



Company : Apache

Well : Madfish-1

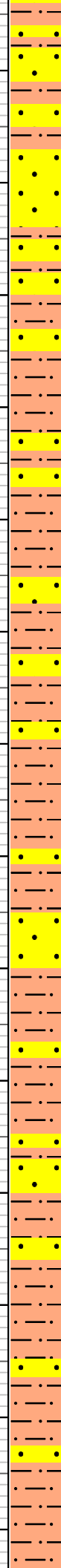
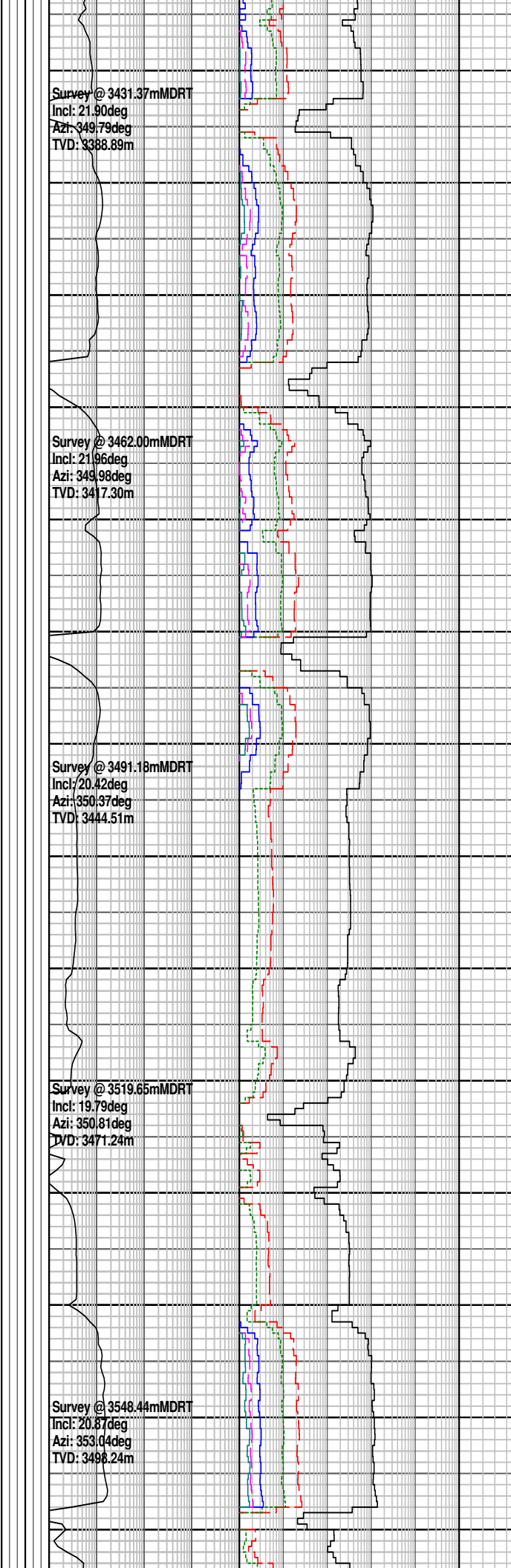
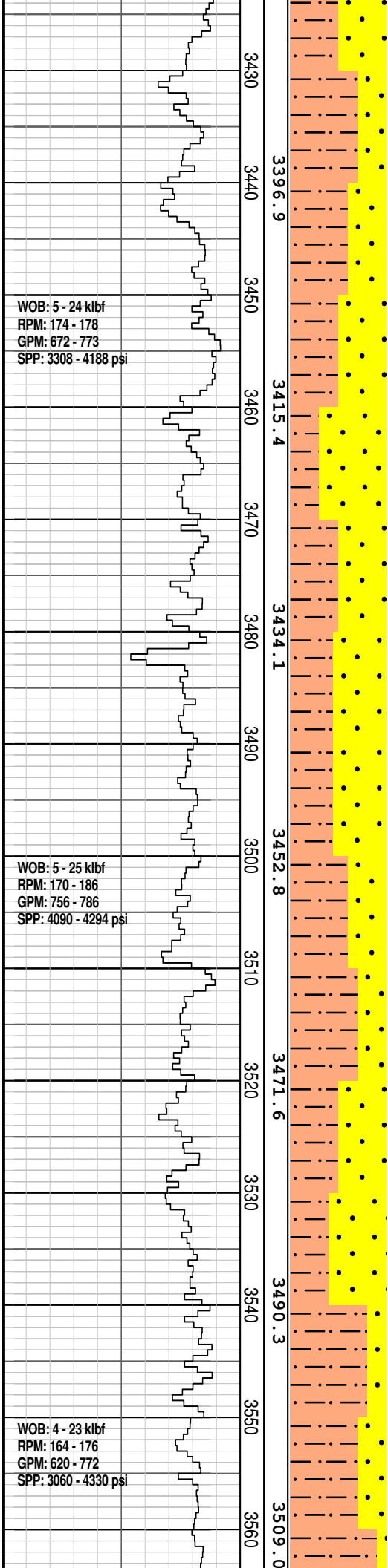
Interval : 3326.00 - 3860.57 meters

