902020

HOLE NO: T2
LOCALITY: Seaford Road, Little Swanport CO-ORDS 147°58'59"E 42°20'19"S

DATE COMMENCED: 10.8.81
DATE COMPLETED: 11.8.81

DRILLED BY: Stacpoole Drillers
DRILLER: Wayne Bald
LOGGED BY: Chris Sharples

COLLAR R.L. 2m ASL
CASING COLLAR (~10m)
DEPRESSION Vertical
BEARING -
RIG: Foxmobile B-80 DD rig

DEPTH FROM (m)	DEPTH TO (m)	THICKNESS (m)	DESCRIPTION	COMMENTS
0	9.38	9.38	OPEN HOLE - soil and weathered material - no recovery.	CORING FROM 9.38m DOWN
9.38	13.4	4.02	SANDSTONE grey-white medium lithified moderately friable sandstone. Grains well sorted, sub-angular to angular, appear to be 100% quartz. Cement v. minor component. Yellow-brown Fe staining (Mostly as Leisegang rings) is common and dark brown Fe-Oxide spots 0.5-2mm diameter occur throughout as a secondary cement around quartz grains within spots. 'Spots' comprise 30-40% of sediment. Cross bedding appears present, but is usually hard to distinguish from Liesegang Rings. Indistinct bedding present (bands 2-30mm thick), at ~10° to horizontal.	(EASY DRILLING) QUARTZ ARENITE
13.4	13.9	0.5	SANDSTONE/CLAY PELLET CONG-LOMERATE Sandstone as above with 20-30% pale grey/yellowish clay pellets 1-3mm thick, 2-30mm long, elongated horizontally. Minor (~1-2%) possible Feldspar grains.	
13.9	22.98	9.88	SANDSTONE As at 9.38-13.4m. Definite mica grains present (<1%) and probable feldspars (1-2%). Minor coarse quartz grains on a few bedding planes and minor (<2%) scattered clay pellets, mainly near bottom of unit - Fe-oxide spots most abundant (70-80% of sediment) at 21.3-22.5m. Base of unit marked by apparent minor 'unconformity (as between crossbed sets) and by minor (~2%) black (?carbonaceous) grains.	0.4m CORE LOSS AT 14.49-14.9m 0.42m CORE LOSS AT 16.48-17.9m 0.15m CORE LOSS AT 19.75-19.9m A QUARTZ ARENITE WITH MINOR LITHIC COMPONENTS.
22.98	25.2	2.22	SANDSTONE Grey/white medium (angular well sorted grains) quartz arenite with abundant Fe-stained brown bands and patches. Mica generally rare, but is common (~10%) on some bedding plaes. Minor content of dark black grains (carbonaceous?). Possible Feldspar minor. Sandstone breaks easily, clayey cement is obvious in places.	QUARTZ ARENITE WITH MINOR LITHIC COMPONENTS

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DEPTH FROM (m)	DEPTH TO (m)	THICKNESS (m)	DESCRIPTION	COMMENTS
25.2	26.1	0.9	MUDSTONE Fine brown/yellow mudstone with up to 20% fine mica in places. Minor ?Mn stains. Mudstone moderately clayey.	QUARTZ ARENITE WITH MINOR LITHIC COMPONENTS.
26.1	28.01	1.91	SANDSTONE grey/white well sorted fine quartz sandstone with common brown Fe banding and Fe-spots in bottom 0.5m. Bedding vague-defined by Fe-stained banding and bedding plane breaks (~10% from horizontal). Medium grained mica common on some bedding planes in top 0.5m of unit. Occurs together with common ~1.0mm dia. black spots (carbonaceous?). On these planes, Quartz ~60%, mica ~10-20%, black spots 10-20%, brown clay cement ~10%.	
28.01	32.0	3.99	SANDSTONE/CLAY PELLET CONGLOMERATE Brown to pale purple/brown medium quartz arenite with brown Fe-staining and spots (~1mm dia.). Fe-stain bands 3-10mm thick often define crossbedding. Trace (<2%) Feldspar grains appear to be present. At 28.01-30.1m up to 20% pale grey/grey clay pellets occur, 0.5-5.0mm thick and up to 30.0mm long, and elongated in direction of bedding (bedding ~10^0 from horizontal.)	QTZ. ARENITE
32.0	34.3	2.3	SANDSTONE grey/white medium friable well sorted quartz arenite with brown Fe-stain bands up to 10mm thick defining bedding (bedding ~10^0 to horizontal).	QTZ ARENITE
34.3	42.85	8.55	SANDSTONE grey/white medium friable well sorted quartz arenite, almost entirely light brown Fe-stained. Brown Fe spots and banding ubiquitous, sometimes defining crossbeds. Rare clay pellets (mostly <1mm dia.). No micas or feldspar identified.	QTZ. ARENITE
42.85	43.5	0.65	SANDSTONE grey/white medium friable well sorted quartz arenite, 50% of whichis bands up to 20mm thick stained brown by Fe.	
43.5	49.6	6.1	SANDSTONE grey/white medium friable well sorted quartz arenite with Fe spots up to 2mm dia, and 80% of sediment light brown Fe stained. Scattered clay pellets present (~5%) and minor bands up to 30mm thick with coarse granule size poorly sorted quartz clasts. Clay pellets common in these bands, but no mica/feldspar seen.	
49.6	50.0	0.4	MUDSTONE dark brown and brown red (bands 5-20mm thick) fine grained mudstone.	OXIDISED SEDS.
50.0	50.64	0.64	SANDSTONE fine grained brown clayey quartz arenite-featureless apart from Fe staining	
50.64	50.76	0.12	SANDSTONE fine grained pale grey quartz arenite. slightly clayey with sub-horizontal undulating bands 1-5mm thick (darker grey).	UNOXIDISED SEDS.

