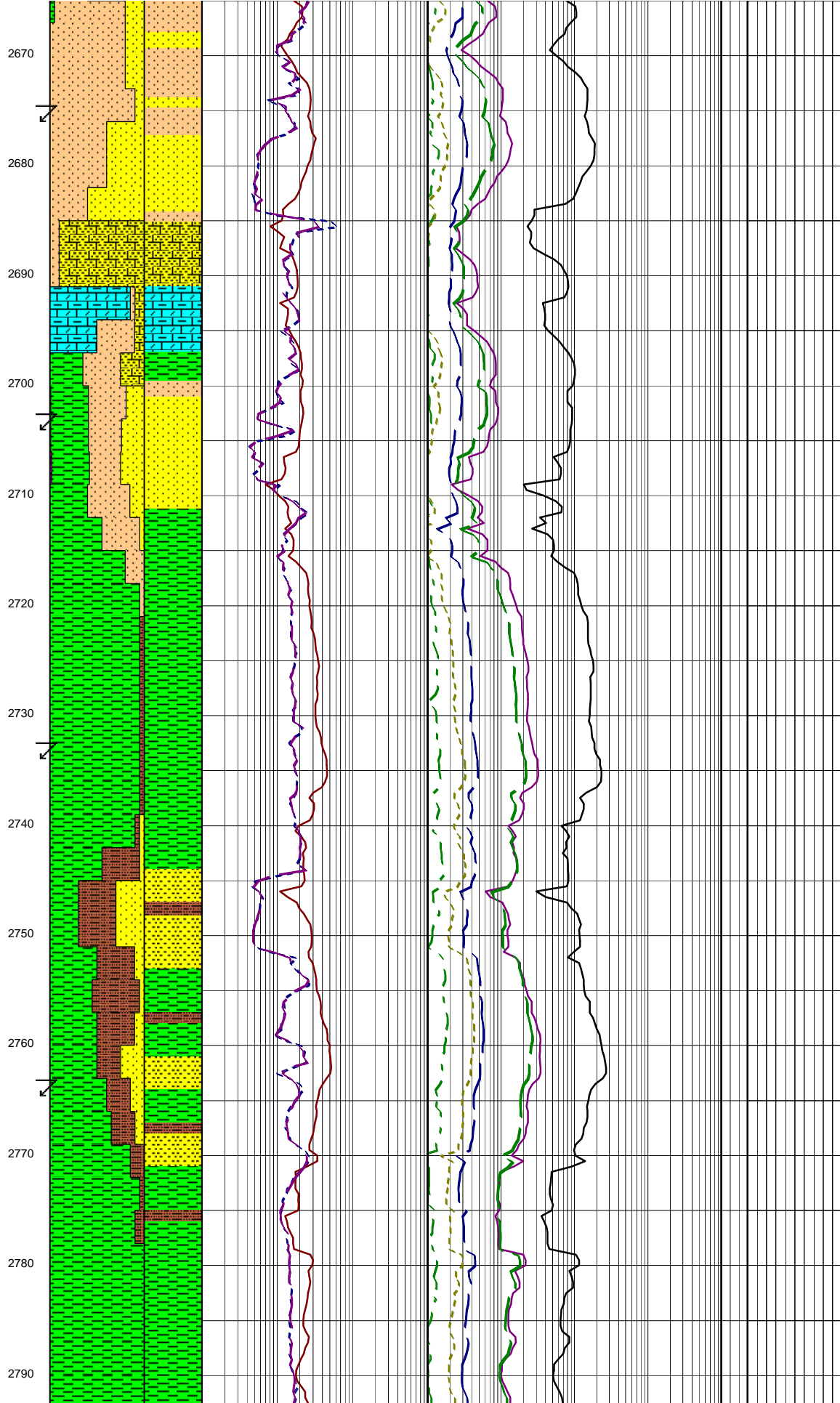
SURVEY @ 2646.63m
Incl 1.43° AZI: 86.39°
TVD: 2646.32m

