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GEOLOGICAL REPORT
DRILLING TIME AND SAMPLE LOG

WELL NAME:	BIGLAKE 1	RIG:	Ensign 707
LEASE:	BIGLAKE 1	CONTRACTOR:	Ensign Drilling
COUNTY:	Cooper Basin	STATE:	SA
COORDINATES:	1777 FSL 1417 FWL	SECTION:	36
TOWNSHIP:	34S	RANGE:	1E
PROJECTION:	GDA 94 Zone 54	DATUM:	GDA 94
ELEVATIONS:	KB: 37.00	GL:	36.00
SPUD:	20-Jun-11	COMPLETED:	28-Jun-11
TOTAL DEPTH:	4500 m RTD	TOTAL DEPTH:	4500 m RTD
DRILLING TIME START FROM:	2000 m RTD	CASING:	9 5/8" @ 1000 m RTD
SAMPLE START FROM:	2000 m RTD	CORING:	NONE
DRILLING TIME KEPT FROM:	2000 m RTD	DST:	NONE
SAMPLE KEPT FROM:	2000 m RTD	SAMPLE SHOWS:	YES
GEOLOGICAL SUPERVISION:	FULL TIME	WELL STATUS:	Abandoned
DRILLING TIME RECORDED BY:	ELECTRICAL		
SAMPLE DESCRIPTION BY:	Tim Priest		
FORMATION TOPS:	ELECTRICAL LOG		
DRILLING TIME:	ELECTRICAL LOG		
SAMPLES:	Nil		

REMARKS: Due to the results of DST4, it was decided to plug and abandon the well.

Respectfully Submitted,

Tim Priest
Petroleum Geologist

API #15-053-21988-00-00

LEGEND

Drilling Time | Gas | Sample Shows | Lithology | Cuttings | Sample Description | Remarks

DRILLING TIME IN Minutes/Metre (m/h)

Gas Units (%)

