

**CONFIDENTIAL**

<b>Date:</b>	28 August 2001	<b>Last Casing:</b>	30 / 20" @ 184 mMDRT
<b>Report Number:</b>	1	<b>LOT:</b>	N/A
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.03
<b>Depth @ 24:00 Hours:</b>	480 mMDRT	<b>ECD</b>	N/A
<b>Depth (mTVDRT)</b>	480 mTVDRT	<b>Mud Type:</b>	Seawater - Gel
<b>Lag Depth:</b>	N/A	<b>Mud Chlorides:</b>	N/A
<b>Last Depth:</b>	0 mMDRT	<b>Est. Pore Press:</b>	Normal
<b>Progress:</b>	480 m	<b>Last Survey Depth:</b>	N/A
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	N/A
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	17.5"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Spudded Thylacine-2 @ 01:45 hrs and drilled 36" hole to 185 mMDRT. Ran 30"/20" casing to 184 mMDRT and cemented in place. Made up 17.5" BHA, ran in hole and drilled to 480 mMDRT.*

**NEXT 24 HOURS:** *Drill 17.5" hole to 550m, POOH, run and cement 13 3/8" casing, rig up to run BOPs.*

**CURRENT OPERATION @ 06:00 Hrs 29/08/2001:** POOH, laying out 17.5" BHA.

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

**INTERVAL:** 126 – 185 mMDRT  
**ROP(range):** 14 - 100 m/hr  
**Av ROP:** 48 m/hr

No samples – returns to sea.

**INTERVAL:** 185 – 480 mMDRT  
**ROP(range):** 30 - 250 m/hr  
**Av ROP:** 170 m/hr

No samples – returns to sea.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Complete mudlogging crew (2 data engineers, 2 mudloggers, 2 sample catchers) on rig.

**REMARKS:**

T.D. 17.5" hole: 557 mMDRT  
Completed mudlogging HSE checklist.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek



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<b>Date:</b>	29 August 2001	<b>Last Casing:</b>	13.375" @ 551 mMDRT
<b>Report Number:</b>	2	<b>LOT:</b>	N/A
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	N/A
<b>Depth @ 24:00 Hours:</b>	557 mMDRT	<b>ECD</b>	N/A
<b>Depth (mTVDRT)</b>	557 mTVDRT	<b>Mud Type:</b>	N/A
<b>Lag Depth:</b>	N/A	<b>Mud Chlorides:</b>	N/A
<b>Last Depth:</b>	480 mMDRT	<b>Est. Pore Press:</b>	Normal
<b>Progress:</b>	77 m	<b>Last Survey Depth:</b>	557m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	1.5 deg
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	17.5"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Drill 17.5" hole to 557 mMDRT, POOH, run and cement 13 3/8" casing, rig up and commence running BOPs.*

**NEXT 24 HOURS:** Complete running and testing BOP's, drill 12 1/4" hole.

**CURRENT OPERATION @ 06:00 Hrs 30/08/2001:** Nipple up BOPs.

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

No drilling occurred during this period.

**MUDLOGGING EQUIPMENT/PERSONNEL:****REMARKS:**

Possible top Gellibrand Marl at 315m MDRT, based on ROP.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	30 August 2001	<b>Last Casing:</b>	13.375" @ 551 mMDRT
<b>Report Number:</b>	3	<b>LOT:</b>	N/A
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	N/A
<b>Depth @ 24:00 Hours:</b>	557 mMDRT	<b>ECD</b>	N/A
<b>Depth (mTVDRT)</b>	557 mTVDRT	<b>Mud Type:</b>	N/A
<b>Lag Depth:</b>	N/A	<b>Mud Chlorides:</b>	N/A
<b>Last Depth:</b>	480 mMDRT	<b>Est. Pore Press:</b>	Normal
<b>Progress:</b>	77 m	<b>Last Survey Depth:</b>	557m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	1.5 deg
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	12.25"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** Finished nipping up BOP's and commenced pressure testing program.

**NEXT 24 HOURS:** Finish pressure tests, run in hole with 12.25" BHA and FEWD, drill out shoe track plus 3m of new formation whilst displacing seawater to KCl-PHPA-Glycol mud system, conduct Leak off Test, drill 12.25" section as per program.

**CURRENT OPERATION @ 06:00 Hrs 31/08/2001:** Drilling 12 <sup>1/4</sup>" hole at 569m MDRT.

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

No drilling occurred during this period.

**MUDLOGGING EQUIPMENT/PERSONNEL:****REMARKS:**

FEWD CDR offsets: resistivity 14.83m, gamma ray 18.18m.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek



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<b>Date:</b>	31 August 2001	<b>Last Casing:</b>	13.3/8" @ 551 mMDRT
<b>Report Number:</b>	4	<b>LOT:</b>	2.15 SG
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.21
<b>Depth @ 24:00 Hours:</b>	1343 mMDRT	<b>ECD</b>	1.13
<b>Depth (mTVDR)</b>	1343 mTVDR	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	N/A	<b>Mud Chlorides:</b>	47000
<b>Last Depth:</b>	557 mMDRT	<b>Est. Pore Press:</b>	Normal
<b>Progress:</b>	786 m	<b>Last Survey Depth:</b>	557m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	1.5 deg
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	12 1/4"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** Drill 12 1/4" hole 557m – 1343m.

**NEXT 24 HOURS:** Drill 12 1/4" hole as per program.

**CURRENT OPERATION @ 06:00 Hrs 01/09/2001:** Drilling 12 1/4" hole at 1489m MDRT.

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

**INTERVAL:** 557 – 605m MDRT

**ROP range:** 8 - 176

**Av ROP:** 65

**ARGILLACEOUS CALCILUTITE GRADING TO ARGILLACEOUS CALCISILTITE AND MINOR CALCARENITE.**

**Argillaceous Calcilutite (50%):** light grey to medium grey, very soft to soft, amorphous, grades to Calcareous Claystone.

**Argillaceous Calcisiltite (50%):** light grey to medium grey, soft to friable, trace skeletal fragments, **Calcarenite:** medium grey, friable to moderately hard, fine grained, common clay, common calcilutite matrix, minor calcite cement, minor disseminated subround fine quartz grains, minor skeletal fragments, trace glauconite, trace lithic fragments, no visible porosity.

**INTERVAL:** 605 – 750m MDRT

**ROP range:** 16 - 360

**Av ROP:** 89

**CALCAREOUS CLAYSTONE AND MINOR ARGILLACEOUS CALCISILTITE.**

**Calcareous Claystone (80%):** very light grey to medium grey, very soft to soft, trace pyrite, trace glauconite, trace forams and skeletal fragments, trace dark grey and brown lithics, grades to Argillaceous Calcilutite.