LOW MUD LEVEL IN SHAKER BOX ACCOUNTS FOR ANOMALOUS LOW GAS DATA BETWEEN 2601-2613 mMDRT

MW: 9.4 FV: 68
PV/YP: 11/26
FC: 1/2
SOL: 3.3% SAND: 0.25%
CL: 41,500 mg/l

MW: 9.4 FV: 46
PV/YP: 10/28
FC: 1/2
SOL: 3.5% SAND: 0.25%
CL: 40,000 mg/l

WOB: 5-15klbs
RPM: 115-120
GPM: 699-704
SPP: 2400-2550psi



CLAYSTONE: olv blk, frm, sbblky, tr micmic, tr carb spks.

SURVEY @ 2674.00m
Incl 1.43° AZI: 86.39°
TVD: 2673.70m

SANDSTONE: v lt gry, clr & opq, pred lse-fri, qtz, f grs, 10% vf grs, 40% med, sbang-sbrnd, sbsph-sbelg, pr sil cmt when aggs, tr pyr cmt, 5% cl mtx, tr brn mica flks, fr vis por infr, no fluor.

CALCILUTITE: lt gry-med lt gry, tr yelsh gry, v sft-frm, sbblky-blky, grd to CLYST i/p, tr carb mat.

SURVEY @ 2702.98m
Incl 1.62° AZI: 88.34°
TVD: 2702.65m

ARGILLACEOUS SILTSTONE: brnsh blk, olv blk, olv gry, sft-frm, sbblky-blky, tr carb mat, tr lithic frags.

CLAYSTONE: med gry-med dk gry, sft-frm, sbblky-blky, tr carb mat, tr micmic.

SURVEY @ 2732.91m
Incl 1.69° AZI: 88.47°
TVD: 2732.57m

SANDSTONE: wh-v lt gry, clr-opq, tr yelsh gry, 10% vf, 70% f, 20% med, lse-mod hd, mod wl-wl srt, sbrnd-rnd, sbsph-sph, tr sil cmt, gd inf vis por, no fluor.

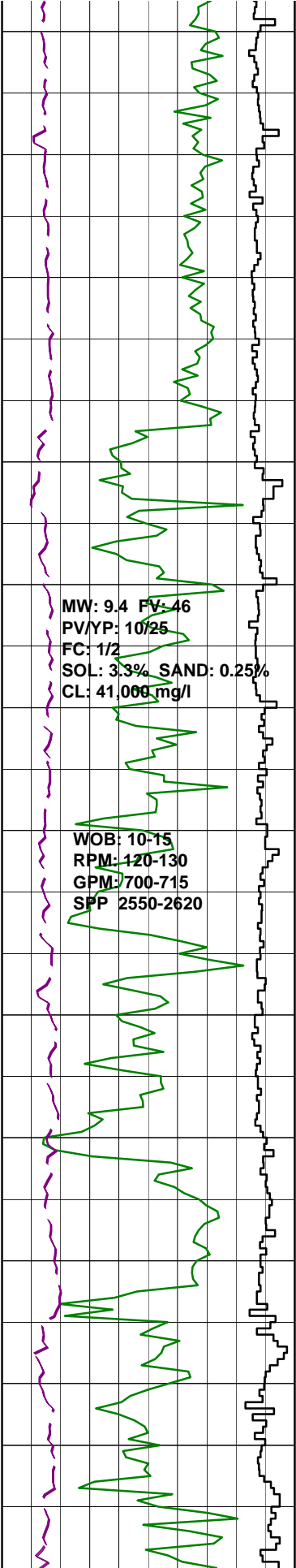
CLAYSTONE: med gry-med dk gry, olv gry-lt olv gry, sft-frm, sbblky-blky, tr carb mat, tr micmic.