DEPTH (m)	Sample Description	Remarks
2100		Arbuthlie 2052(-1045)
		Bower Arbuthlie 2102(-1095)
2150	La con-tan, fr-vf, loa-fm sst, p-f int ob ppr, NS	
	Sh-gm-gry, silty	
	La con-tan, fr-vf, loa, chky, p-f int ob ppr, NS	
	La con-tan, vfr-vf, chky, dmw	
	Ss-tan	
2200	Sh-lt gry, vfr-gm, w/gry silts & SS	
	Sh-gm-gry	
	Ls con, fr-sd, sol, vf chky, f int ob ppr, NS	
	Sh-gm-gry	
	Sh-blk	
	Ls con-lt gry, fr-sd, loa, chky, f int ob ppr, NS	
	Sh-gry, w/lt gry chky Ls	
2250	Ls con-gry, fr-sd, loa, chky, f int ob & ml frag ppr, NS	
	Sh-gry	Allamuchy 2400 (-1395)
	Ls con-lt gry, vfr-sd, dmw	
	Sh-gm-gry-maroon, calc	
	Sh-gry-blk	Toolachi 2602 (-1595)
2300	Ls con, fr-sd, loa, vf chky, p int ob ppr, NS	
	Sh-gry	Lanning 2612 (-1604)
	Ls con-lt gry, fr-sd, loa-sol, chky, vf chky, p-f int frag ppr, NS	
	Ls con, fr-sd, loa, chky, p int ob ppr, NS	
	Ls con-lt gry, vfr-sd, sl chky, wh gry SS	
2350	Ls con-lt gry, fr-sd, loa-sol, chky, vf chky, p-f int frag ppr, NS	
	Sh-gry	
	Ls con-lt gry, vfr-sd, dmw	
	Sh-gry-blk gry	
	Ls con-lt gry, fr-sd, loa-sol, chky, vf chky, p-f int frag ppr, NS	
	Sh-gry	
	Ls con-lt gry, vfr-sd, dmw	
	Sh-gry-gry	Muncie Creek 4090 (-1585)
2400	Ls-tan-gry, vfr-sd, dmw	
	Sh-gry	
	Ls con-lt gry, fr-sd, loa, sol chky, p-f int ob ppr, NS	
	Ls con-lt gry, mic-sd, dmw	
	Sh-gry-blk gry	
2450	Sh-gry-gry	
	Ls con-tan, fr-vf, loa, sl chky, p-f int ob & int ppr, NS	DST # 3 (4087-4121) 1 hr IF, 1 hr ISI, 1 hr FF, 1 hr FSI. Rec 1 m of mud. Max temp 100 deg F.
	Ls con-tan, fr-vf, loa, sl chky, p-f int ob & int ppr, NS	
	Ls con-lt gry, vfr-sd, dmw	
	Ls con-tan, fr-vf, loa, sl chky, p-f int ob ppr, w/ sm yellow ssgs, NS	
	Ls con-lt gry, fr-sd, loa-sol, chky, vf chky, p-f int ob & int ppr, NS	
	Ls con-tan-lt gry, vfr-sd, chky, dmw	Stuart Shale 4100 (-1595)
2500	Sh-blk, carb	
	Ls con-tan-lt gry, vfr-sd, chky, p-f int ob ppr, w/ sm yellow ssgs, NS	
	Ls con-lt gry, fr-sd, loa, fms, chky, vf chky, p-f int ob ppr, NS	
	Ls con-lt gry, fr-sd, loa-sol, chky, p-f int ob & int ppr, NS	Sun 4140 (-1635)
	Ls con-tan-lt gry, vfr-sd, chky, dmw	
	Ls-tan-gry, vfr-sd, dmw	Beri 4157 (-1652)
	Sh-var col	
	Ls-lt gry-gry, vfr-sd, dmw	
	Sh-var col, silty	
2550	Ls con-lt gry, mic-sd, sl fms, dmw	Murraroo 4200 (-1695)
	Sh-blk, carb	
	Sh-red-gry-gry, calc	
	Sh-red-maroon, soft	
	Ls-tan-lt gry, mic-sd, dmw	
	Ls con, fr-vf, sl fms, v chky, p-f int ob ppr, spot oil & gas in int ppr, v chky, f flor	DST # 4 (4207-4241) 1 hr IF, 1 hr ISI, 1 hr FF, 1 hr FSI. Rec 1 m of mud. Max temp 100 deg F.
	Sh-gry-gry	
2600	Ls con-lt gry, vfr-sd, fms, chky, vf chky, dmw	Patchawarra 4207 (-1702)
	Sh-blk, carb	
	Ls con-tan-lt gry, vfr-sd, chky, dmw	
	Ls con-lt gry, fr-sd, loa, chky, p-f int ob ppr, w/ sg, f gs	
	Sh-wx blk, carb, wmw var col	Epsilon 4217 (-1712)
	Ls-tan-gry, vfr-sd, dmw	
	Sh-var col	
	Ls-lt gry-gry, vfr-sd, dmw	
	Sh-var col, silty	
2650	Ls con-lt gry, mic-sd, sl fms, dmw	Nappamerri 4300 (-1815)
	Sh-blk, carb	
	Sh-red-gry-gry, calc	
	Sh-red-maroon, soft	
	Ls-tan-lt gry, mic-sd, dmw	
	Ls con, fr-vf, sl fms, v chky, p-f int ob ppr, spot oil & gas in int ppr, v chky, f flor	DST # 5 (4307-4341) 1 hr IF, 1 hr ISI, 1 hr FF, 1 hr FSI. Rec 1 m of mud. Max temp 100 deg F.
	Sh-gry-gry	
2700	Ls con-lt gry, vfr-sd, fms, chky, vf chky, dmw	Patchawarra 4307 (-1902)
	Sh-blk, carb	
	Ls con-tan, mic-sd, dmw	
	Sh-blk, carb	
	Ls-gry-blk gry	
2750	Ls con-lt gry, vfr-sd, chky, dmw	
	Ls-tan-gry, vfr-sd, dmw	
	Sh-blk, carb	
	Sh-gry-blk gry	Murta Member 4378 (-1973)
	Ls con-lt gry, vfr-sd, chky, chky, no vis por, NS	
	Ls con-lt gry, mic-sd, sl chky, dmw	Fort Sorell 4400 (-1995)
	Sh-blk, carb	
	Ls con-tan-gry-medl, vfr-sd, sol in part, chky, dmw	Cheepdee Shale 4411 (-2006)
	Ls con-lt gry, mic-sd, sl chky, dmw	
	Ls-tan-gry, mic-sd, sl chky, dmw	
2800	Sh-blk, carb	
	Ls con-lt gry, fr-sd, fms, chky, no vis por, NS	DST # 6 (4447-4481) 1 hr IF, 1 hr ISI, 1 hr FF, 1 hr FSI. Rec 1 m of mud. Max temp 100 deg F.
	Ls con-tan, vfr-sd, dmw	
	Sh-blk, carb, w/lnt bed tan-gry Ls	Johnson Zone 4471 (-2066)
	Ls con-tan, vfr-sd, dmw	
2850	Ls-tan, vfr-sd, blocky, dmw	Whelahan 4501 (-2095)
	Ls con-tan, vfr-sd, sandy, chky, dmw	
	Ls-tan-brn, vfr-sd, sandy, dmw w/gry-gry Sh	
	Ls con-tan, vfr-sd, sandy, chky, dmw	
	LsDol tan-gry, fn-med sd, sl chky, p-f int ob ppr, NS	
	LsDol tan-lt gry, fr-sd, chky, no vis por	Total Depth 4500 (-2095)
2900		
2950		
3000		
3050		
3100		
3150		
3200		
3250		
3300		
3350		
3400		
3450		
3500		
3550		
3600		
3650		
3700		
3750		
3800		
3850		
3900		
3950		
4000		
4050		
4100		
4150		
4200		
4250		
4300		
4350		
4400		
4450		
4500		