**Argillaceous Calcisiltite (20%):** light grey to medium grey, soft to friable, trace skeletal fragments, trace pyrite, trace dark grey and brown lithics.



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**INTERVAL:** 750 – 960m MDRT

**ROP range:** 12 - 420

**Av ROP:** 125

**CALCAREOUS CLAYSTONE AND MINOR ARGILLACEOUS CALCISILTITE.**

**Calcareous Claystone (80%):** light to medium grey, olive grey, very soft to firm, amorphous, abundant calcareous clay, minor calcareous silt, trace foraminifera, trace skeletal fragments, trace dark grey lithic fragments, trace glauconite, trace disseminated pyrite.

**Argillaceous Calcisiltite (20%):** very light grey to medium grey, soft to moderately hard, abundant to very abundant calcareous clay, trace glauconite, trace lithic fragments, grading in parts to argillaceous calcilutite, trace disseminated pyrite.

**INTERVAL:** 960 - 1210m MDRT

**ROP range:** 59 - 500

**Av ROP:** 135

**MASSIVE CALCAREOUS CLAYSTONE.**

**Calcareous Claystone (100%):** very light grey to medium grey, soft to firm, amorphous to sub-blocky, very abundant calcareous clay, rare calcareous silt, rare siliceous silt, trace glauconite, trace foraminifera, trace lithic fragments.

**INTERVAL:** 1210 - 1260

**ROP range:** 16 - 207

**Av ROP:** 103

**CALCAREOUS CLAYSTONE AND MINOR ARGILLACEOUS CALCILUTITE**

**Calcareous Claystone (90%):** as above.

**Argillaceous Calcilutite (10%):** very light to light grey, soft amorphous, minor calcareous silt.

**INTERVAL:** 1260 - 1320

**ROP range:** 13 - 145

**Av ROP:** 64

**CALCAREOUS CLAYSTONE, COMMON ARGILLACEOUS CALCILUTITE AND MINOR SANDSTONE.**

**Calcareous Claystone (70%):** similar to above, light to medium grey, olive grey, soft, minor firm, amorphous to sub-blocky, minor calcareous silt, minor quartz silt, minor disseminated very fine spherical quartz grains, trace pyrite, trace foraminifera, trace glauconite, trace lithic fragments.

**Argillaceous Calcilutite (25%):** as above.

**Sandstone (5%):** colourless, yellow to orange and brown iron staining, loose, predominantly very fine to minor fine grained quartz, subround to round, spherical moderately sorted quartz, rare dark grey silt and dark brown lithic fragments, trace mica, trace glauconite, 25% inferred porosity, no fluorescence.

**INTERVAL:** 1320 - 1343

**ROP range:** 10 - 93

**Av ROP:** 46

**CALCAREOUS CLAYSTONE AND ARGILLACEOUS CALCILUTITE**

**Calcareous Claystone (50%):** similar to above, no quartz sand.

**Argillaceous Calcilutite (50%):** very light grey, minor white, soft, amorphous,

**CONFIDENTIAL****GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
557 - 850	0.02 – 0.05	0.009 – 0.04	0 – 0.013	Nil	Nil	Nil	Nil	Nil
850 - 960	0.02 – 0.12	0.003 – 0.04	0.004 – 0.095	Nil	Nil	Nil	Nil	Nil
960 - 1210	0.05 – 0.15	0.003 – 0.04	0.006 – 0.102	Nil	Nil	Nil	Nil	Nil
1210 - 1260	0.02 – 0.14	0.007 – 0.03	0.033 – 0.113	Nil	Nil	Nil	Nil	Nil
1260 – 1343	0.03 – 0.11	0.008 – 0.03	0.006 – 0.060	Nil	Nil	Nil	Nil	Nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Peaks**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:**

No connection gas or cavings noted, dxc unreliable – pore pressure estimated to be about 1.03 sg.

**SAMPLE QUALITY:**

Adequate.

10 m samples taken due to high ROP's.



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**LWD**

Sensor	Meters behind drill bit
Resistivity	14.83
GR	18.18

Note problems with ROP system. Changed out to back up system – no data from 790 to 820 mMDRT while new geolograph cable installed. ROP data improved below 820m.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Integrator printout not annotating depth – ok in database. Waiting on new chair

**REMARKS:**

Preliminary top Narrawaturk @ 1315m MDRT

Preliminary top Mepunga @ 1417m MDRT

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek



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**CONFIDENTIAL**

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<b>Date:</b>	01 September 2001	<b>Last Casing:</b>	13.3/8" @ 551 mMDRT
<b>Report Number:</b>	5	<b>LOT:</b>	2.15 SG
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.26
<b>Depth @ 24:00 Hours:</b>	2050 mMDRT	<b>ECD</b>	1.29
<b>Depth (mTVDRT)</b>	2050 mTVDRT	<b>Mud Type:</b>	KCI-PHPA-glycol
<b>Lag Depth:</b>	2030 mMDRTN/A	<b>Mud Chlorides:</b>	64000
<b>Last Depth:</b>	1343 mMDRT	<b>Est. Pore Press:</b>	1.1
<b>Progress:</b>	687 m	<b>Last Survey Depth:</b>	1963m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	1.4 deg , Az 050 deg
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	12 1/4"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** Drill 12 1/4" hole 1343m to 2050m.

**NEXT 24 HOURS:** Drill 12 1/4" hole to 2109m, wiper trip, pull out of hole, run 9 5/8" casing.

**CURRENT OPERATION @ 06:00 Hrs 02/09/2001:** Circulating hole to 1.28 sg mud at 2109m TD 12 1/4" hole.

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

**INTERVAL:** 1343 - 1418

**ROP range:** 10 - 107

**Av ROP:** 36

**ARGILLACEOUS CALCILUTITE INTERBEDDED WITH CALCAREOUS CLAYSTONE.**

**Argillaceous Calcilutite (60%):** very light to light grey, soft, amorphous, abundant light grey argillaceous material, minor calcareous silt.

**Calcareous Claystone (40%):** light to medium grey, olive grey, soft, minor firm, amorphous to sub-blocky, minor calcareous silt, minor quartz silt, rare disseminated clear and yellow to brown stained very fine grained subrounded to rounded, spherical quartz grains, trace pyrite, trace foraminifera, trace glauconite, trace lithic fragments.