SURVEY @ 2762.56m
Incl 1.85° AZI: 89.89°
TVD: 2762.20m

ARGILLACEOUS SILTSTONE: brnsh blk, olv blk, olv gry-brnsh gry, sft-frm, sbblky-blky, tr carb mat, tr lithic frags, tr pyr.

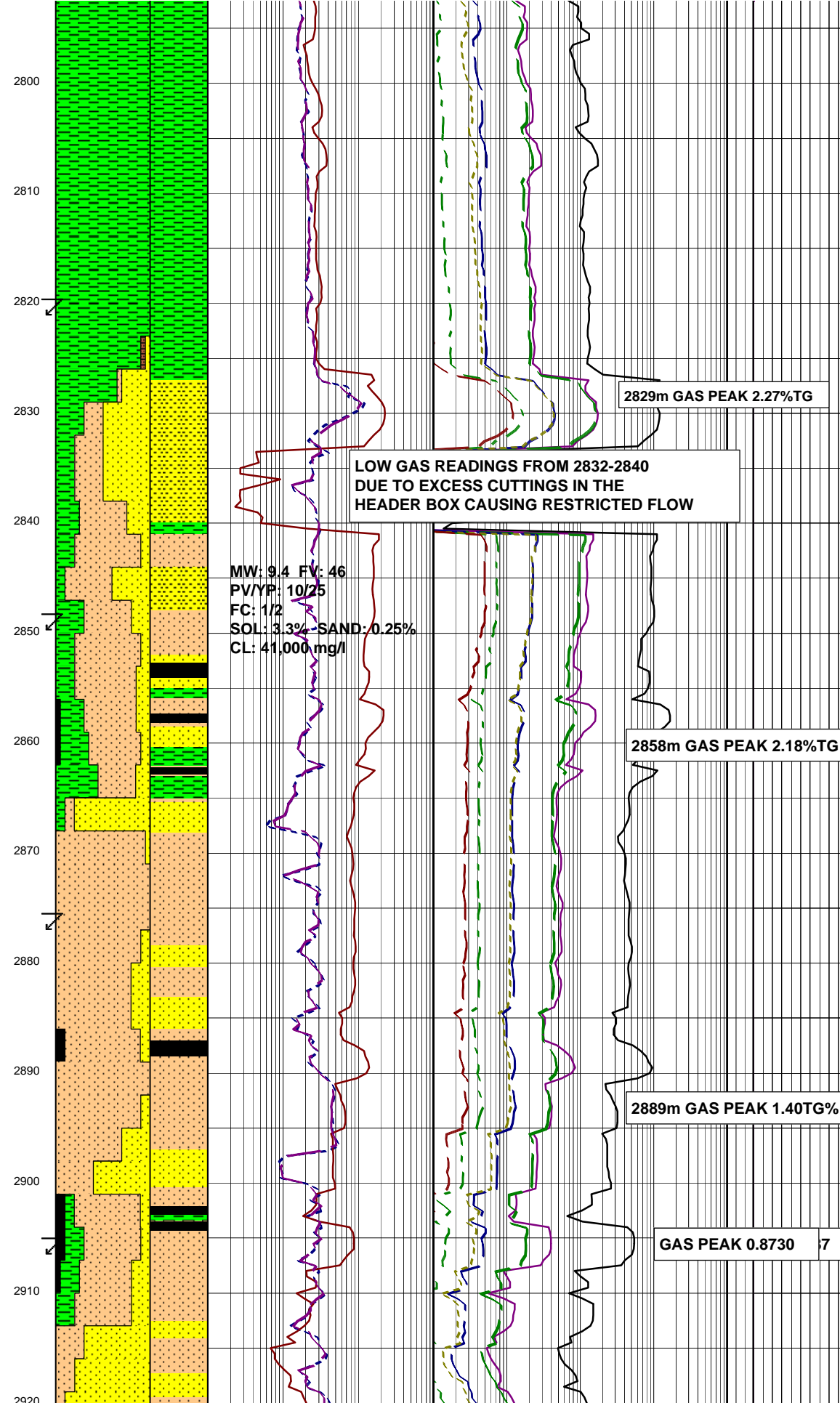
CLAYSTONE: med gry-med dk gry, olv gry-lt olv gry, v sft-frm, sbblky-blky, tr carb mat, tr micmic.

