



# 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

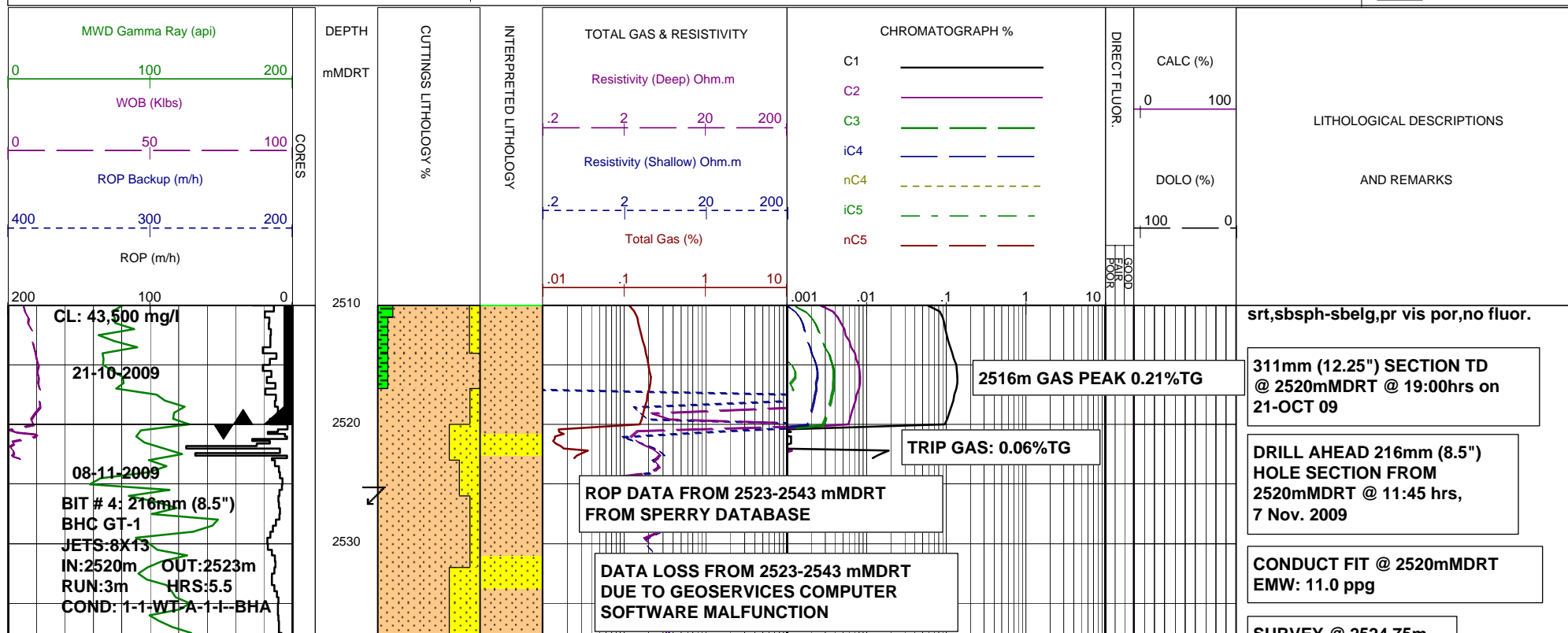
MW MUD WEIGHT NB NEW BIT  
FV FUNNEL VISCOSITY RR RERUN BIT  
PV PLASTIC VISCOSITY CB CORE BIT  
YP YIELD POINT WOB WEIGHT ON BIT  
FC FILTER CAKE RPM REVS PER MINUTE  
SOL SOLIDS FLC FLOW CHECK  
CR CIRCULATE RETURNS WL FILTRATE  
SD SAND - % PR POOR RETURNS  
S SALINITY - PPM NR NO RETURNS  
RM MUD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