**INTERVAL:** 1418 - 1464

**ROP range:** 17 - 120

**Av ROP:** 43

**Calcareous Claystone (90%):** light to medium grey, olive grey, soft, minor firm, amorphous to sub-blocky, minor calcareous silt, minor to abundant quartz silt, rare disseminated clear and yellow to brown stained, very fine grained, subrounded to rounded, spherical quartz grains, trace pyrite, trace foraminifera, trace glauconite, trace lithic fragments, grading to:

**Calcareous Siltstone (10%):** very dark yellowish brown to very dark brown, friable, minor moderately hard, blocky, common calcareous clay matrix, rare to minor carbonaceous matter, trace glauconite. Rarely grades to Siltstone and Claystone.





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**INTERVAL:** 1464 - 1550  
**ROP range:** 5 - 138  
**Av ROP:** 49

**CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE AND TRACE CALCILUTITE,**

**Claystone (90%):** dark greyish brown, soft to firm, blocky, rare carbonaceous material, trace glauconite.

**Sandstone (10%):** greenish grey, loose, very fine to fine, rarely medium grained quartz, subangular to subrounded, sub spherical to spherical, moderately sorted, rare glauconite, minor carbonaceous fragments.

**Calcilutite (trace):** very light grey, soft, trace carbonaceous matter, trace glauconite.

**INTERVAL:** 1550 - 1600  
**ROP range:** 15 - 137  
**Av ROP:** 66

**CLAYSTONE INTERBEDDED WITH MINOR SILTY SANDSTONE.**

**Claystone (90%):** medium to dark olive grey, soft to firm, slightly sticky in parts to sub-blocky, common siliceous silt, trace very fine carbonaceous detritus, trace glauconite, trace pyrite, trace micromica, trace silty lithics and very coarse grained quartz sand.

**Silty Sandstone (10%):** light to medium grey, olive grey, loose to friable, predominantly very fine to fine common medium rare coarse and trace very coarse quartz grains, subangular, to rounded, poorly sorted, slightly spherical, trace calcareous cement, trace pyrite cement, minor to common brown argillaceous matrix, trace very fine carbonaceous detritus, trace glauconite, trace brown and grey lithic fragments, tight visual porosity, no fluorescence.

**INTERVAL:** 1600 - 1690  
**ROP range:** 10 - 213  
**Av ROP:** 74

**SILTY CLAYSTONE INTERBEDDED WITH MINOR SANDSTONE.**

**Silty Claystone (90%):** medium to dark olive grey, soft to firm, slightly sticky in parts to sub-blocky, abundant quartz and lithic silt, trace very fine carbonaceous detritus, trace glauconite, trace pyrite, trace micromica.

**Sandstone (10%):** white to very light grey, loose to friable, predominantly very fine to fine minor medium trace coarse to very coarse quartz grains, subangular to rounded, poorly sorted, slightly spherical, trace calcareous cement, trace pyritic cement, abundant silt matrix, minor to common argillaceous matrix, trace very fine carbonaceous detritus, trace glauconite, trace brown and grey lithic fragments, tight visual porosity, no fluorescence.

**INTERVAL:** 1690 - 1760  
**ROP range:** 13 - 108  
**Av ROP:** 53

**MASSIVE SILTY CLAYSTONE.**

**Silty Claystone (100%):** medium to dark olive grey, soft to firm, slightly sticky in parts to sub-blocky, abundant quartz and lithic silt, trace very fine carbonaceous detritus, trace glauconite, trace pyrite, trace micromica.

**CONFIDENTIAL****INTERVAL:** 1760 - 1960**ROP range:** 16 - 173**Av ROP:** 79**MASSIVE CLAYSTONE.**

**Claystone (100%):** medium to dark grey, dark olive grey, firm, sub-blocky, minor to common quartz and lithic silt, rare minor very fine carbonaceous detritus, trace micromica, trace glauconite in parts, locally becoming siltier and grading to Silty Claystone.

**INTERVAL:** 1960 - 2040**ROP range:** 14 - 110**Av ROP:** 50**MASSIVE CLAYSTONE.**

**Claystone (100%):** medium to dark grey, olive grey, firm, sub-blocky, common mica, quartz and lithic silt, minor very fine to silty carbonaceous detritus, trace disseminated pyrite and pyritic microlaminae, trace micromica, trace dolomitic inclusions, becoming locally more silty and grading to Silty Claystone in parts.

**INTERVAL:** 2040 – 2109**ROP range:** 8 - 71**Av ROP:** 23.5**INTERBEDDED CLAYSTONE AND SILTY CLAYSTONE**

**Claystone (100%):** medium to dark grey, olive grey, firm, sub-blocky, common mica, quartz and lithic silt, minor very fine to silty carbonaceous detritus, trace disseminated pyrite and pyritic microlaminae, trace micromica, trace dolomitic inclusions, becoming locally more silty and grading to Silty Claystone in parts.

**Silty Claystone (50%):** olive grey to dark olive grey, moderately hard, sub-blocky, rare carbonaceous matter, minor mica silt, rare pyrite, trace lithic fragments, trace glauconite, rarely grades to Argillaceous Siltstone.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
1343 - 1600	0.06 – 0.22	0.008 – 0.023	0.01 – 0.153	nil	nil	nil	nil	nil
1600 - 1690	0.09 – 0.29	0.004 – 0.035	0.05 – 0.18	nil	nil	nil	nil	nil
1690 - 1760	0.15 – 0.25	0.008 – 0.037	0.08 – 0.16	0.00 – .01	nil	nil	nil	nil
1760 - 1960	0.06 – 0.29	0.007 – 0.029	0.01 – 0.22	0.0 – 0.01	0.0 - 005	nil	nil	nil
1960 – 2050	0.15 – 0.24	0.007 – 0.032	0.1 – 0.20	0.0 – 0.1	nil	nil	nil	nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
1846	0.21 / 0.12	0.162	0.008		Nil	Nil	
1876	0.29 / 0.19	0.193	0.009	0.005	Nil		
1904	0.30 / 0.12	0.14	0.009	0.004	Nil		
1962	0.29 / 0.15	0.202	Nil	Nil	Nil		

**CONFIDENTIAL****Peaks**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:**

Small gas peaks above background were recorded - connection gas from 1846m to 1962m. No connection gas was observed below 1962m as mud wt was raised to 1.26. No significant overpressure cavings were observed dxc unreliable – maximum pore pressure estimated to be about 1.25 sg (1962m).

**SAMPLE QUALITY:**

Adequate.

