271209

OR_282

5 cm

DATE SPUDDED: 15-2-86
DATE ABANDONED: 21-2-86
RIG RELEASED: 21-2-86
STATUS: PLUGGED + ABANDONED

BRIDGE OIL LIMITED
WELLSITE LITHOLOGY LOG

WELL: SEAL No 1
PERMIT: T-19-P
LATITUDE: 39°21'48.979"S LONGITUDE: 144°52'52.700"E

RIG CONTRACTORS: ATWOOD OCEANICS
ELEVATION ~~GROUND~~ / W.D. 64.6m
ELEVATION RT - SB: 89.9m
RT - SL: 25.8m
TOTAL DEPTH 1670m
GEOLOGISTS B.L. FURR.
ENCLOSURE No 3

ROCK TYPES

SHALE	(Sh)	DOLOMITE	(Dol)
CLAYSTONE	(Clst)	SIDERITE IRONSTONE	(Sid)
SILTSTONE	(Sltst)	ANHYDRITE	(Anhy)
SANDSTONE	(Sst)	GYPSUM	(Gyp)
CONGLOMERATE	(Cgl)	HALITE	(Hal)
GREENSAND	(Grnsnd)	COAL	(C)
CALCILUTITE	(Clclt)	IGNEOUS	(Ig)
CALCISILTITE	(Clslt)	VOLCANIC	(Volc)
CALCARENITE	(Clcar)	METAMORPHIC	(Meta)
CALCIRUDITE	(Clcrd)		
LIMESTONE (recrystallised)	(Clx)		
MARL	(Mrl)		

CEMENT

SILICA	(Sil)
CALCITE	(Calc)
DOLOMITE	(Dol)
SIDERITE	(Sid)
PYRITE	(Pyr)

MATRIX

CLAY MINERALS	(Cl) (Arg)
MICRITE	(Micr)
QUARTZ SILT	(Slt)
CALCITE SILT	(Clst)

ACCESSORIES

QUARTZ GRAINS	(Aren) (Qtz)	CALCITE CRYSTALS	(Cx)
SIDERITIC CONCRETIONS	(Sid conc)	OOLITHS	(Ool)
LITHIC FRAGMENTS	(Lf)	ALGAE	(Alg)
FELDSPAR	(Fspr)	SKELETAL FRAGMENTS	(Skel)
GLAUCONITE	(Glauc)	CORALS	(Cor)
PYRITE	(Pyr)	CRINOIDS	(Crin)
MICA	(Mic)	FORAMINIFERA	(Foram)
CHERT	(Cht)	BRYOZOA	(Bry)
LIGNITE, COAL Carbonaceous matter	(Cc)	OSTRACODA	(Ostr)
		RADIOLARIA	(Rad)
		INOCERAMUS	(Inoc)
		CHLORITE	(Chl)

POROSITY type
- i intergranular
- v vugular
- f fracture
- isk intraskeletal

ROUNDING
- A angular
- SA subangular
- SR subrounded
- R rounded

GRAIN SIZE
- Cl clay size
- Slt silt size
- VF very fine
- F fine
- M medium
- C coarse
- VC very coarse
- G granule

SORTING
- VW very well sorted
- W well sorted
- M moderately sorted
- P poorly sorted

HARDNESS
- U unconsolidated
- VS very soft
- S soft
- M moderately hard
- H hard
- F firm
- Fr friable
- D dispersive
- VD very dispersive

COLOUR
- lt light / pale
- m medium / moderate
- dk dark / dusky
- wh white
- gry grey
- blk black
- pk pink
- rd red
- or orange
- brn brown
- yel yellow
- grn green
- ol olive
- bl blue
- prp purple
- mult multicoloured
- cl colourless
- v very

Colours are taken from the Geological Society of America Rock - Color Chart

ENGINEERING DATA
- ► S W C (recovered)
- ▷ S W C (no recovery)
- Cored interval : rec. : Not rec.
- Casing shoe
- TBG Bit Data
- FC Flow Check
- CR Circulate Returns
- LBT Logged Before Trip
- LAT Logged After Trip
- DST. 1
- RFT. 1
- PERFORATIONS

N.B. MARL is defined as a rock consisting entirely of clay sized fraction having between 35-65% micrite the remainder being clay minerals

VERTICAL SCALE: 1:500

5-54

RATE OF PENETRATION (METRES/HOUR, MIN/METRE) | ENG. DATA | DEPTH Ft. M. | LITH. | ROCK TYPE % | COLOUR | Grain/Crystal Size: CLAY, SILT, VFG, FG, MG, CG, VCG, GRIT, PEBBLE | SORTING | ROUNDING | MATRIX TYPE % | CEMENT TYPE % | ACCESS TYPE % | HARDNESS | POROSITY: TYPE, NIL-TRACE, POOR, FAIR, GOOD, EXCEL. | Hydrocarbons: FLUOR, Streaming Cut, Leaching Cut, CRUSHCUT, STAIN, ODOUR, RING | DESCRIPTION SUMMARY & REMARKS

MEAN SEA LEVEL 25.8m BELOW K.B.

SEA FLOOR 89.9m KB (-64.6m)

SAMPLES RETURNED TO SEA FLOOR.

SAMPLES RETURNED TO SEA FLOOR.

SAMPLES TO SEABED.

10 metre samples.

BIOCLASTIC LIMESTONE:- wh, org, occ. deep org, shell frags, gastro, bivalve, corals, bryozoa, some v. friable cemented fragments, forams, calcite grains, 10% qtz sand grains, crs. clr. ? worm casts? Strong mineral fluor.

