441094 ENCLOSURE 2 MLH-01-A

OR-355B

Geoservices MASTER LOG

geological evaluation

5 cm

OPERATOR	WEAVER
WELL	SQUID 1 ST
RIG	EPOCH
Country	Australia
Field	Bass Basin T 15P
Latitude	40 11' 25"
Longitude	146 16' 10"
Elevation of Rotary Table Above Sea level	22.3m
Above Ground level	
Mean Water Depth	80.5m
Depth reference	RT
Well type	Wildcat
Drilling Contractor	Diamond M
Rig Type	Semisubmersible

FINAL DATA

Date Spudded 16 / 7 / 84
Date TD 1 / 8 / 84
Date TD Sidetrack 16 / 8 / 84
Final Well Status Plug and abandon
Total Depth Sidetrack 2922m
Total Vertical Depth
Horizontal Displacement
Azimuth from North

CASING & LEAK OFF TEST DATA

Depth	Size	Depth	Eq M.W.
243m	20"		
1241m	13 3/8"		

UNIT DATA

Unit No. 60 Type Basic Mudlogging
Engineers J. Guy
G. Denton
J. Stott
G. Lebas
Other Geoservices Logs provided

Remarks
Sidetrack from 1320m to 2922m
Masterlog from SQUID 1 is appended

MUD DATA

MW	Mud Weight
FV	Funnel Viscosity
PV	Plastic Viscosity
YP	Yield Point
Gel	Gel Strength
pH	Acidity/Alkalinity
WL	Water Loss
Cl	Chloride
Ca	Calcium
Sol	Solids
H2O	Water
Oil	Oil
Snd	Sand

DRILLING LEGEND

WOB	Weight On Bit
RPM	Rotary Speed
SPM	Pump Strokes/min
FR	Flow Rate
PP	Pump Pressure
DS	Deviation Survey
RR	Rerun
◢	Casing Shoe

GEOLOGICAL LEGEND

- ▦ Conglomerate
- ▦ Sand/Sandstone
- ▦ Silt/Siltstone
- ▦ Clay/Claystone/Shale
- ▦ Limestone
- ▦ Dolomite
- ▦ Salt
- ▦ Gypsum
- ▨ Anhydrite
- ■ Coal/Lignite
- ▦ Chert
- ▨ Metamorphic rock (Gneiss....)
- ▦ Extrusive rock (Basalt....)
- ▦ Intrusive rock (Granite....)

FLUORESCENCE

- ■ Good Direct Fluo. Excellent Cut Fluo.
- ▥ Moderate Direct Fluo. No Cut Fluo.

ENGINEERING LEGEND

C 1	Core No. 1
rec. 95%	recovery 95%
DST 1	Drill Stem Test No. 1

SCALE : 1/500

LITHOLOGICAL DESCRIPTIONS REMARKS

At 261m LOT. EMW = 11.5 ppg

LIMESTONE: undifferentiated inc. Fos. frag in clay matrix, brizoan, coral, foram, sponge spicules, echinoid spines; CALCARENITE grd to CALCISILTITE, wh-ltgy, yel gy, vfn-vcrse grn, subrnd, calc cmt, occ arg mat.

LIMESTONE: undifferentiated as above, dull yell to or. min. Fluor.-Calc.

CLAYSTONE: olv gy, grn gy, sft non dispersive, v.calc, occ slty, abd Foss frags.

SILTSTONE: gy-grn, sft, v.calc.

CLAYSTONE: olv gy-grn gy, sft, v.calc, sli.dispersive, tr Foss. frags.

CLAYSTONE: as above.

LIMESTONE: undifferentiated inc Foss frag in calc clay matrix, brizoan, coral, foram, sponge spicules, echinoid spines

CALCARENITE: wh-crm-clr, frm calc cmt, occ spar, occ arg, vfn-m grn, tr Glau, Pyr, carb mat.

CALCARENITE grading to **CALCISILTITE** and **CALCILUTITE**

CALCARENITE: wh-crm-clr, frm, calc cmt, occ spar, arg, vfn-m grn, subrnd, tr Glau, Pyr, carb mat.

CALCARENITE: wh-crm-clr-gy, frm, calc cmt bcm arg, vfn-m grn, tr Glau, carb frag.

CLAYSTONE: lt gy-yell gy, sft sticky, occ slty, v calc, abd reworked Foss frag.

CALCARENITE: as above.