10 m samples taken due to high ROP's.

**LWD**

Sensor	Meters behind drill bit
Resistivity	14.83
GR	18.18

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Carbide lag check at 1904 m MDRT (0.4% peak –background 0.12%) – average hole diameter calculated to be 12.8".

**REMARKS:**

Preliminary top Pember: 1418m MDRT (63m high)  
Preliminary top Paaratte: 1463m MDRT (97m high)  
Preliminary top Belfast: 1760m MDRT (23m high)

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

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<b>Date:</b>	02 September 2001	<b>Last Casing:</b>	13.3/8" @ 551 mMDRT
<b>Report Number:</b>	6	<b>LOT:</b>	2.15 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.28 sg
<b>Depth @ 24:00 Hours:</b>	2109 mMDRT	<b>ECD</b>	1.31 sg
<b>Depth (mTVDRT)</b>	2108.9 mTVDRT	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2109 mMDRTN/A	<b>Mud Chlorides:</b>	56000 mg/l
<b>Last Depth:</b>	2050 mMDRT	<b>Est. Pore Press:</b>	1.1 sg
<b>Progress:</b>	59 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inclin: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	12 1/4"

**OPERATIONS SUMMARY**

**24 HOUR SUMMARY:** Drilled 12 ¼" section to 2109 mMDRT, circulated hole clean increasing mud weight from 1.26 to 1.28sg. Performed wiper trip. Pulled 13 3/8" wear bushings and prepared to run 10 ¾" x 9 5/8" casing.

**NEXT 24 HOURS:** run and cement 10 x 9 5/8" casing.

**CURRENT OPERATION @ 06:00 Hrs 03/09/2001:** Running 9 5/8" casing.

**GEOLOGICAL SUMMARY****LITHOLOGY:**

**INTERVAL:** 2040 – 2109

**ROP range:** 8 - 71

**Av ROP:** 23.5

**INTERBEDDED CLAYSTONE AND SILTY CLAYSTONE**

**Claystone (50%):** medium to dark grey, olive grey, firm, sub-blocky, common mica, quartz and lithic silt, minor very fine to silty carbonaceous detritus, trace disseminated pyrite and pyritic microlaminae, trace micromica, trace dolomitic inclusions, becoming locally more silty and grading to Silty Claystone in parts.

**Silty Claystone (50%):** olive grey to dark olive grey, moderately hard, sub-blocky, rare carbonaceous matter, minor mica silt, rare pyrite, trace lithic fragments, trace glauconite, rarely grades to Argillaceous Siltstone.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2050 – 2109	0.11 – 0.25	0.0145-0.032	0.13	0.01	0.006	Nil	Nil	Nil

**Wiper Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil	0.41	0.283	0.013	0.007			

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Connection Gas DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
	Nil						

Peaks DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**HYDROCARBON FLUORESCENCE:**

Nil

**SAMPLE QUALITY:**

Adequate.

10 m samples taken due to high ROP's.

**LWD**

Sensor	Meters behind drill bit
Resistivity	14.83
GR	18.18

Tools laid out and recorded data downloaded. No more LWD planned for remaining 8 ½" section.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Commenced splitting air dried ditch cuttings

**REMARKS:****WELLSITE GEOLOGISTS**

G. Weste / M. Bilek



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<b>Date:</b>	03 September 2001	<b>Last Casing:</b>	13.3/8" @ 551 mMDRT
<b>Report Number:</b>	7	<b>LOT:</b>	2.15 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.28 sg
<b>Depth @ 24:00 Hours:</b>	2109 mMDRT	<b>ECD</b>	1.31 sg
<b>Depth (mTVDRT)</b>	2108.9 mTVDRT	<b>Mud Type:</b>	KCI-PHPA-glycol
<b>Lag Depth:</b>	2109 mMDRTN/A	<b>Mud Chlorides:</b>	56000 mg/l
<b>Last Depth:</b>	2109 mMDRT	<b>Est. Pore Press:</b>	1.1 sg
<b>Progress:</b>	0 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inclin: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	N/A

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Ran and cemented 10 3/4" x 9 5/8" casing, made up seal assembly, commenced testing BOPs.*

**NEXT 24 HOURS:** *Complete testing BOPs and surface equipment, run wear bushing, make up 8 1/2" BHA and run in hole, drill out shoe track and 3m of new formation, perform LOT.*

**CURRENT OPERATION @ 06:00 Hrs 04/09/2001:** *Running wear bushing.*

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

No drilling carried out during reporting period

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Splitting air dried ditch cuttings

**REMARKS:**

Recorded FEWD data sent to Perth. No FEWD to be recorded in 8 1/2" hole.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	04 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	8	<b>LOT:</b>	N/A
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.15 sg
<b>Depth @ 24:00 Hours:</b>	2112 mMDRT	<b>ECD</b>	1.21 sg
<b>Depth (mTVDRT)</b>	2111.9 mTVDRT	<b>Mud Type:</b>	KCI-PHPA-glycol
<b>Lag Depth:</b>	2109 mMDRTN/A	<b>Mud Chlorides:</b>	59000 mg/l
<b>Last Depth:</b>	2109 mMDRT	<b>Est. Pore Press:</b>	1.1 sg
<b>Progress:</b>	3 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inclin: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

**OPERATIONS SUMMARY**

**24 HOUR SUMMARY:** Ran wear bushing. Completed pressure testing program. Made up BHA and ran in hole. Drilled out shoe track and new formation to 2112 mMDRT.

**NEXT 24 HOURS:** perform LOT, drill 8 1/2" hole from 2112m to core point as per program, pull out of hole, pick up core barrel and corehead, run in hole and cut core as per program.

**CURRENT OPERATION @ 06:00 Hrs 05/09/2001:** Flow check prior to pulling out of hole for coreing.

**GEOLOGICAL SUMMARY****LITHOLOGY:**

**INTERVAL:** 2109 - 2112

**ROP range:** 10 - 17

**Av ROP:** 13

**INTERBEDDED CLAYSTONE AND SILTY CLAYSTONE**

**Claystone (40%):** medium to dark grey, olive grey, firm, sub-blocky, common mica, quartz and lithic silt, minor very fine to silty carbonaceous detritus, trace disseminated pyrite and pyritic microlaminae, trace micromica, trace dolomitic inclusions, becoming locally more silty and grading to Silty Claystone in parts.