CALCARENITE:- white, light grey, off white, fine grained, friable, subang - rnd, calcite cement, vis ø poor. moderately sorted.

CALCILUTITE:- med. grey, hard, blocky occ. v. fine sd. approx 10% clay.

CLAYSTONE:- Light grey, soft and very dispersive, mostly washing out, calcareous.

CLAYSTONE:- Light grey, grey, v. soft and dispersive, slightly calcareous, (Tr - 5%) Residue of clay.

SILTSTONE:- Grey/green, soft, slightly calcareous, very argillaceous, occ green specks (glauconite)?

HEAVY CEMENT CONTAM.

CALCILUTITE:- cream, grey, light-green soft - v.soft, calcareous, clay matrix occ. glauconitic with glauconitic grains, shell and coral fragments

Clays becoming very dispersive.

CLAYSTONE:- Light green grey, very soft and dispersive, occ soft, calcareous (n-2), foss. frags (Tr - 5%).

SANDSTONE:- Light grey, light grey green, firm to very firm, very fine to fine, quartz sand cemented with calcareous material, glauconitic.

SANDSTONE:- Translucent, clear, unconsolidated, rounded subrounded, medium occasionally very coarse, moderately to well sorted. Angular bioclastic material good inferred porosity.

CLAYSTONE:- brown, very soft and dispersive (mostly washing out) carbonaceous dark brown flecks, occ. silty, non calcareous. Heavy trace Pyrite.

SILTSTONE:- medium to dark brown soft to firm, blocky to sub-fissile, slightly calcareous, carbonaceous micaceous. grading to very fine sandstone.

SANDSTONE:- Translucent, clear, occasionally orange, unconsolidated, medium and occasionally coarse, subangular to rounded. moderate sorting.

SANDSTONE:- Brown, firm, friable, fine, angular to sub angular, moderately sorted, immature - lithic fragments, shell fragments calcite, argillaceous, calcareous cement

CLAYSTONE:- Light green/grey, soft to firm, blocky occasionally sub fissile, glauconitic, calcareous.

SANDSTONE:- Translucent, unconsolidated, occasionally cemented. Fine to very coarse. (finer fraction usually consolidated), angular to subangular, poorly to moderately sorted, bimodal, abundant pyrite occasionally as cement. Visible porosity in consolidated fraction good. Inferred porosity in unconsolidated excellent. Occasionally dark brown silty matrix Fluor no cut, dolomitic.

SANDSTONE:- Brown, friable, fine, angular, well sorted, argillaceous matrix Visible porosity poor

CLAYSTONE:- Light green/grey, soft to firm, blocky, occasionally grading to SILTSTONE, occasional fine grained sand grains, calcareous abundant fossil fragments. Also:- Light grey, firm, blocky occasionally sub fissile, slightly calcareous.

CLAYSTONE:- brown, dark brown, washing out grading to brown SANDSTONE As described above.

FLUORESCENCE:- TRACE DIM YELLOW, TRACE LIGHT YELLOW CUT FLUORESCENCE

SANDSTONE:- Translucent clear, medium very coarse grained, subangular to occasionally rounded, moderately sorted, v.good inferred porosity, dull yellow fluorescence, no cut.

FLUORESCENCE:- DULL YELLOW, SLOW CRUSH CUT, THICK LIGHT YELLOW RING.

SANDSTONE:- Light, dark brown, soft occasionally hard, clay matrix. medium grained, angular.

SANDSTONE:- Brown, firm, fine, occasionally very fine and medium, angular to subangular moderately sorted, argillaceous matrix occasionally dolomitic cement. Grading to SILTSTONE and CLAYSTONE. Clays washing out.

SILTSTONE:- brown, hard, conchoidal fracture.

SHALE:- Dark grey/brown, occasionally light brown soft to hard, predom firm, fissile, carbonaceous. Tr dull yellow fluorescence instant streaming cut, very light yellow thin residual ring. Slow crush cut.

CLAYSTONE:- Brown, very soft and dispersive, Grading to occasionally very firm blocky to fissile (shale) occasionally silty + v. fine sand.

CLAYSTONE:- Light brown/grey, very soft and dispersive, occasionally firm enough to be fissile SHALE, micaceous.

SILTSTONE:- White, light grey, firm to soft, blocky, slightly calcareous in parts.

DOLERITE:- white, light green, dark green, dark brown, occasionally pink, hard, coarse to very coarse crystals. (feldspars and pyroxenes).

DOLERITE:- white, light green, dark green, dark brown, occasionally pink, hard coarse to very coarse, crystals (feldspars and pyroxenes) Also:- altered to:- green, light green, soft to firm, medium to coarse crystals in a soft clayey matrix.

SANDSTONE:- white, off white, firm, friable, occasionally hard, fine to very fine, sub angular, moderately sorted, visible ø trace white argillaceous matrix.

SANDSTONE:- dark grey, firm + friable to hard, fine, subangular argillaceous matrix poorly sorted, visible porosity trace.

CLAYSTONE:- brown, V.soft and dispersive to firm, and occasionally sub fissile. mostly washing out of sample.

DOLERITE:- white, light green, dark green, dark brown, medium to very coarse crystals, occasionally dark grey with white vesicles.

SCHLUMBERGER LOG RUN 2
1. DIL - MSFL - LSS - GR - SP - Cal
2. LDT - CNL - GR - Cal.
3. CST