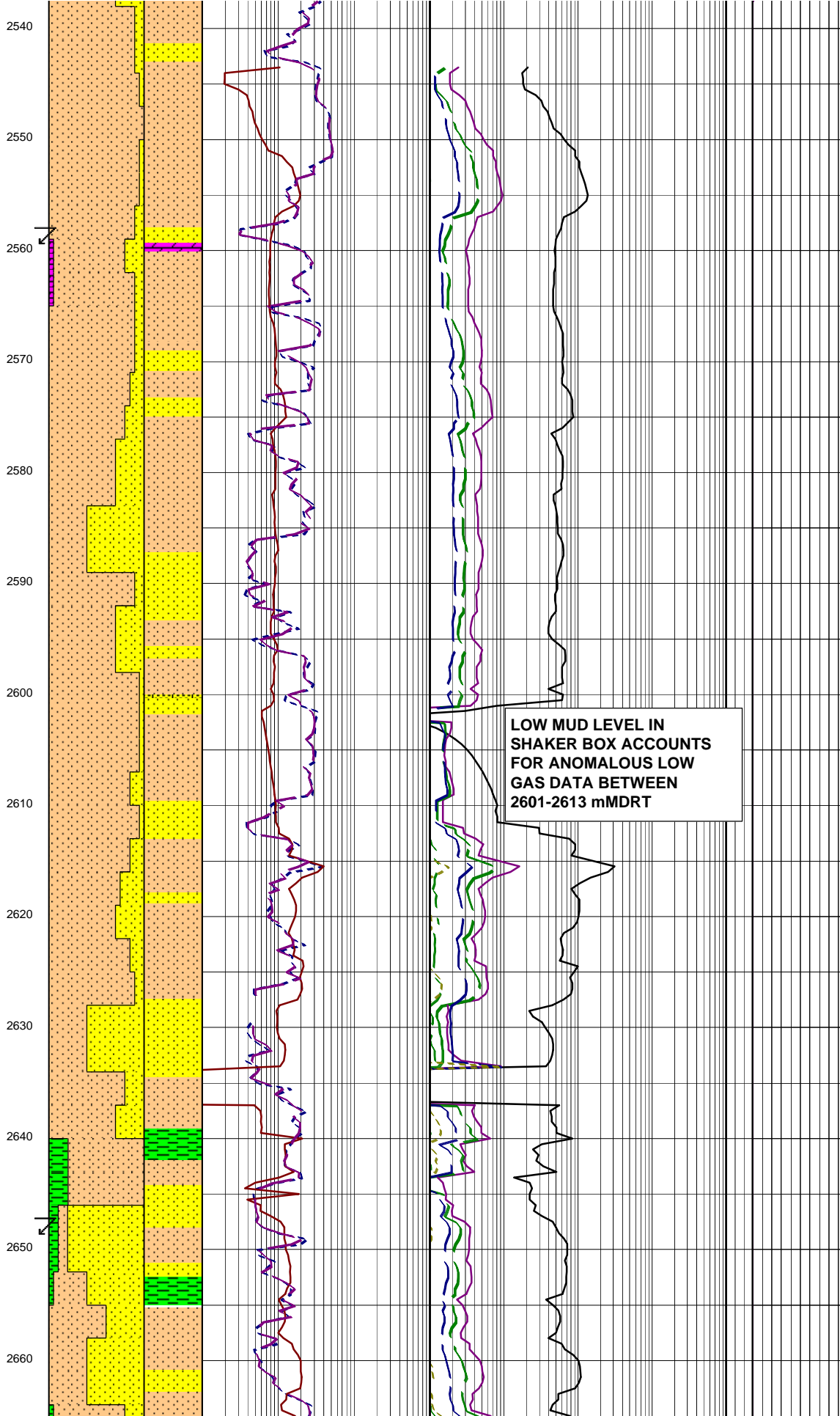
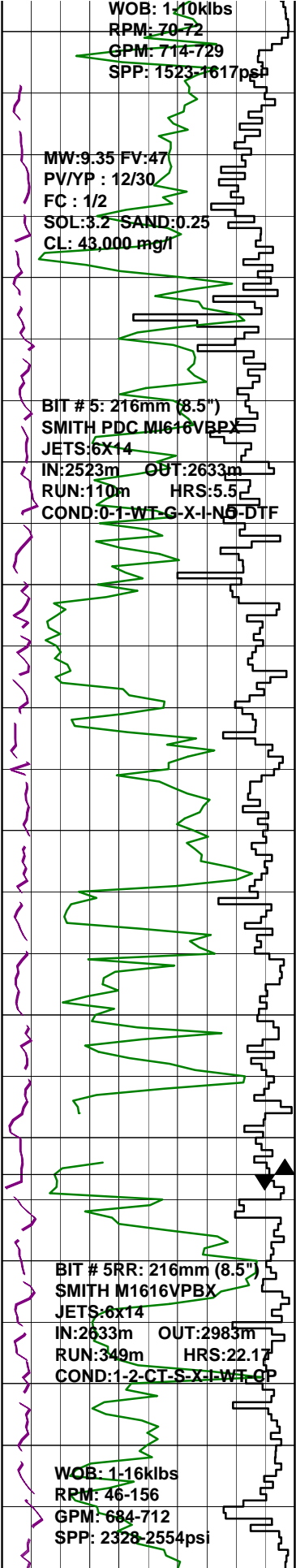
## LITHOLOGY LEGEND

	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
	Calcimetry





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,  
sbbiky w/- conch frac i/p.