**Silty Claystone (60%):** olive grey to dark olive grey, moderately hard, sub-blocky, rare carbonaceous matter, minor mica silt, rare pyrite, trace lithic fragments, trace glauconite, rarely grades to Argillaceous Siltstone.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2109 - 2112	0.018 – 0.02	0.005	0.01 – 0.02	nil	nil	nil	nil	Nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							



<i>Peaks</i>							
DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:****SAMPLE QUALITY:**

Adequate.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Gas system recalibrated – ok. Ditch gas line checked with carbide prior to drilling out shoe track.

**REMARKS:****WELLSITE GEOLOGISTS**

G. Weste / M. Bilek





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**CONFIDENTIAL**

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<b>Date:</b>	05 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	9	<b>LOT:</b>	FIT 2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.16 sg
<b>Depth @ 24:00 Hours:</b>	2200 mMDRT	<b>ECD</b>	1.18 sg
<b>Depth (mTVDRT)</b>	2199.9 mTVDRT	<b>Mud Type:</b>	KCI-PHPA-glycol
<b>Lag Depth:</b>	2175 mMDRTN/A	<b>Mud Chlorides:</b>	55000 mg/l
<b>Last Depth:</b>	2112 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	88 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Performed LOT, drilled 8 1/2" hole from 2112m to 2150m, circulated bottoms up, pulled out of hole, picked up 54m core barrel and corehead, ran in hole, commenced cutting core 1 from 2150m to 2200m.*

**NEXT 24 HOURS:** *Complete cutting core 1, pull out of hole, lay out core, proceed as per program.*

**CURRENT OPERATION @ 06:00 Hrs 06/09/2001:** *Pulling out of hole with corebarrel following completion of core run 1: 2150m – 2203.5m.*

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

**INTERVAL:** 2112 – 2122m

**ROP range:** 5 - 13

**Av ROP:** 9

SILTY CLAYSTONE GRADING TO ARGILLACEOUS SILTSTONE

**Silty Claystone (50%):** olive grey to dark olive grey, moderately hard, sub-blocky, minor mica silt, rare carbonaceous matter, rare pyrite, trace lithic fragments, trace glauconite, grades to Argillaceous Siltstone.

**Argillaceous Siltstone (50%):** increasing abundance with depth, olive grey, moderately hard to hard, sub-blocky, brittle, quartzose, rare silica cement, rare carbonaceous detritus, rare coarse mica, trace pyrite, trace glauconite, rarely grades to Siltstone.

**INTERVAL:** 2122 – 2137m

**ROP range:** 15 - 29

**Av ROP:** 22

ARGILLACEOUS SILTSTONE GRADING TO SILTSTONE

**Argillaceous Siltstone (30%):** olive grey, moderately hard to hard, sub-blocky, brittle, quartzose, rare silica cement, rare carbonaceous detritus, rare coarse mica, trace pyrite, trace glauconite, grades to Siltstone.

**Siltstone (70%):** grey to olive grey, moderately hard to hard, sub-blocky, brittle, abundant clay matrix, rare silica cement, rare carbonaceous material, rare coarse mica, trace pyrite, trace glauconite.

**INTERVAL:** 2137 - 2140m

**ROP range:** 19 - 25

**Av ROP:** 22

SILTSTONE

**Siltstone (100%):** similar to above, medium grey to grey, brownish grey, friable to moderately hard, sub-blocky, quartzose, rare silica cement, minor clay matrix, minor disseminated subangular to subrounded, slightly spherical, very fine grained quartz sand, rare carbonaceous material, trace pyrite, trace glauconite.

**CONFIDENTIAL****INTERVAL:** 2140 - 2146m**ROP range:** 20 - 40**Av ROP:** 31**SILTSTONE WITH MINOR SANDSTONE INTERBEDS**

**Sandstone (70%):** very light brownish grey to very light olive grey, predominantly loose, becoming more aggregated and friable with depth, very fine to coarse grained, predominantly medium grained, rarely coarse grained, subangular to minor subrounded, subspherical, poorly sorted to moderately sorted quartz, aggregates have trace silica cement, argillaceous matrix increasing from minor to common with depth, minor silt matrix, trace carbonaceous material, trace mica, trace glauconite. Rarely grades to Argillaceous Sandstone. Aggregates have 10 % visible intergranular porosity, loose grains 25% inferred porosity. No fluorescence.

**Siltstone (30%):** as above, medium grey to grey, brownish grey, friable to moderately hard, sub-blocky, quartzose, rare silica cement, minor clay matrix, minor disseminated subangular to subrounded, slightly spherical, very fine grained quartz sand, rare carbonaceous material, trace pyrite, trace glauconite.

**INTERVAL:** 2146 - 2150m**ROP range:** 59 - 73**Av ROP:** 67**SANDSTONE**

**Sandstone (100%):** similar to above, predominantly as friable aggregates, very fine to medium grained, predominantly fine to medium grained, minor calcite cement, 10% visible intergranular porosity. No fluorescence.

**CUTTING DESCRIPTIONS FROM CORED INTERVAL****Note:** very poor quality samples from cored section - severe "pasting" of sample.**INTERVAL:** 2150 - 2174m**ROP range:** 4 - 30**Av ROP:** 10

**Claystone (90-95%):** light to medium grey, soft, sticky to dispersive, common siliceous silt, trace silty to very fine carbonaceous detritus, trace disseminated pyrite, trace glauconite.

**Sandstone (5-10%):** colourless, clear to translucent, loose, predominantly very fine common fine rare medium grained quartz, subangular to subrounded, slightly spherical, moderately sorted, 10% inferred porosity. No fluorescence.

**INTERVAL:** 2174 - 2200m**ROP range:** 6 - 79**Av ROP:** 22

**Claystone (50-70%):** similar to above, light to medium grey, soft, dispersive to sticky, common to abundant silt, rare carbonaceous matter, trace 1% pyrite, grades to Silty Claystone..