SURVEY @ 2791.49m
Incl 1.82° AZI: 85.20°



MW: 9.4 FV: 46
PV/YP: 10/25
FC: 1/2
SOL: 3.3% SAND: 0.25%
CL: 41,000 mg/l

WOB: 10-15
RPM: 120-130
GPM: 700-715
SPP: 2550-2620



MW: 9.4 FV: 46
PV/YP: 10/25
FC: 1/2
SOL: 3.3% SAND: 0.25%
CL: 41,000 mg/l

LOW GAS READINGS FROM 2832-2840
DUE TO EXCESS CUTTINGS IN THE
HEADER BOX CAUSING RESTRICTED FLOW

2829m GAS PEAK 2.27%TG

2858m GAS PEAK 2.18%TG

2889m GAS PEAK 1.40%TG

GAS PEAK 0.8730 7

INCL: 1.82° AZI: 85.29°
TVD: 2791.12m

CLAYSTONE: med gry-med dk gry,
olv gry-lt olv gry, sft-frm, sbblky-
blky, tr carb mat, tr micmic

CLAYSTONE: med gry-med dk gry,
olv gry-lt olv gry, sft-mod hd,
sbblky-blky, tr carb mat.

ARGILLACEOUS SILTSTONE:
brnsh blk, olv blk, olv gry-brnsh
gry, sft-frm, sbblky-blky, tr carb
mat, tr lith frags,

SURVEY @ 2819.89m
Incl 1.94° AZI: 85.21°
TVD: 2819.50m

SANDSTONE: wh-v lt gry, clr-opq,
10% f, 30% med, 50% crs, 10% v crs,
lse-mod hd, pr-mod wl srt, rnd-ang,
sbsph-sph, tr sil cmt, gd inf vis
por, no fluor.

SURVEY @ 2847.72m
Incl 2.06° AZI: 83.71°
TVD: 2847.31m

SILTSTONE: brnsh blk, olv blk,
olv gry-brnsh gry, sft-frm, sbblky-
blky, tr carb mat, tr lithic
frags, tr grd to ARG SLTST.

COAL: brn blk-blk, olv gry,
sft-frm, sbblky-blky, dull-
sbvit.

CLAYSTONE: med gry-med
dkgry, olv gry-lt olv gry,
sft-mod hd, sbblky-blky,
com carb mat.