SILTSTONE: pred brnsh blk, tr  
olv gry & brnsh gry, sft-frm, blk-  
sbbiky, 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-  
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.

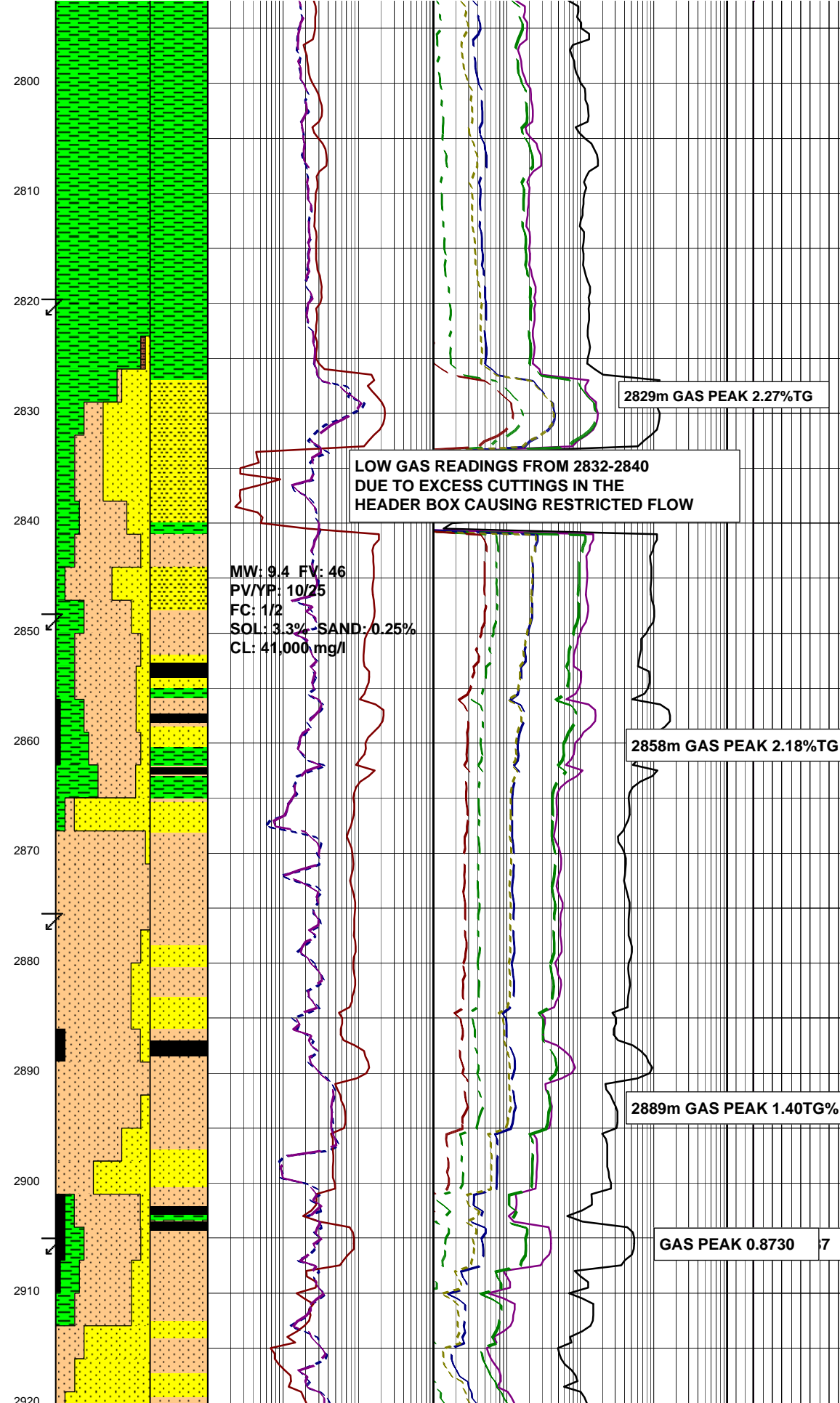
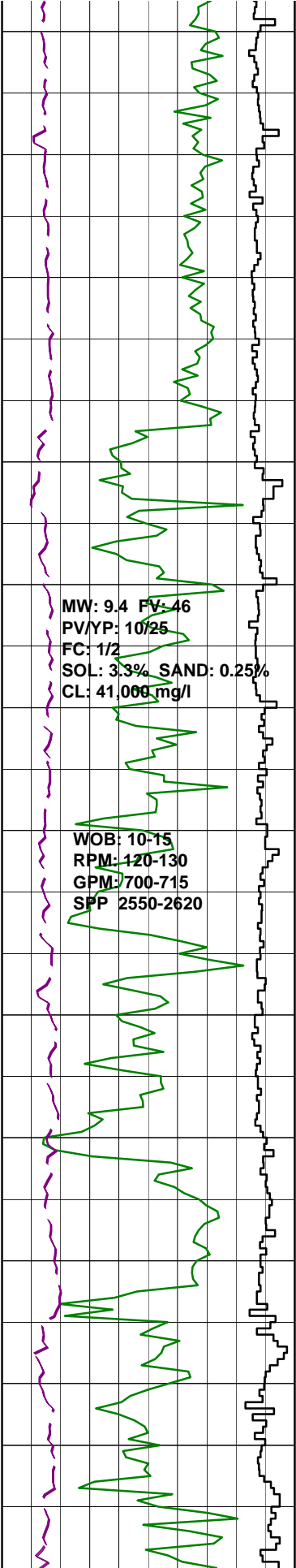
POOH @ 2633 mMDRT DUE TO  
LWD 'PULSER' FAILURE. P/U  
COMPLETE LWD TOOL STRING