**Sandstone (30-50%):** similar to above, colourless, very light grey, loose to friable, very fine to medium grained, predominantly very fine to fine grained, subangular to subrounded, slightly spherical quartz, rare calcite cement, common to abundant clay matrix, minor silt matrix, trace carbonaceous matter, trace pyrite, trace lithic fragments, trace feldspar, 5% visible intergranular porosity, grades to Argillaceous Sandstone. No fluorescence.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2112 - 2122	0.02 - 0.03	0.004 - 0.018	0.01 - 0.02	nil	nil	nil	Nil	Nil
2122 - 2137	0.04 - 0.05	0.009 - 0.02	0.02 - 0.04	0.0 - 0.005	nil	nil	Nil	nil
2137 - 2140	0.05 - 0.30	0.013 - 0.02	0.03 - 0.05	0.003 - 0.006	nil	nil	Nil	nil
2140 - 2146	0.5 - 4.4	0.009 - 0.02	0.30 - 3.79	0.01 - 0.11	0.003-0.034	0-0.003	0-0.003	nil
2146 - 2150	0.8 - 0.47	0.007	0.09 - 2.83	0.01 - 0.08	0.003-0.026	0-0.003	0 0.002	nil
2150 - 2176	0.02 - 0.11	0.011 - 0.023	0.02 - 0.08	0 - 0.007	nil	nil	Nil	nil
2176 - 2200	0.23 - 3.37	0.009 - 0.030	0.11 - 3.02	0.01 - 0.09	0.001-0.024	0-0.002	0-.002	Nil

**CONFIDENTIAL**

<i>Trip Gas</i>							
DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

<i>Connection Gas</i>							
DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

<i>Peaks</i>							
DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
2143	4.4	3.8	0.11	0.034	0.003	0.003	Nil
2148	3.5	2.8	0.08	0.03	0.003	0.003	Nil
2189	3.4	3.0	0.09	0.02	0.002	0.002	Nil

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal, no gas cut mud, no cavings

**SAMPLE QUALITY:**

Adequate when drilling, very poor when coring.

**MUDLOGGING EQUIPMENT/PERSONNEL:****REMARKS:****WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	06 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	10	<b>FIT:</b>	2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.17 sg
<b>Depth @ 24:00 Hours:</b>	2258.5 mMDRT	<b>ECD</b>	1.21 sg
<b>Depth (mTVDR)</b>	2258.4 mTVDR	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2258.5 mMDRT	<b>Mud Chlorides:</b>	50000 mg/l
<b>Last Depth:</b>	2200 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	58.5 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Completed cutting core 1 to 2203.5 mMDRT. Circulated hole until ditch gas values dropped to a background of 0.2%. Pulled out of hole and recovered core 1 (2150 – 2203.5 mMDRT cut 53.5 m, Recovered 49.87m -93%). Made up 54m coring assembly and ran in hole to cut core 2. Cut 55 m of core from 2203.5 to 2258.5 mMDRT (extra 1 m taken up by telescopic core catcher and by actual total inner barrel length of 55.2 m). Circulated hole until ditch gas values dropped to 0.2%. commenced pulling out of hole.*

**NEXT 24 HOURS:** *.Pull out of hole, recover core 2, pick up 63m core barrel, run in hole, cut and recover core 3.*

**CURRENT OPERATION @ 06:00 Hrs 07/09/2001:** *Running in hole to cut core 3.*

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY:**

**INTERVAL:** 2200 - 2232 m

**ROP range:** 7 - 60

**Av ROP:** 20

**SANDSTONE with trace SILTSTONE.**

**SANDSTONE (100%):** colourless, very light grey, clear to translucent, predominantly loose rare friable aggregates, very fine to fine grained quartz, subangular, moderate sphericity, well sorted, trace calcareous / dolomitic cement, minor very light grey argillaceous matrix, trace partially altered feldspars, trace carbonaceous detritus trace glauconite, trace red brown lithics, trace dark grey siltstone? lithics, trace mica, 15% inferred porosity, no fluorescence.

**SILTSTONE (trace):** dark grey, soft to firm, subblocky, common dark grey argillaceous material, rare very fine quartz grains, trace glauconite, trace micro mica, trace carbonaceous detritus, trace disseminated pyrite.

**INTERVAL:** 2232 - 2237m

**ROP range:** 4.8 - 14

**Av ROP:** 8

**SILTSTONE** interbedded with **SANDSTONE.**

**SILTSTONE (80%):** as above.

**SANDSTONE (20%):** as above.



**INTERVAL:** 2237 - 2242m

**ROP range:** 11 - 60

**Av ROP:** 25

**SANDSTONE (100%):** colourless, very light grey, clear to translucent, predominantly loose rare friable aggregates, very fine to fine rare medium and trace coarse grained quartz, subangular, moderate sphericity, moderately sorted, trace siliceous cement, minor very light grey argillaceous matrix, trace partially altered feldspars, trace carbonaceous detritus trace glauconite, trace red brown lithics, trace dark grey siltstone? Lithics, 15% inferred porosity, no fluorescence.

**INTERVAL:** 2242 - 2247m

**ROP range:** 4 - 8

**Av ROP:** 6

**SILTSTONE** interbedded with minor **SANDSTONE**.

**SILTSTONE (70%):** as above.

**SANDSTONE (30%):** as above.

**INTERVAL:** 2247 – 2258.5m

**ROP range:** 4 - 8

**Av ROP:** 6

**SANDSTONE** interbedded with minor **SILTSTONE**.

**SANDSTONE (80%):** as above, trace moderately hard aggregates with trace pyritic cement.

**SILTSTONE (20%):** as above.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2200 – 2228	0.3 – 6.8	0.009 – 0.02	0.2 – 6.2	0.07 – 0.18	0.007 – 0.06	0 – 0.006	0 – 0.005	Nil
2228 – 2237	0.1 – 0.5	0.014 – 0.02	0.07 – 0.3	0.009 – 0.014	0.004 – 0.006	Nil	Nil	Nil
2237 – 2258.5	0.17 – 5.3	0.015 – 0.03	0.12 – 5.3	0.005 – 0.03	0.005 – 0.029	Nil	Nil	Nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
2203.5	0.31 / 0.24	0.465	0.16	0.007			

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Peaks**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
2208	6.8	5.9	0.16	0.05	0.004	0.004	Nil
2220	5.7	5.0	0.14	0.04	0.003	0.003	Nil
2242	4.7	4.4	0.09	0.03	0.003	0.003	Nil
2255	5.5	5.3	0.11	0.03	nil	0.003	Nil

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal, no gas cut mud, no cavings.

**SAMPLE QUALITY:**

Poor – all descriptions from ditch cuttings generated by coring.