SURVEY @ 2876.19m
Incl 2.24° AZI: 81.90°
TVD: 2875.76m

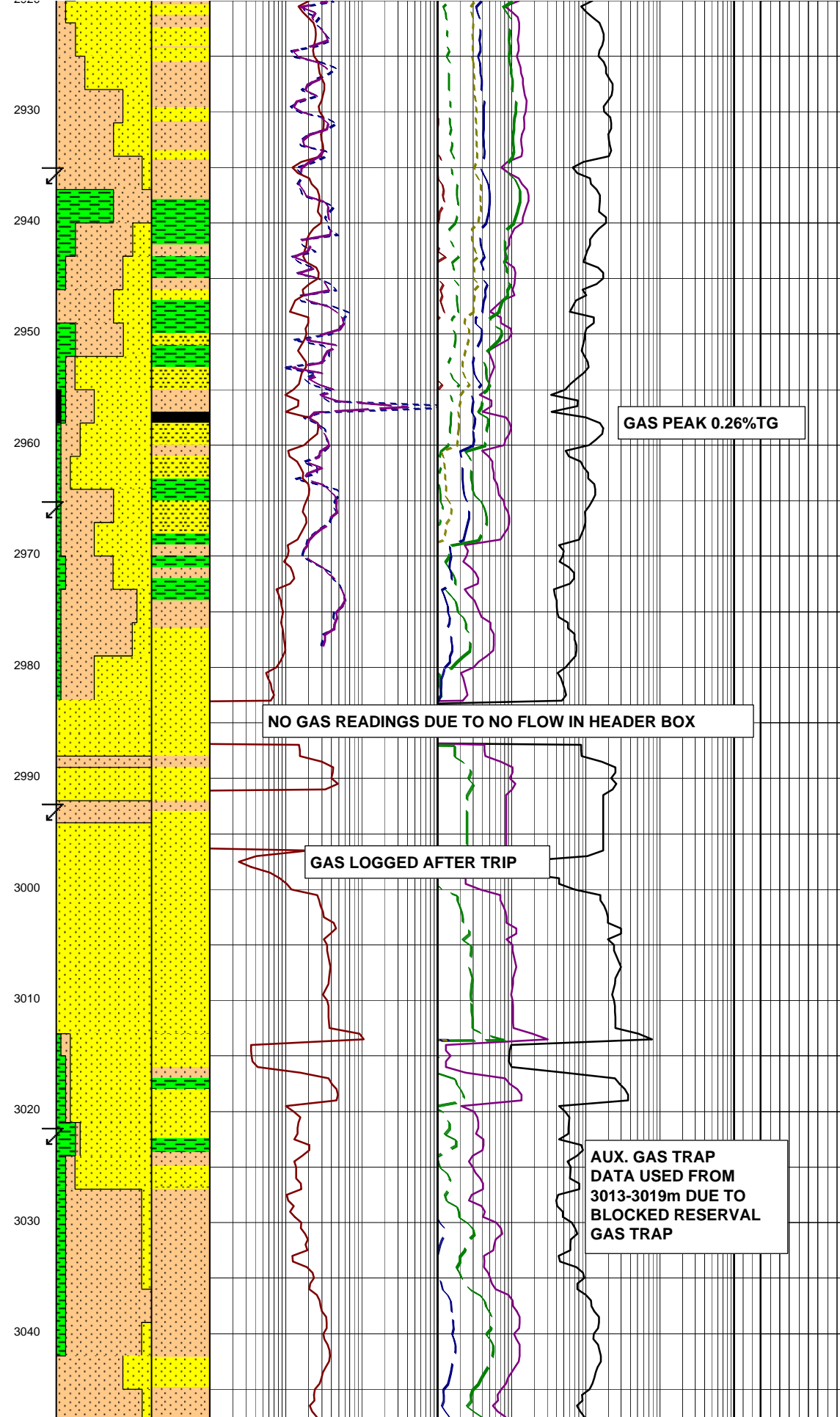
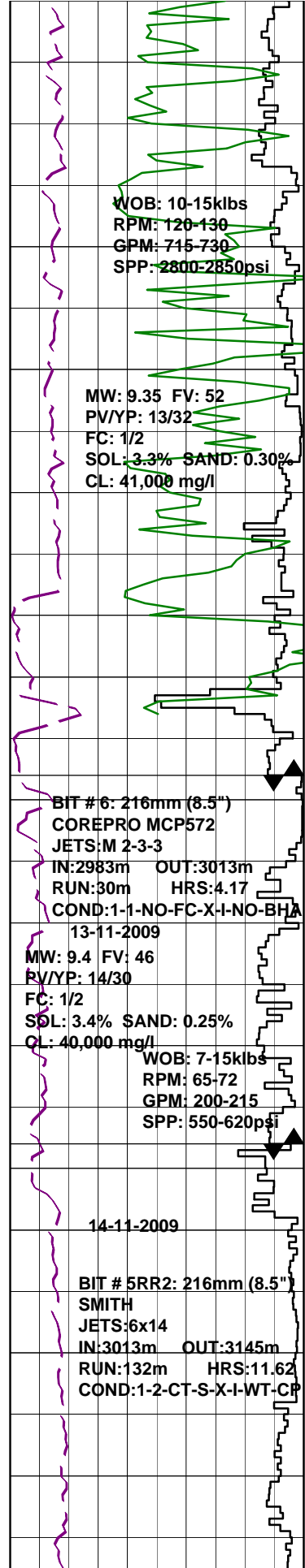
SANDSTONE: wh-v lt gry, 40%
v f, 60% f, frm, mod-wl srt, sbrnd-
sbang, sbsph, tr sil cmt, tr carb
mat, fr inf vis por, no fluor.

