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ENCLOSURE 2

CORE LAB Grapholog

CORE LABORATORIES, INC.

COMPANY B.H.P. HEMATITE PETROLEUM PTY. LTD.
WELL PIPIPA No. 1
FIELD BASS BASIN
COUNTY BASS STRAIT, AUSTRALIA STATE
LOCATION LAT 40°23'11.26"S LONG 145°41'44.96"E ELEVATION 21m RKB to MSL

DEPTH LOGGED, FROM 94 TO 2115 MTR.
DATE LOGGED 4 th MAY, 1982 TO 16 th MAY, 1982
CREW CHIEF G.M., B.G., R.M., J.W. FILE NO. FL 802
DRLG. FLUID SEAWATER 94 TO 229 MTR.
SEAWATER GEL 229 TO 2115 MTR.

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

5 cm

LEGEND

ABBREVIATIONS

NB = NEW BIT
NCB = NEW CORE BIT
CO = CIRCULATED OUT
DST = DRILL STEM TEST
LAT = LOGGED AFTER TRIP
TG = TRIP GAS
NR = NO RETURNS
DS = DIRECTIONAL SURVEY
DC = DEPTH CORRECTION
DEPTHS CORRESPOND TO DRILL PIPE MEASUREMENTS
FROM RIG KELLY BUSHING

RESISTIVITY, OHM-METERS
Rm = MUD
Rmc = MUD CAKE
Rmf = MUD FILTRATE

MUD DATA
CK = CAKE THICKNESS 32nds
V = VISCOSITY API SECONDS
F = FILTRATE API CC'S
W = WEIGHT
S = SALINITY, ppm Cl

LITHOLOGY

SAND	▨	SALT	▨	COAL	■	☐
CONG.	▨	CLAY	▨	DOLOMITE	▨	☐
ANHYDRITE OR GYPSUM	▨	SHALE	▨	CHERT	▨	☐
LIMESTONE	▨	CHALK	▨	SILTSTONE	▨	☐

DRILLING RATE
MIN/MTR ☐
MTR/HR ☒

1 METER = 500 METERS

LITHOLOGY

DEPTH

HYDROCARBON ANALYSIS
PRESENTED IN PARTS PER MILLION

CHROMATOGRAPHIC

Drilling Mud Gas
Methane ● Butane 4
Ethane 2 Pentane 5
Propane 3 Hexane + 6+
CALIBRATION–PPM=

CHECK GAS	CHART DIV.	PPM PER CHART DIV.
½% Methane		
½% Ethane		
½% Propane		
½% Butane		

OIL SHOW
Trace Poor Fair Good

HOT WIRE

Drilling Mud Gas
Drill Cuttings Gas
CALIBRATION–PPM:

CHECK GAS	UNITS	PPM PER UNIT
1% Methane	20	500

REMARKS
FORMATION DESCRIPTION,
MUD DATA,
DRILL STEM TESTS, etc.

RKB – MUDLINE : 94m.

MUD DATA
SEAWATER spotted with Hi-Vis Gel

Foss: calc foss frags, forams, coral, shell frags

Foss: calc foss frags, forams, coral, shell frags

MUD DATA @ 312m.			
Wt	8.8+	FV	36
PV	6	YP	9

LIMESTONE: wh–lt gy, calcarenite, coral, forams, shell frags

LIMESTONE: wh–lt gy, calcarenite, coral, forams, shell frags, tr amber

LIMESTONE: wh–lt gy, calcarenite, coral, forams, shell frags

460 m.–500 m.
GUMBO: lt gy, amorph clay material present in samples

LIMESTONE: wh–lt gy, grdg calcarenite, forams, abnt shell frag

LIMESTONE: wh–lt gy, forams, shell frags, grdg calcarenite

LIMESTONE: wh–lt gy, forams, shell frags, grdg calcarenite, slty i.p.

LIMESTONE: wh–lt gy, forams, shell frags, calcarenite, tr gumbo present
SILTSTONE: tr, lt gy, v fri, v calc

LIMESTONE: wh–lt gy, mott, blk specks, forams shell frags, calcarenite

LIMESTONE: wh–lt gy, mott, blk specks, forams, coral, shell frags, calcarenite

LIMESTONE: wh–lt gy, forams, coral, shell frags, calcarenite
800m.–810m. (gumbo)

LIMESTONE: wh–lt gy, forams, coral, shell frags, calcarenite

MUD DATA @ 880m.			
Wt	9.0+	FV	35
PV	6	YP	16

LIMESTONE: wh, lt–gy–m gy–gn, mot, calcarenite, some m xln, tr fos.

MUD DATA			
Wt	9.1	Cake	2
FV	38	Cl⁻	19K
PV	6	Sand	.75
YP	35	Sol	7
Gel	6/30	Ca	1200
pH	9.5	Oil	0
Filt	16.6		

LIMESTONE: wh, lt gy–m gy–gn, calcarenite, mot, tr fos, tr glau, tr pyr.

LIMESTONE: wh, lt gy–m gy–gn, calcarenite, mot, tr fos, tr glau, tr pyr, v/slty.

SILTSTONE: gy–gn, calc, mod–w cmtd, fri, tr ls a/a, tr sh.

SILTSTONE: lt gy–gn, calc, mod–w cmtd, tr pyr, tr glau, occ clr qtz gr, arg, tr dol, tr ~~carb~~ flk.