**MUDLOGGING EQUIPMENT/PERSONNEL:****REMARKS:****WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	07 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	11	<b>FIT:</b>	2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.16 sg
<b>Depth @ 24:00 Hours:</b>	2316.0 mMDRT	<b>ECD</b>	1.22 sg
<b>Depth (mTVDR)</b>	2315.9 mTVDR	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2316 mMDRT	<b>Mud Chlorides:</b>	42000 mg/l
<b>Last Depth:</b>	2358.5 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	57.5 m	<b>Last Survey Depth:</b>	2082.91 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 1.02°, Az: 4.82°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Pulled out of hole with core 2 and recovered core (cut 55.0 m, recovered 53.9 m, 98% recovery). Made up 63 m coring assembly and ran in hole. Cut core 3 from 2258.5 to 2316 mMDRT (low ROP and low torque after a connection indicated possible core jam). Aborted coring, circulated hole clean and pulled out of hole with core 3. Recovered core 3 (cut 57.5m, recovered 56.05m, 97.5% recovery).*

**NEXT 24 HOURS:** *Make up 8 1/2" BHA and run in hole to drill to TD at 2525 +/-.*

**CURRENT OPERATION @ 06:00 Hrs 08/09/2001:** *Running in hole with 8 1/2" BHA.*

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY: (from ditch cuttings)**

**INTERVAL:** 2258.5 - 2297m

**ROP range:** 11 - 60

**Av ROP:** 20

**SANDSTONE interbedded with minor SILTSTONE.**

**SANDSTONE (80%):** colourless, very light grey, clear to translucent, predominantly loose rare friable aggregates, very fine to fine rare medium and trace coarse grained quartz, subangular, moderate sphericity, poorly sorted, trace siliceous and pyritic cement, minor very light grey argillaceous matrix, trace partially altered feldspars, trace carbonaceous detritus trace glauconite, trace red brown lithics, trace dark grey siltstone? Lithics, 15% inferred porosity loose grains (aggregates 5% visual porosity), no fluorescence.

**SILTSTONE (20%):** dark grey, soft to firm, sub-blocky to sticky, common argillaceous material, minor very fine to grained quartz, trace to minor micro-mica, trace to minor carbonaceous detritus, trace disseminated pyrite, trace partially altered feldspar.

**INTERVAL:** 2297 - 2316m

**ROP range:** 3.5 - 42

**Av ROP:** 17

**SANDSTONE interbedded with SILTSTONE.**

**SANDSTONE (70%):** colourless, very light grey, clear to translucent, loose to moderately hard, subangular, poorly sorted, slightly spherical, predominantly very fine grained, abundant fine grained, rare medium grained, trace coarse to very coarse grained quartz, trace very coarse quartz shards, trace siliceous and pyritic cement, common light grey argillaceous matrix associated with aggregates, trace carbonaceous detritus, trace dark grey and red brown lithic fragments, trace partially altered feldspar, 15% inferred porosity (5% visual porosity from aggregates), no fluorescence.

**SILTSTONE (30%):** as above.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2258.5 - 2297	0.2 – 1.0	0.007 – 0.02	0.19 – 0.9	0.01 – 0.02	0.002 – 0.004	Nil	Nil	Nil
2297 - 2316	0.3 – 0.8	0.013 – 0.02	0.28 – 0.7	0.007 – 0.02	0.002 – 0.004	Nil	Nil	Nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Peaks**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
2270	2.12	2.0	0.036	0.01	Nil	Nil	Nil
2280	5.15	5.0	0.09	0.02	Nil	Nil	Nil
2300	3.4	3.2	0.05	0.01	Nil	Nil	Nil
2312	0.8	0.7	0.01	0.004	Nil	Nil	Nil

**HYDROCARBON FLUORESCENCE:**

Nil

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal, no gas cut mud, no cavings.

**SAMPLE QUALITY:**

Poor – all descriptions from ditch cuttings generated by coring.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Ditch cuttings split and packed to 1780 m.

**REMARKS:**

Total interval cored as 3 runs: 2150.0 – 2316.0m

Total core recovered: 159.82m

Overall core recovery: 96.3%

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek



**CONFIDENTIAL**

<b>Date:</b>	08 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	12	<b>FIT:</b>	2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.16 sg
<b>Depth @ 24:00 Hours:</b>	2525 mMDRT	<b>ECD</b>	1.22 sg
<b>Depth (mTVDRT)</b>	2524.7 mTVDRT	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2525 mMDRT	<b>Mud Chlorides:</b>	43000 mg/l
<b>Last Depth:</b>	2316 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	209 m	<b>Last Survey Depth:</b>	2496 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 3.51°, Az: 151.68°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

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**OPERATIONS SUMMARY**

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**24 HOUR SUMMARY:** *Made up 8 1/2" drilling assembly, ran in hole and drilled from 2316 to 2525 mMDRT. Circulated hole clean, dropped gyro and pulled out of hole. Rigged up wireline loggers and ran in hole for Run 1 (PEX (HRLA)-DSI-GPIT) - and commenced wireline logging program.*

**NEXT 24 HOURS:** *Continue wireline logging as per program.*

**CURRENT OPERATION @ 06:00 Hrs 09/09/2001:** *Rigging down from Run 1.*

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**GEOLOGICAL SUMMARY**

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**LITHOLOGY: (from ditch cuttings)**

**INTERVAL:** 2316 - 2478m

**ROP range:** 22 - 273

**Av ROP:** 80

**SANDSTONE interbedded with minor SILTSTONE.**

**SANDSTONE (80%):** light grey, loose to friable, very fine to fine predominantly fine grained, subangular, slightly spherical, common quartz silt matrix, minor clay matrix, trace calcite cement, rare silica cement, rare to minor fine carbonaceous streaks, rare to minor lithic fragments, rare to minor pyrite, grades to Silty Sandstone, 5 - 20% intergranular porosity. No fluorescence.

**SILTSTONE (20%):** dark grey, hard, sub-blocky, minor carbonaceous matter, rare lithic fragments, minor pyrite.

**INTERVAL:** 2478 - 2525 m

**ROP range:** 35 - 167

**Av ROP:** 92

**SANDSTONE interbedded with minor SILTSTONE.**

**SANDSTONE (90%):** colourless, very light grey, opaque to clear, loose rare friable, medium to coarse rare very fine minor fine, coarse, very coarse and granular quartz grains and shards (conglomeratic in parts), angular, to subangular, very poorly sorted, slightly spherical, trace siliceous cement and minor light grey argillaceous matrix associated with rare aggregates, trace carbonaceous detritus, 20% inferred porosity, (5 to 10% visible porosity from aggregates), no fluorescence.

**SILTSTONE (10%):** grey black, firm to hard, sub-blocky to subfissile, abundant to very abundant carbonaceous detritus and microlaminae, grading in parts to Carbonaceous Siltstone, trace very fine grained quartz, trace lithic fragments, trace disseminated and nodular pyrite.