COAL: brn blk-blk, olv gry,
sft-frm, sbblky-blky, dull-
sbvit.

SURVEY @ 2905.64m
Incl 2.46° AZI: 85.79°
TVD: 2905.19m

SANDSTONE, wh-v lt gry, 40%
vf, 60% f, frm, sbrnd-sbang, mod-
wl srt, sbsph, tr sil cmt, tr
carb mat, tr disp coal pieces,
fr infr vis por, no fluor.

CLAYSTONE: olv gry, olv blk,
sft-frm, sbblky-blky, increase
in carb mat.



SILTSTONE: olv gry, brn blk,
sft frm, sbblky-blky, tr carb
mat as thn lam spks, tr lithic
frags, tr micmic, tr blk, bright
coal pieces.

SANDSTONE: olv gry, mott, fri,
lithofelds, vf grs, 30% f grs,
mod srt, sbsph, 10% cly mtx,
2% carb mat, 1% alt felds, tr
lithic frags, fr vis por, no fluor.

CLAYSTONE: olv blk, sft frm,
blky-sbblky, tr dk mica flks.

SURVEY @ 2935.67m
Incl 2.58° AZI: 82.74°
TVD: 2935.19m

COAL: blk, grysh blk, sft, sp.

CLAYSTONE: brnsh gry-brnsh blk,
olv blk, sft frm, sbblky, tr carb
strks.

SURVEY @ 2963.22m
Incl 2.93° AZI: 85.15°
TVD: 2962.71m

SANDSTONE: wh-v lt gry, olv gry,
mott, lt gry, clr, opq, tr yelsh, gry,
5% vf, 5% f, 20 med, 40% crs, 30% v
crs, tr gran grs, lse-mod hd, pr-
mod srt, sbrnd-sbang, sbsph-sph, tr
carb mat, tr micmic flks, gd inf vis
por, no fluor.

CORE RUN # 1
2983 - 3013 mMDRT
CUT 30m, REC 31.2m
104%

SANDSTONE: wh-v lt gry, yelsh
gry, clr, vf-v crs grs, frm-hd, pr
srt, sbrnd-ang, sbsph-sph, 7-10% sil
cmt, 1% mic flks, fr inf vis por,
tr-1% amber, no fluor.