Created : 08/Dec/2008 7:39:33 AM

INTEQ

FORMATION EVALUATION LOG

Drilling Rate		MD meters	TVD meters	Cuttings Lithology	Visual Inferred Porosity	Oil Show	Gas Data	Chromatograph Data	Calcmetry	Interpreted Lithology	Lithology Description
ROP (m/hr)	ROP (m/hr)						Gas Hydrocarbon Avg %	Methane ppm			
200	200						0.1 1 10 100	100000			
180	180							100000	CaCO3 %		
160	160							100000	MgCO3 %		
140	140							100000			
120	120							100000			
100	100							100000			
80	80							100000			
60	60							100000			
40	40							100000			
20	20							100000			
		3330	3306.3				Survey @ 3321.40mMDRT Incl: 30.35deg Azi: 355.39deg TVD: 3290.25m				Reached 311 mm (12 1/4") section TD @ 3337.0 mMDRT @ 23:00 hrs on 4th December 2008.
		3340	3306.3				Survey @ 3345.18mMDRT Incl: 30.05deg Azi: 353.68deg TVD: 3310.81m				CLAYSTONE: med gry-med dk gry, mnr olv gry, mod calc, slty i/p & grad to ARG SLTST, mnr carb mat, com micmic, tr v f lith, tr v f glauc, disp i/p, frm-mod hd, dom frm-brit, com mod hd, sbbly-sbfiss, r fiss-splin, com amor
		3350	3306.3				Survey @ 3370.43mMDRT Incl: 26.45deg Azi: 349.79deg TVD: 3332.86m				SANDSTONE: clr-trnsl, v f-v crs, dom v f-f, abdt med, mnr crs-v crs, wl srt, ang-rnd, dom sbang-sbrnd, mnr ang, tr nod pyr, mnr glauc, tr mic flk, disagg, gd inf por, n shw
		3360	3323.8								
		3370	3341.7								
		3380	3341.7								
		3390	3359.9								
		3400	3359.9				Survey @ 3398.43mMDRT Incl: 23.17deg Azi: 349.79deg TVD: 3358.46m				
		3410	3359.9								
		3420	3378.4								SILTSTONE: olv blk, v aren, com arg mtz, mnr-com carb lam & spks, tr v f glauc, com micmic, mnr nod & dissem pyr, com f qtz, grd to SLTY SST i/p, frm-brit, sbbly