DEPTH FROM (m)	DEPTH TO (m)	THICKNESS (m)	DESCRIPTION	COMMENTS
50,76	50.98	0,22	CARBONACEOUS SANDSTONE dull black finegrained ?quartz sandstone (well sorted) with fine black carbonaceous matrix. Massive, no banding. Grades into units above and below.	
50,98	52.8	1.82	SANDSTONE pale grey/green medium well sorted friable quartz arenite. Banding indistinct, 5-250mm thick. A few (1-2mm) red laminae, and at 52.25-52.34m, is a large allocthonous block of ?quartz arenite having pale grey/green laminae interlaminated with 80% red laminae. Laminae are contorted and end abruptly at edge of block ("Sedimentary Roll"?). Band of dull black carbonaceous sandstone at 52.7-52.72.	
52.8	52.89	0,09	CONGLOMERATE sandstone as above with 50% rounded elongate grey (red tinged) mudstone clasts up to 10×30cm.	
52.89	52.97	0,08	CARBONACEOUS MUDSTONE dull black fine grained carbonaceous mudstone.	
52,97	64.85	11.88	SANDSTONE pale grey/green fine/medium friable quartz arenite (no mica/feldspar identified) with minor red, black and yellow (clay) laminae above 59.0m (indicate bedding dipping 10^0 to horizontal). Unit massive below 59.0m. Red tinge to sediment at 62.9-63.25, and 63.55-63.8m. Dull black carbonaceous mudstone interbedded at 56.98 - 57.04. Minor mudstone clasts at 60-93 m	
64,85	66.67	1,82	BANDED MUDSTONE dull black carbonaceous mudstone (80% of top 0,5m) interbedded with pale red and pale green mudstone, and with minor pale green sandstone bands (as at 52.97-64.85m bands usually 1.0-30.0mm thick (except carb. mudstone. bands in top o.5m, which are up to 200mm thick). Mainly pale green sandstone in lower 0.5m.	
66.67	68.5	1.83	SANDSTONE pale grey/green medium quartz arenite with 50% pale red laminae and bands up to 200mm thick. One dull black carbonaceous clay band at 67.53-67.55m	
68.5	69.4	0.9	CARBONACEOUS MUDSTONE dull black ?carbonaceous mudstone, massive and featureless except for green/ black fine sandstone band at 68.93-68.96m. Fracture at ~70^0 to horiz. in top half of unit	
69.4	70.0	0.6	SANDSTONE/MUDSTONE . Green fine quartz arenite (40%) interbanded with 1-5mm thick dull black carbonaceous mudstone laminae (~40%) and dull red mudstone bands (~20%) up to 15mm thick.	
70,0	74.17	4.17	SANDSTONE pale grey/green fine well sorted quartz arenite. Laminated-laminae 1-10mm thick of darker sand (and rarely of red mudstone) define bedding at 10^0 to horizontal. Sediment fairly friable.	
74.17	76,18	1.99	SANDSTONE brown fine-medium well sorted quartz arenite with indistinct banding and laminations.	

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DEPTH FROM (m)	DEPTH TO (m)	THICKNESS (m)	DESCRIPTION	COMMENTS
74.17 (cont'd)	76.18	1.99	A few irregular blotches and laminae pale grey/green (i.e., not Fe stained), and rare fracture surfaces (at ~45° to horizontal) also grey/green.	BROWN Fe-STAINED DUE TO SOLUTIONS FROM DOLERITE?
76.18	76.6	0.42	MUDSTONE fine red/brown banded (1-10mm thick bands) mudstone, except grey/green on some bedding planes and on a vertical fracture at 76.42-76.54m.	
76.6	76.8	0.2	SANDSTONE fine/medium brown hard arenite (baked)	
76.8	77.82	1.02	BAKED MUDSTONE/SANDSTONE fine grey/green mudstone, laminated, with dark grey/green and red laminae up to 5mm thick, and with ~40% 5-10mm thick fine grey/green quartz arenite interbeds. Vertical fracture in bottom 0.5m (cuts dolerite contact, therefore post-dolerite intrusion or penecontemoraneous).	
77.82			DOLERITE CONTACT 2mm thick ?quartz layer on contact.	
77.82	83.0	5.18	DOLERITE top 70mm dull black fine grained - a chilled margin. Rest of unit is dense grey/green medium to coarse grained dolerite, clearly showing intergrown texture of pyroxene and feldspar crystals.	
83.00			END OF HOLE	