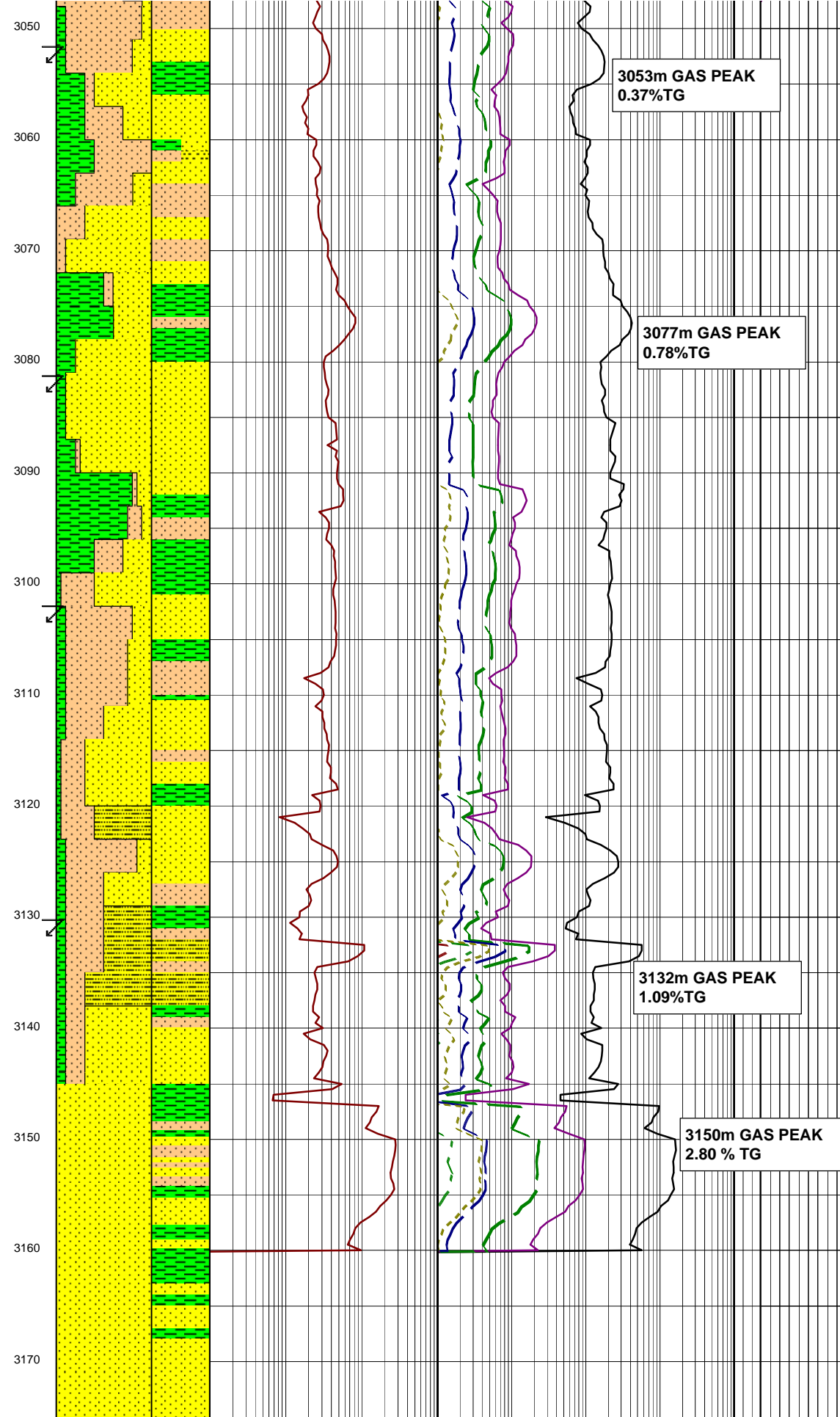
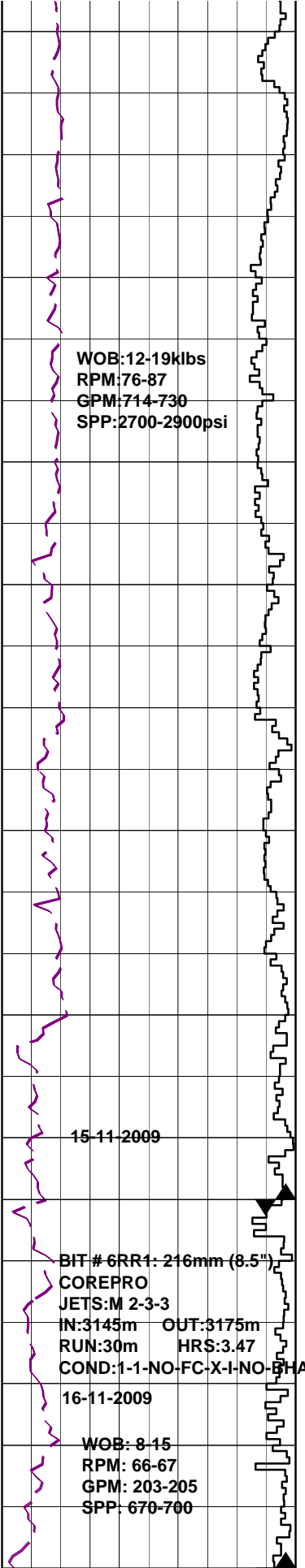
SILTSTONE: med gry-med dk gry,
dk gry, mod hd-hd, blky-sbfiss,
15-25% mic flks.