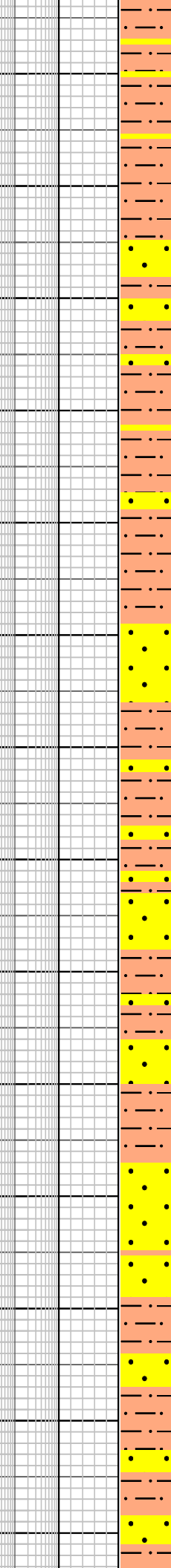
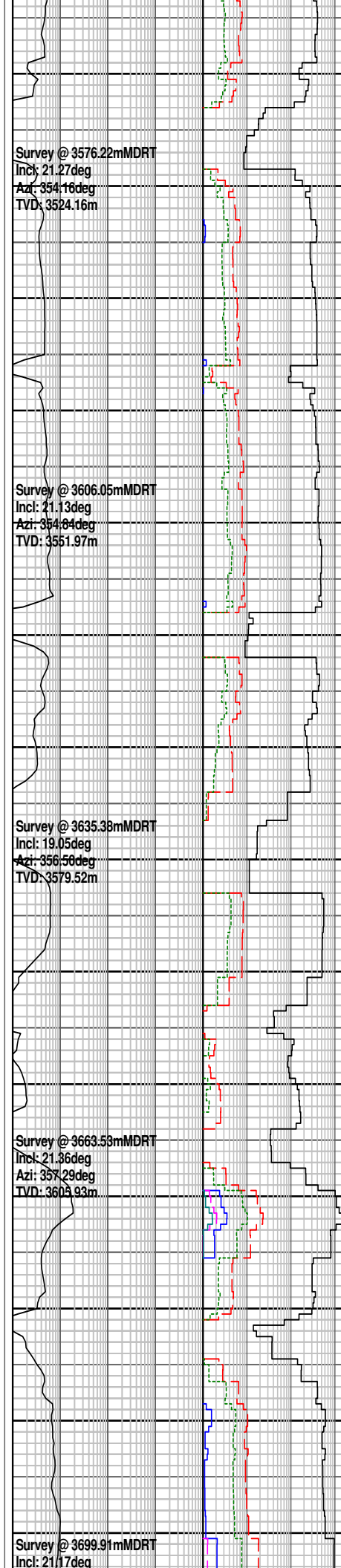
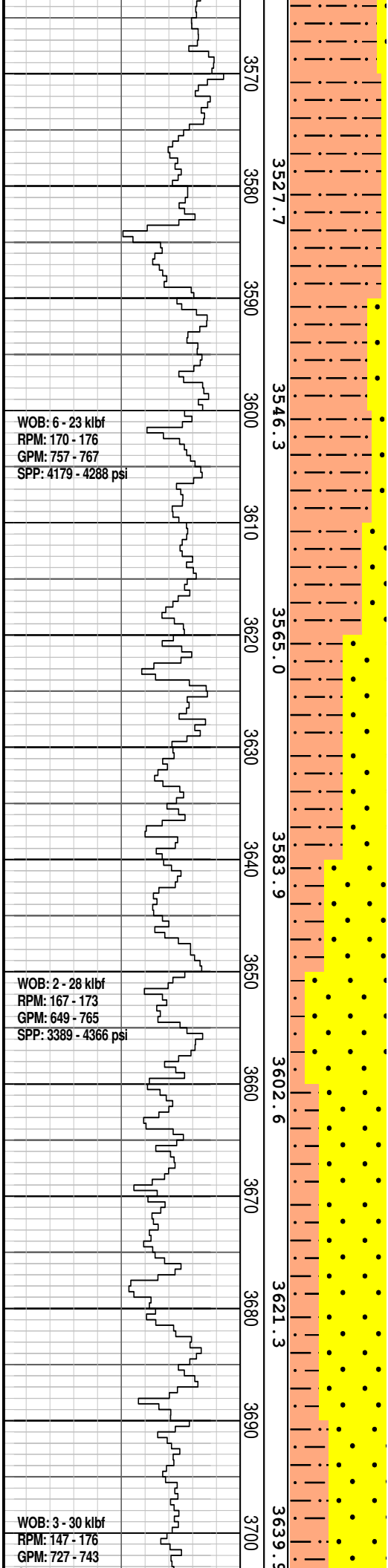


SANDSTONE: clr-trnsl, v f-crs, dom f, abdt v f, com med, r crs, wl srt, ang-rnd, dom sbrnd-rnd, abdt sbang, mnr ang, tr res pyr cmt, tr pyr nod, tr v f glauc, tr carb mat, tr mic flk, dissagg, fr inf por, n shw

SILTSTONE: olv blk, v aren, com arg mtx, sbblky, com carb lam & mat, tr v f glauc, com micmic, mnr nod & dissep pyr, com f qtz, grd to SLTY SST i/p, com-abdt carb lam & spks, frm-m

SANDSTONE: clr-trnsl, v f-f, r med gr, wl srt, sbang-sbrnd, mnr wk calc cmt, com-abdt olv gry sity mtx & com grd to AREN SLTST, com carb lam & spks, gen disagg, mnr frm agg, pr vis por, fr inf por, n shw

SILTSTONE: olv blk, v aren, com arg mtx, com carb lam & mat, tr v f glauc, com micmic, tr nod pyr, com grd to SLTY SST, com-abdt carb lam & spks, sft-mod hd, dom frm-brit, com sft, com mod hd, sbblky



SANDSTONE: clr-trnsl, v f-f, r med gr, wl srt, sbang-sbrnd, tr wk calc cmt, com-abdt olv gry slty mtx & com grd to AREN SLTST, com lith, gen disagg, mnfr frm agg, pr vis por, fr inf por, n shw