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

This figure is a detailed geological cross-section of the T1201 well. The vertical axis represents depth in meters, ranging from 2670 to 2790. The leftmost column shows the stratigraphic column with various lithologies represented by different patterns and colors: yellow for sandstone, blue for shale, green for siltstone, and brown for claystone. To the right of the stratigraphic column are several logs: a gamma-ray log (red line), a resistivity log (blue line), a neutron log (green line), and a density log (black line). The logs show the variation of these properties with depth, which is used to identify and correlate different geological units. The stratigraphic column is divided into several units, including the T1201 formation, which is further subdivided into T1201-1, T1201-2, and T1201-3. The T1201-1 unit is characterized by yellow sandstone, while the T1201-2 unit is composed of blue shale. The T1201-3 unit is a green siltstone. The logs show that the resistivity is high in the sandstone units and low in the shale units, which is a typical characteristic of these rock types. The gamma-ray log shows a high value in the shale units and a low value in the sandstone units. The neutron log shows a high value in the sandstone units and a low value in the shale units. The density log shows a high value in the sandstone units and a low value in the shale units. The logs are used to identify and correlate different geological units, which is essential for understanding the subsurface geology and for planning oil and gas production.

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

**SURVEY @ 2791.49m**  
Incl 1.82° AZI-85.20°



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, sb sph-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 dk gry, 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, sb sph, tr sil cmt, tr carb mat, fr inf vis por, no fluor.