CLAYSTONE: lt gy - yell gy, sft, occ blky, largely washing out, v calc, occ slty, abd reworked Foss frag.

CLAYSTONE: as above.

LIMESTONE: undifferentiated, pred. Foss. frag in calc clay matrix with minor CALCARENITE grd to CALCISILITE

CLAYSTONE: dk olv gy -m gy sft, bkly - subfiss, slty, abd Foss frags, grd to non calcareous CLATSTONE.

CLAYSTONE: dk olv gy - m gy sft, blky-subfiss, occ fiss slty, abd Foss frags, sli calc.

CLAYSTONE: m-lt olv gy, sft-frm, blky-fiss, slty abd Foss frags, r calc.

CLAYSTONE: m olv gy -m gy, sft-frm, blky-fiss, slty, % Foss frags decr, occ Pyr r Glau.

CLAYSTONE: lt olv gy -brn gy frm, subfiss-fiss, slty, tr Pyr.

CLAYSTONE: brn gy - lt olv g frm, subfiss-fiss, slty, tr Pyr.

CLAYSTONE: lt olv gy - brn gy, frm, slty, tr Pyr, subfiss -fiss.

Ream down 13 joints after becomming stuck on connection

Large quantities of cavings over shakers.

LOT @1256m EMW 14.6 ppg

Run Schlumberger log DIL-LSS-GR-SP-CAL
300m of fill on first run
Wiper trip, condition mud
run logs again

CLAYSTONE: m olv gy, sft-frm blky-sbfiss-fiss, tr glauc, sl calc-calc, tr wh kaolin, tr qtz, m gr, sbrnd, fri, Fe s stnd, no fluo, tr fos frags

CLAYSTONE: m olv gy, sft-frm, blky-fiss, sl calc, tr glauc, tr wh kaol, sl slty, arg

Commence drilling sidetrack hole SQUID 1St

CLAYSTONE: lt olv brn-gy, sft-frm, sub fis, sli calc, disp, slty.

CLAYSTONE: lt olv brn-gy, sft-frm, sub fis, sli calc, slty, disp.

CLAYSTONE: dk gy- med brn, sft, tr slt, tr calc, tr skel frags, tr mic, tr coal.

SANDSTONE: v lt gy, trnsl-trnsp, frm - fri, fn - v crs dom crs grn qtz, subang - rnd, dom subrndd, mod wll - wll srt, tr arg mat, tr sil cmt, tr calc cmt, fair por, no fluor.

COAL: blk, tr arg & slt mat sub bit, conc frac, brit.

CLAYSTONE: v lt gy, sft, tr slt, tr mic, tr coal, tr carb mat.

SANDSTONE: trnsp- trnsl, fri crs grn, mod wll srt, subrnd occ arg mat, tr sil cmt, fair por, tr mic, no fluor.

SANDSTONE: trnsp- trnsl, fri, crs grn, wll srt, subrndd- rndd, trarg mat, tr sil cmt, fair por, no fluor.

CLAYSTONE: v lt gy, sft, tr slt mat, tr mic, tr carb

SANDSTONE: trnsl- trnsp, fri, v crs grn, subrndd - rndd, wll srt, occ arg mat, occ sil cmt, tr lithics, fair por, no fluor.

SANDSTONE: trnsl- v lt gy, fri, crs grn, mod srt subang- subrndd, tr arg mat, occ sil cmt, fair por, no fluor.

SANDSTONE: trnsl- trnsp, fri, crs grn, subang- sub rndd, mod srt, tr arg mat, tr sil cmt, fair por, no fluor.

SANDSTONE: trnsl- trnsp, fri, med - crs grn, subang- subrndd, mod srt, tr arg mat, tr sil cmt, tr mic, tr carb mat, gd por, no fluor.

CLAYSTONE: lt- dk gy brn, sft, tr mic, tr qtz, tr foss.

Carbide 500 strokes later

CLAYSTONE: Lt-dk gy brn, dissem py, sub fiss, sft, tr mic, tr qtz, tr of foss.

CLAYSTONE: Dk brn some lt gy to lt brn in part, sft, incr in dissem py.

SANDSTONE: Lt grn-lt brn, lithic, md-crs grned, arg mtrx, py cmt in part.

SANDSTONE: Trnsp-trnsl, fri, crs-md grned, well srted, poor arg cmt, tr small mica flakes, tr gran py,