SURVEY @ 2992.32m
Incl 2.88° AZI: 83.61°
TVD: 2991.77m

SURVEY @ 3021.53m
Incl 3.01° AZI: 83.20°
TVD: 3020.94m

SANDSTONE: lse qrtz grns, clr,
opq, v lt gry, crs grs, 10% v crs,
10% med grs, ang(shtd)-sbang to
sbrnd, mod srt, sbelg-sbsph, tr wh
cly mtx, adhr to grn surfaces & i/p
recon as sft, stcky, amorph cly, fr-
gd vis por inf, no fluor.

SILTSTONE: olv blk, olv gry, sft-
frm, sbblky-sbfiss i/p, 2% mica
flks, incl lra muscovitic typ.



tr lith frags,tr carb mat.

SURVEY @ 3051.62m
Incl 3.07° AZI:82.21°
TVD:3050.99m

SANDSTONE:v lt gry,grysh blk, clr & opq,qtzose,20% v f-60% f gr aggs,20% crs gr lse,sft-fri aggs,ang & shatt lse frac,sbang-sbrnd,pr srt,sbsph-sbelg,aggs w/ 10% cly mtx,10% slt & wk sil cmt, tr mic flks,tr carb spks, lse frac w/ wh cly mtx to grs,fr vis por,no fluor.

SURVEY @ 3080.66m
Incl 3.23° AZI:81.34°
TVD:3079.99m

CLAYSTONE:brnsh gry,frm, sbblky-blky,tr micmic,tr carb mat,f lam.

SURVEY @ 3101.98m
Incl 3.47° AZI:82.50°
TVD:3101.27m

SILTSTONE:v lt gry-lt gry,med lt gry-med dk gry,sft-frm,sbblky-blky,com carb lam,tr micmic,grd to ARG SLTST i/p.

SANSTONE:wh-v lt gry,clr,tr lt grnsh gry,10% v f,55% f,30% med,5% crs grs,sft-mod hd, mod srt,rnd-sbrnd,sbsph-sph,tr micmic,tr lith frag,fr inf vis por,nofluor.

SURVEY @ 3130.21m
Incl 3.75° AZI:81.59°
TVD:3129.44m

ARGILLACEOUS SANDSTONE: wh-v lt gry,clr,yelsh gry,tr lt grnsh gry,med dk gry-brnsh gry, 50% v f,40% f,50% med,5% crs grs,20% cly,sft-frm,mod-wl srt, sbrnd-rnd,sbsph-sph,tr carb mat, tr lith frag,tr micmic,pr inf vis por,no fluor.

CORE RUN # 2
3145 - 3175 mMDRT
CUT 30m, REC XX.Xm

SANDSTONE:wh-v lt gry,yelsh gry,10% vf,90% f grs,sft-frm, sbrnd-sbang,sbsph-sph,com sil cmt, tr grnsh gry-dk grnsh gry ambr,tr mic flks,pr inf vis por,no fluor.

SANDSTONE:w-v lt gry,lt gry,tr yelsh gry,tr lt grnsh gry,vf-crs grs frm-hd sbrnd-sbang sbsph-sph