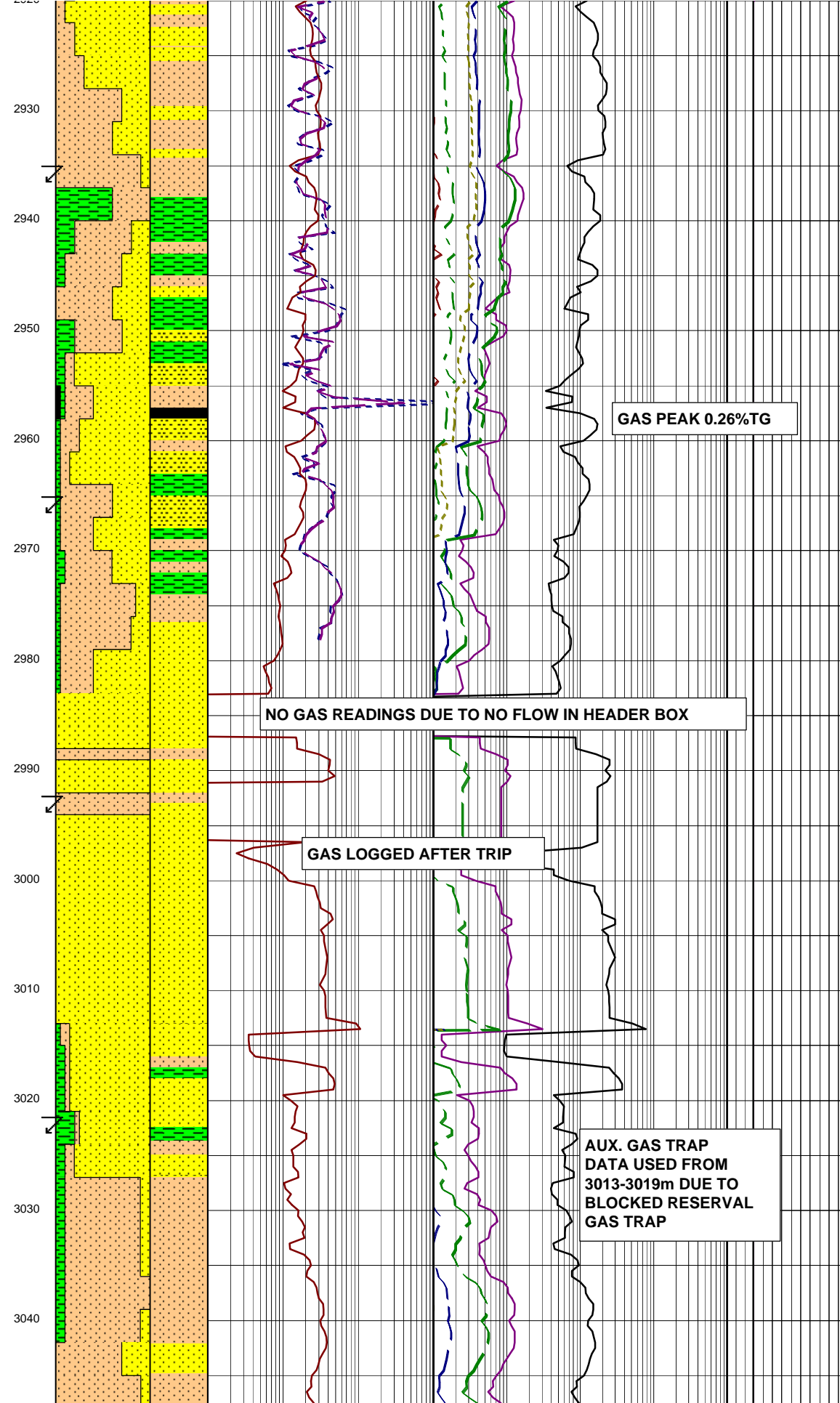
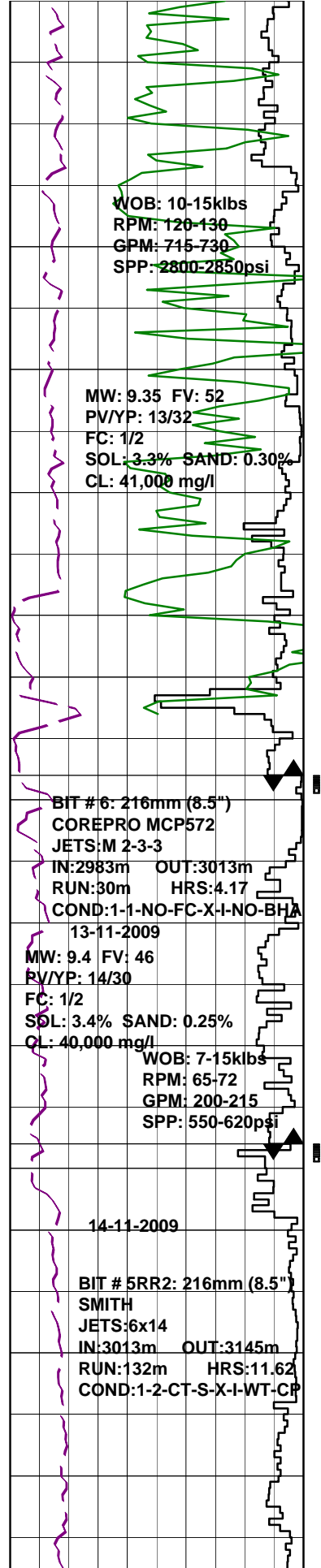
COAL: brn blk-blk, olv gry, sft-frm, sbblky-blky, dull-sbvit.

