BAUDIN - 1
COMPOSITE WELL LOG

PERMIT: PEP 135
BASIN: Onshore Gippsland Basin
LOCATION: 147° 52' 19" E
37° 51' 41" S

ELEVATION: G.L. 40 metres
K.B. 41.5 metres
DRILLING CONTRACTOR: Sides Engineering Pty Ltd
RIG: Bourne 2000 THD

SPUDDED: 18:30 hours, 28 September 1999
TOTAL DEPTH: 426 metres, reached at 04:15 hours 3 October 1999
STATUS: Plugged and Abandoned Exploration Well
RIG RELEASED: 07:00 hours, 03 October 1999

SANDSTONE
SILTSTONE
CLAYSTONE
LIMESTONE
DOLOMITE
MARL
COAL
CONGLOMERATE
BRECCIA
INTRUSIVE
VOLCANIC
METAMORPHIC

Conglomeratic
Sandy
Silty
Argillaceous
Calcareous
Dolomitic
Carbonaceous

Py Pyrite
Gl Glauconite
Si Siliceous
Fe Ferruginous
Li Lithic

Plant Remains
Microfossils
Macrofossils

Casing Shoe
Cement Plug

DESCRIPTIONS

BIT #1: RTC SIGJ; 8.5"; Jets 3 x 12mm: In spud; Out 130 m
Run: 130 m; Hours 6.3; Condition; 1:1:IN.

SANDSTONE: pale to moderate yellowish brown, firm to unconsolidated, fine to coarse grained, sub angular to sub rounded poorly sorted quartz, common coarse mica, part with common ferruginous cement, part with common white to pale brown clay matrix.

CALCAREOUS SANDSTONE with minor **ARGILLACEOUS CALCAREOUS SANDSTONE** and possible dispersive clays:
CALCAREOUS SANDSTONE: (90%) light moderate grey, unconsolidated, coarse to very coarse grained, 50-70% sub rounded moderate sphericity pale yellowish grey quartz, 30-50% very coarse marine shell fragments, common glauconite, trace mica, minor black carbonaceous fragments near top of interval.
ARGILLACEOUS CALCAREOUS SANDSTONE: (10%) light moderate grey, firm, very fine grained quartz, with abundant argillaceous calcareous matrix.
(? inferred dispersive Calcareous Claystone not seen in cuttings, estimate 20-30% of formation)

CALCARENITE: light grey, firm, fine grained calcareous grains and fragments, minor quartz grains, rare glauconite, minor argillaceous matrix, minor calcareous cement.
(? possible minor dispersive Calcareous Claystone as above)

CALCARENITE: white to yellowish grey, firm, fine to very coarse calcareous grains and fragments, minor calcareous cement, trace glauconite, abundant corals, bryozoa, trace forams.

BIT #2: VAREL L127; 6.125"; Jets 3 x 11mm: In 120 m; Out 426 m
Run: 306 m; Hours 27.6; Condition; 7:3:1/8.

CALCARENITE: yellowish grey to light olive grey, firm, fine to very coarse poorly sorted bioclastic fragments, minor to common argillaceous micritic matx, trace glauconite pellets, coarser fragments include corals, bryozoa, echinoid spines, trace foraminifera.

CALCARENITE with minor to common interbedded **CALCAREOUS CLAYSTONE** grading to **MARL**

CALCARENITE: as above.
CALCAREOUS CLAYSTONE: medium light grey to greenish grey, soft, amorphous, partly dispersive, grading to **MARL** in part, minor part brownish grey, slightly silty.

Interbedded **SILTY CLAYSTONE, CALCARENITE**, and **CALCAREOUS CLAYSTONE.**

CALCARENITE: as above.
CALCAREOUS CLAYSTONE: as above.
SILTY CLAYSTONE: brownish grey, soft, amorphous, common to abundant quartz silt, argillaceous slightly to moderately calcareous matrix, rare to minor mica, rare to minor carbonaceous flecks, rare moderate reddish brown lithic grains, trace pyrite, grading to **ARGILLACEOUS SILTSTONE** in part.

CALCAREOUS SANDY SILTSTONE, with minor **SILTY CLAYSTONE**, and interbedded **CALCARENITE**, and **CALCAREOUS CLAYSTONE** in upper part of unit.

CALCAREOUS SANDY SILTSTONE: brownish grey to olive grey, firm to moderately hard, very poorly sorted, comprises quartz silt, with sub angular very fine to fine calcite and quartz grains, minor glauconite, trace moderate reddish orange lithics, trace scattered coarse to very coarse sub rounded to rounded frosted yellowish brown quartz grains, strong micrite cement, common argillaceous matrix in part, tight.
SILTY CLAYSTONE, CALCAREOUS CLAYSTONE, and CALCARENITE, as above

SANDSTONE, very minor interbedded **SILTSTONE.**

SANDSTONE: very light grey, predominantly loose, medium to very coarse grained, moderately sorted, sub rounded to rounded, moderate sphericity, clear and frosty quartz, trace greyish yellow quartz, trace very coarse lithic (basement derived?) grains, trace nodular pyrite, inferred good porosity, no shows; (in minor part very fine to medium grained aggregates, weak silica cement, trace pyrite cement, rare argillaceous matrix, minor moderate brown stain, no fluorescence, no cut, poor visual porosity).
SILTSTONE: brownish grey to medium grey, firm to moderately hard, quartz silt, grading to very fine sand in part, minor to common calcareous cement, minor to common argillaceous matrix, trace lithic grains, trace pyrite.

BASEMENT: Indurated **SANDSTONE** with interbedded low grade schist or phyllitic **CLAYSTONE.**

SANDSTONE: light greenish grey, hard, very fine to coarse grained, poorly sorted, angular to sug rounded quartz, strong silica cement, trace dolomite cement, rare white feldspar, trace pyrite, tight.

CLAYSTONE: greenish grey, silvery sheen, hard, sub fissile, faint cleavage, trace quartz veining.

STRATIGRAPHY

AGE	FORMATION
PLEISTOCENE TO PLIOCENE	HAUNTED HILLS GRAVELS
PLIOCENE	JEMMY'S POINT FORMATION
LATE MIOCENE TO PLEISTOCENE	TAMBO RIVER FORMATION
MIOCENE	GIPPSLAND LIMESTONE
LATE OLIGOCENE TO EARLY MIOCENE	LAKES ENTRANCE FORMATION
OLIGOCENE	LATROBE GROUP
ORDOVICIAN?	BASEMENT

Composite Well Log compiled by J Gausden & Associates Pty Ltd