**GAS SUMMARY:****Background Gas**

INTERVAL(mMDRT)	Total GAS (%)	CO <sub>2</sub> (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	NC4 (%)	C5 (%)
2316 - 2478	0.07 – 0.9	0.02	0.06 – 0.8	0.01 – 0.02	0.006	Nil	Nil	Nil
2478 - 2525	0.09 – 0.3	0.02	0.08 – 0.25	0.01	0.003	Nil	Nil	Nil

**Trip Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Connection Gas**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
Nil							

**Peaks**

DEPTH (mMDRT)	Total GAS (%)	C1 (%)	C2 (%)	C3 (%)	iC4 (%)	nC4 (%)	C5 (%)
2324	5.55	4.73	0.11	0.035	Nil	Nil	Nil
2347	1.11	0.90	0.02	0.007	Nil	Nil	Nil
2378	1.07	0.92	0.02	0.006	Nil	Nil	Nil

**HYDROCARBON FLUORESCENCE:**

Nil

**WIRELINE:**

<b>MUD DATA</b>	Rmf: 0.0903 @ 15°C	Rm: 0.1027 @ 15°C	Rmc: 0.2357 @ 14°C	Chlorides: 43K
Type: KCl-PHPA-Glycol	MWt: 1.16	FL: 3.7	Vis: 58	pH: 9.0

Run	Logging Run	COMMENTS	Status
1	PEX (HRLA)-DSI-GPIT		Running
2	FMI-GR-GPIT		To be run
3	MDT-GR		To be run
4	CSI (Checkshot)		To be run

Loggers TD: 2530m, 9 5/8" shoe @ 2103.5m

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal, no gas cut mud, no cavings.

**SAMPLE QUALITY:**

Poor.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	09 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	13	<b>FIT:</b>	2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.16 sg
<b>Depth @ 24:00 Hours:</b>	2525 mMDRT	<b>ECD</b>	1.22 sg
<b>Depth (mTVDR)</b>	2524.7 mTVDR	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2525 mMDRT	<b>Mud Chlorides:</b>	43000 mg/l
<b>Last Depth:</b>	2525 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	0 m	<b>Last Survey Depth:</b>	2496 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 3.51°, Az: 151.68°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

**OPERATIONS SUMMARY**

**24 HOUR SUMMARY:** Completed Run 1 (PEX (HRLA)-DSI-GPIT) and Run 2 (FMI-GR-GPIT).  
Commenced Run 3 (MDT-GR).

**NEXT 24 HOURS:** Continue wireline logging as per program.

**CURRENT OPERATION @ 06:00 Hrs 10/09/2001:** Pulling out of hole to replace MDT tool pump valve.

**GEOLOGICAL SUMMARY****LITHOLOGY:**

No drilling during report period

**WIRELINE:**

<b>MUD DATA</b>	Rmf: 0.0903 @ 15°C	Rm: 0.1027 @ 15°C	Rmc: 0.2357 @ 14°C	Chlorides: 43K
Type: KCl-PHPA-Glycol	MWt: 1.16	FL: 3.7	Vis: 58	pH: 9.0

Run	Logging Run	COMMENTS	Status
1	PEX (HRLA)-DSI-GPIT	BHT 103.9 deg C @ 2485m	Completed
2	FMI-GR-GPIT	BHT 108.9 deg C @ 2513m	Completed
3	MDT-GR		Running
4	CSI (Checkshot)		To be run

Loggers TD: 2530m, 9 5/8" shoe @ 2103.5m

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal, no gas cut mud, no cavings.

**SAMPLE QUALITY:**

Poor.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek

**CONFIDENTIAL**

<b>Date:</b>	10 September 2001	<b>Last Casing:</b>	9 5/8" @ 2101 mMDRT
<b>Report Number:</b>	14	<b>FIT:</b>	2.2 sg
<b>Report Period:</b>	00:00-24:00 Hours	<b>Mud Weight:</b>	1.16 sg
<b>Depth @ 24:00 Hours:</b>	2525 mMDRT	<b>ECD</b>	1.22 sg
<b>Depth (mTVDR)</b>	2524.7 mTVDR	<b>Mud Type:</b>	KCl-PHPA-glycol
<b>Lag Depth:</b>	2525 mMDRT	<b>Mud Chlorides:</b>	43000 mg/l
<b>Last Depth:</b>	2525 mMDRT	<b>Est. Pore Press:</b>	1.03 sg
<b>Progress:</b>	0 m	<b>Last Survey Depth:</b>	2496 m
<b>Water Depth:</b>	101.2 m LAT	<b>Deviation:</b>	Inc: 3.51°, Az: 151.68°
<b>RT-Sea Level:</b>	25 m	<b>Bit Diameter:</b>	8 1/2"

**OPERATIONS SUMMARY**

**24 HOUR SUMMARY:** Completed Run 3 (MDT-GR), commenced Run 4.

**NEXT 24 HOURS:** Rig down wireline loggers, make up, run and cement 7" liner.

**CURRENT OPERATION @ 06:00 Hrs 10/09/2001:** Running 7" liner.

**GEOLOGICAL SUMMARY****LITHOLOGY:**

No drilling during report period

**WIRELINE:**

<b>MUD DATA</b>	Rmf: 0.0903 @ 15°C	Rm: 0.1027 @ 15°C	Rmc: 0.2357 @ 14°C	Chlorides: 43K
Type: KCl-PHPA-Glycol	MWt: 1.16	FL: 3.7	Vis: 58	pH: 9.0

Run	Logging Run	COMMENTS	Status
1	PEX (HRLA)-DSI-GPIT	BHT 103.9 deg C @ 2485m	Completed
2	FMI-GR-GPIT	BHT 108.9 deg C @ 2513m	Completed
3	MDT-GR	BHT 114.5 deg C @ 2477m	Completed
4	CSI (Checkshot)	BHT 115.5 deg C @ 2507m	Completed

Loggers TD: 2530m, 9 5/8" shoe @ 2103.5m

**MDT SAMPLES**

450cc DOT certified MPSR samples collected. To be air couriered to Core Laboratories Perth via freight helicopter/air courier a.m. 11-09-01.

2 samples from 2144.0m (Flaxman Formation sand) OFA indication red – gas.

2 samples from 2296.8m (Warre Formation sand) OFA indication white - ?gas +?

**FORMATION PRESSURE ESTIMATION:**

Pore pressure normal.

**MUDLOGGING EQUIPMENT/PERSONNEL:**

Ditch cuttings split and packed to 2473m.

**WELLSITE GEOLOGISTS**

G. Weste / M. Bilek