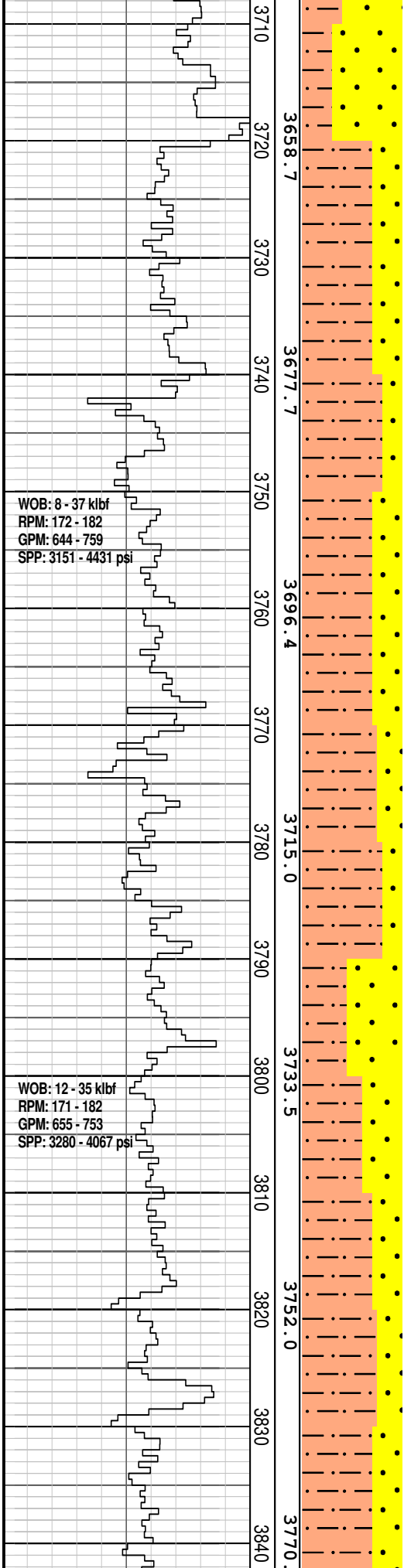
SILTSTONE: olv gry, med brn gry, aren & com grd to SLTY SST, loc com arg mtx, com carb lam & spks, mnfr calc mat, tr v f glauc, com micmic, tr nod pyr, frm-mod hd, sbblky

SANDSTONE: lt brn-olv gry, trnsl i/p, v f-med gr, occ crs fros ang gr, dom v f, gen wl srt, rnd-sbang, mnfr wk calc cmt, com-abdt olv gry slty mtx & com grd to AREN SLTST, com carb lam & spks, com lith, mnfr nod pyr & glauc mat, gen disagg, mod hd v f gr agg, pr-fr inf por, n hdyc fluor

SILTSTONE: olv gry, med brn gry, aren & com grd to SLTY SST, loc com arg mtx, com carb lam & spks, mnfr calc mat, tr v f glauc, com micmic, tr nod pyr, frm-mod hd, sbblkv

SPP: 4043 - 4169 psi

07/12/08



WOB: 8 - 37 klbf
RPM: 172 - 182
GPM: 644 - 759
SPP: 3151 - 4431 psi

WOB: 12 - 35 klbf
RPM: 171 - 182
GPM: 655 - 753
SPP: 3280 - 4067 psi

Azi: 0.10deg
TVD: 3639.8m

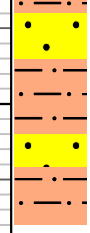
Survey @ 3726.65mMDRT
Incl: 18.09deg
Azi: 13.22deg
TVD: 3665.0m

Survey @ 3756.94mMDRT
Incl: 21.43deg
Azi: 1.01deg
TVD: 3693.5m

Survey @ 3787.49mMDRT
Incl: 22.10deg
Azi: 344.54deg
TVD: 3721.9m

Survey @ 3816.09mMDRT
Incl: 20.73deg
Azi: 337.43deg
TVD: 3748.6m

3658.7
3677.7
3696.4
3715.0
3733.5
3752.0
3770.0



POOH due to MWD tool failure

SANDSTONE: lt brn-olv gry, mnr off wh-trnsl, v f-med gr, occ crs fros ang gr, dom v f, gen wl srt, rnd-sbang, mnr wk calc cmt, incr com mod stg pyr cmt, com-abdt olv gry slty mtX & com grd to AREN
SLTST, com carb spks, com lith, mnr pyr, com glauc mat, gen disagg, occ rk flour, r mod hd agg, v pr vis por, n hydc fluor

SILTSTONE: olv gry, med brn gry, v aren & com grd to **SLTY SST,** mnrg, com carb lam & spks, mnrcalc mat, tr v f glauc, com micmic, tr nod pyr, frm-mod hd, sbblky

SANDSTONE: lt brn-olv gry, mnr off wh-trnsl, v f-med gr, occ crs fros ang gr, dom v f, gen wl srt, rnd-sbang, mnrcalc cmt, incr com mod stg pyr cmt, com-abdt olv gry slty mtX & com grd to AREN
SLTST, com carb spks, com lith, mnrcalc mat, gen disagg, occ rk flour, r mod hd agg, v pr vis por, n hydc fluor

Dropped carbide @ 3824.0 m and hole is ingauge