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

SANDSTONE: wh-v lt gry, 40% v f, 60% f, frm, sbrnd-sbang, mod-wl srt, sb sph, 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.

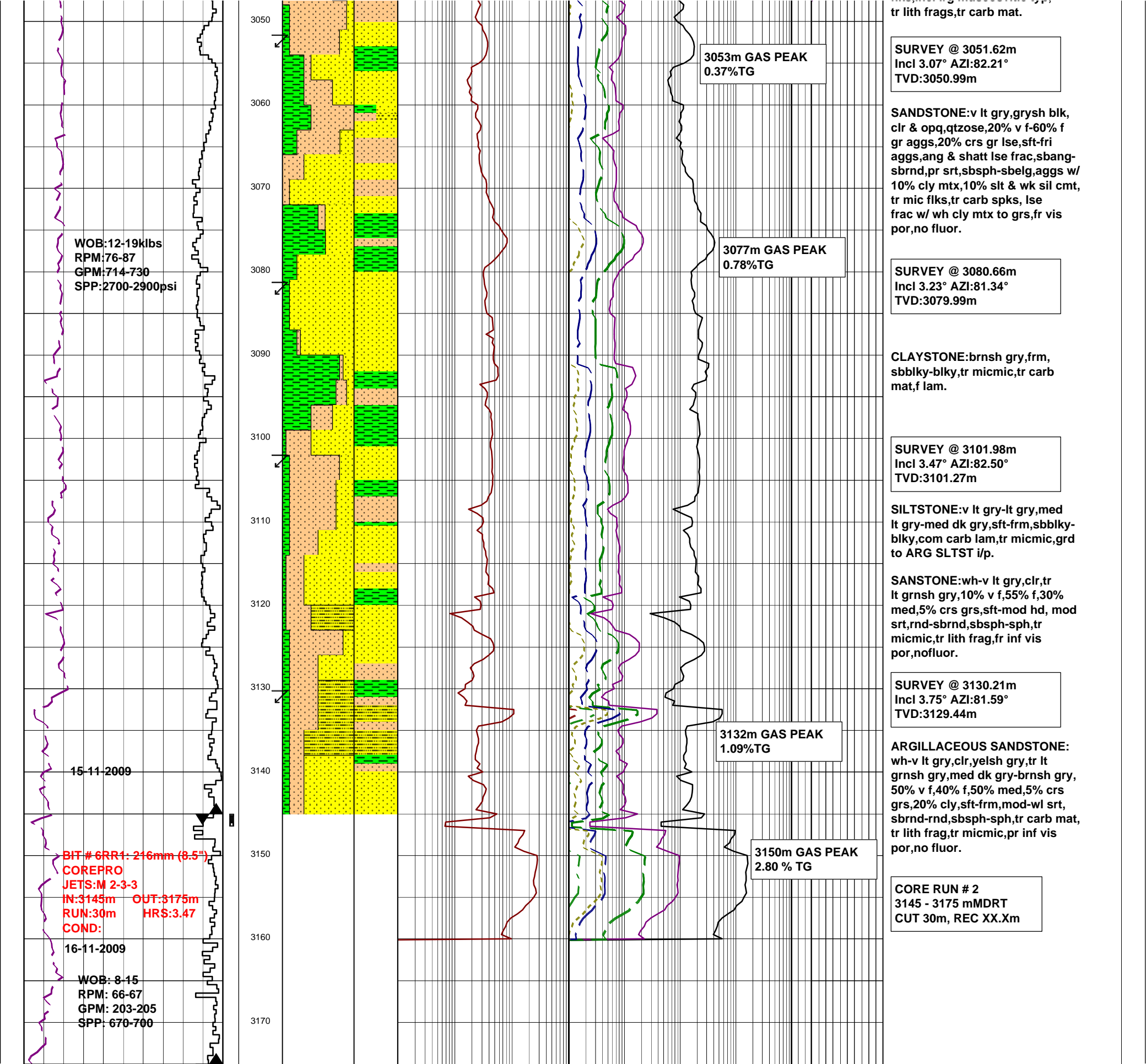
SILTSTONE: med gry-med dk gry,  
dk gry, mod hd-hd, blky-sbfiss,  
15-25% mic flks.

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.



[illegible]