SHALE: lt–m gy, calc, subfis, mod cpt, slty.

MUD DATA			
Wt	9.1	Cake	2
FV	38	Cl⁻	19K
PV	6	Sand	.75
YP	35	Solid	7
Gel	6/30	Ca	1200
pH	9.5	Oil	0
Filt	16.6		

SILTSTONE: lt gy–gn, calc, mod–w cmtd, tr pyr, tr glau, occ clr qtz gr, arg, tr dol, tr carb flecking.
SHALE: lt–m gy, calc, subfis, mod cpt, slty.

SILTSTONE: lt gy–gn, mod–w cmtd, tr pyr, tr glau, occ clr qtz gr, arg, tr carb flecks.

SHALE: lt–dk gy, subfis, mod cpt, slty, tr shell fragments.

SILTSTONE: lt–m gy–brn, mod–w cmtd, arg, tr pyr, tr carb flecks, tr shell fragments, occ clr qtz gr.

SHALE: lt–dk gy, sub fis, mod cpt, slty.

MUD DATA			
Wt	9.9	Cake	2
FV	54	Cl⁻	19.8K
PV	10	Sand	.25
YP	17	Solid	8
Gel	4/14	Ca	120
pH	10.4	Oil	0
Filt	14.6		

SILTSTONE: lt–m gy–brn, mod–w cmtd, arg, tr pyr, tr carb flecks, tr shell fragments, occ clr qtz gr.

DOLOMITE: lt brn–bf, micro–XLN, arg, w ind.

SHALE: lt–dk gy, sub fis, mod cpt, calc, slty.

CLAYSTONE: brn, sft, sticky, hydrated, grds to v/arg sltst.

SILTSTONE: m–dk brn, p–mod cmtd, arg, mica.

CLAYSTONE: brn, sft, sticky, hydrated, tr pyr.

SHALE: gy–gn, subfis, p–mod cpt, slty.

SANDSTONE: clr–wh–bf, pred f–m gr, subang–ang, p srtd, mod cmtd, some lse qtz gr.

SANDSTONE: CLR–wht, med–vc grn, sa–a, srt, pred lse, occ gold fluor.

SILTSTONE: lt brn–drk brn, carb, hd, calc, pyr.

SANDSTONE: clr–wht, med gr–granules, ang–sub–rounded, mod srtd, uncon sol, v/pale yel fluor, n/c.

COAL: blk, vitreous, fiss frm.

SILTSTONE: gry–drk brn frm–hd, sl calc, tr pyr.

MUD DATA			
Wt	9.9	Cake	2
FV	54	Cl	19.8K
PV	10	Sand	.25
YP	17	Solid	8
Gel	4/14	Ca	120
pH	10.4	Oil	0
Filt	14.6		

SANDSTONE: clr–wht, v/crse grn, bec w/srtd, sub ang, low visible por, n/fluor.

SILTSTONE: gry–brn, sft, fria, calc, sdy i.p. argil trpyr.

COAL: blk, blky, vitereous, fiss.

SHALE: drk–gry, fiss, v/carb, hd, slty matrix.

SANDSTONE: wht–clr, f–c grns, argil matrix, calc tr pyr.

COAL: blk, blky, vitreous fiss.

SILTSTONE: drk–brn–drk gry, v/argil/carb.

SANDSTONE: wht, pred m/grn, sub ang, w/srtd, slty matrix, occ argil mat.

SHALE: drk–gry–brn, fiss fr–micaceous.

SANDSTONE: wht–lt–gry, frm–hd, f–medgrns, sub rounded, mod srtd, calc, tr pyr, p/por, n/fluor.

SHALE: med–gry–brn, dub fiss, fr micaceous.

SILTSTONE: med–gry–drk brn, sub fiss grde–sh, v/argil, stky, trpyr.

COAL: blk, hd–frm, slty,

SILTSTONE: med–gry–brn sub fiss, v/argil.

COAL: blk, hd–frm, slty.

SANDSTONE: wht–lt gry, frm–hd, f–med grn, sub rounded, mod srtd, calc, tr pyr, n/fluor.

COAL: blk, frm, dull, occ vitreous, sl slty.

SHALE: gry, frm, carb, fiss

SILTSTONE: drk–brn, sdy, blky, sl argil, tr pyr.

SANDSTONE: wht, vf–med grns, mod srtd, slty mat p/cmt, minor fluor w/fas cut, 40% yel green–milky green, fast wht cut.

COAL: blk, frm, dull, occ vitreous, sdy i/p.

SHALE: gry; frm, carb, fiss, slty i/p.

SILTSTONE: drk–brn, sdy argil.

SHALE: drk–gry–brn, frm–hd, micaceous, fiss, carb.

SHALE: blk, frm, fiss, v/carb, micaceous.

SANDSTONE: wht–clr, med–grn, occ crse grn, sub–ang, w/srtd, frm–unconsol sltytr golden–ornge fluor.

SILTSTONE: gry–brn–drk–gry, sdy i/p, argil, carb, sft.

SANDSTONE: pred wht, occ gry–brn, f–med grn, sub ang, w/srtd, slty mat, occ vis por, tr ornge fluor, no cut.

COAL: blk, blky, vitreous

SANDSTONE: wht, v/sft, slty, med grn, pred argil no vis por, n/flour.

5 cm