

**WCR
PRETTY HILL-1
(W469)**

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Appendix 4....

Lithological Descriptions

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APPENDIX 4

DETAILED LITHOLOGICAL DESCRIPTION

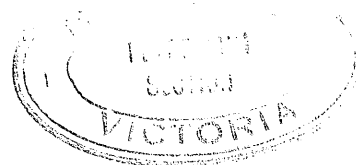
AND

CORE DESCRIPTIONS

AND ANALYSES

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CORE DESCRIPTIONS

- Core No. 1 1282 to 1302 feet. Recovered 12 feet.
2 feet sandstone; dirty, dark brown, limonitic. Fine to very coarse grained with some granules; subangular to well rounded, poorly sorted quartz grains set in a dirty brown limonitic matrix. Tight, fairly hard, non-calcareous and non-fossiliferous.
10 feet siltstone and mudstone; light brown, chocolate brown to dark brown, micaceous, pyritic, laminated.
No apparent dip. Ultra violet: negative.
- Core No. 2 1816 to 1836 feet. Recovered 6 feet
Siltstone and mudstone; dark brown, laminated, micaceous, pyritic, with interbedded clear, loose, very fine to fine sand and shell fragments in places. Tight, dense but soft.
No apparent dip.
- Core No. 3 2373 to 2383 feet. Recovery nil.
- Core No. 4 2383 to 2403 feet. Recovered 15 feet.
2" dolomite-ankerite; brown, tight, dense and hard. The rest of the core is siltstone to very fine sandstone; light to dark grey, brownish, laminated, very micaceous, pyritic and tight. No apparent dip.
- Core No. 5 2716 to 2726 feet. Recovery nil.
- Core No. 6 2726 to 2734 feet. Recovered 6 feet.
Sandy siltstone; dark grey, greenish, very glauconitic and micaceous, fossiliferous and non-calcareous. Tight, dense, and soft. Quartz grains are coarse to very coarse, angular to subrounded, poorly sorted and occur in patches throughout the core. Some coal is present in places.
No apparent bedding. Ultra violet: -negative.
- Core No. 7 2928 to 2940 feet. Recovered 12 feet.
Sandstone; light grey-green, fairly porous, made up of clear to light grey, fine to coarse (mainly medium) grained, angular to subround, fairly well sorted quartz grains, some dark rock fragments, feldspar, siltstone fragments, odd clay pellets, some pink grains, probably feldspar, with chlorite and a few pebbles. Few calcareous concretions.
One foot from the top of the core there is a 3" thick poorly sorted pebble (quartz) conglomerate.
No apparent bedding. Ultra violet: negative.

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- Core No. 8 3340 to 3360 feet. Recovered 15 feet.
1 foot siltstone; light grey-green, compact, composed of clear quartz, some feldspar and silty, clayey, micaceous, chloritic matrix.
2 feet sandstone; light grey-green, very fine subgreywacke with same constituents as the top of the core and somewhat coaly in the bottom foot.
12 feet siltstone and mudstone; light to medium grey-greenish, fairly hard, compact.
No apparent dip. Ultra violet: negative.
- Core No. 9 3810 to 3830 feet. Recovered 13 feet.
Siltstone; light grey-green, micaceous, carbonaceous, compact, tight and uniform except in the second foot from the top when it becomes very fine to fine sandstone, fairly tight and made up of quartz approximately 60%, feldspar, dark rock fragments, chlorite and silty matrix. Siltstone is sandy in places and dense. Cross bedding and apparent dip of 28°. Ultra violet: negative.
- Core No. 10 4315 to 4328 feet. Recovered 13 feet.
Siltstone; light to medium to dark grey, sandy in part, micaceous, carbonaceous, tight, compact and uniform except for several bands of light grey-green, very fine to fine, calcareous, compact sandstone up to 4" thick, mineral composition of which is quartz, feldspar, biotite, few dark rock fragments and chlorite.
Cross bedding and apparent dip of 15°. No evidence of oil or gas.
- Core No. 11 4625 to 4640 feet. Recovered 7 feet.
Note: Seven feet of Core No. 11 was picked up when cutting Core No. 12 and the lithology is uniform for the two cores. Description is as for Core No. 12.
- Core No. 12 4640 to 4655 feet. Recovered 15 feet.
Siltstone; light green-grey, medium to dark grey, tight, dense with odd green clay fragments and carbonaceous matter. In places grades into a very fine sandstone. Mineral composition is quartz, about 50% to 60%, mica, feldspar and few dark rock fragments.
Apparent dip of 15° to 20°. Density: 2.41.
Ultra violet: negative. No evidence of oil or gas.

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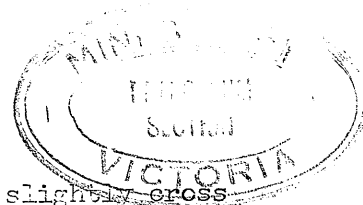
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- Core No. 13 4940 to 4960 feet. Recovered 5 feet.
2 feet siltstone and very fine sandstone; dark grey, micaceous, laminated, tight and dense, non-calcareous.
3 feet sandstone-subgreywacke; light to medium grey, mottled, tight, with fine to medium grained quartz, feldspar, dark rock fragments, chlorite and mica.
Apparent dip in siltstone 15° to 20° .
" " " sandstone up to 30° .
Density siltstone: 2.49.
" sandstone: 2.3.
No evidence of oil or gas.
- Core No. 14 5400 to 5420 feet. Recovered 20 feet.
Sandstone-subgreywacke; grey-green to blue-green, mottled, slightly calcareous, tight, compact, made up of fine to coarse but nearly all medium grained, well sorted quartz, 40% to 50%, feldspar 20%, dark rock fragments 20%, and the rest mica, silt and clay, carbonaceous matter and few pink mineral fragments.
One apparent dip on a carbonaceous bed: 10° .
Density: 2.35. Ultra violet: negative.
No evidence of oil or gas.
- Core No. 15 5420 to 5424 feet. Recovered 2 feet.
First foot sandstone as for Core No. 14.
One foot intraformational breccia, made up of pebble sized bodies of light grey, dark grey and black siltstone fragments, quartz and coal set in a sandstone matrix. Core is tight and some of the brecciated fragments show a slickensided surface. No evidence of oil or gas. Density: 2.38.
Ultra violet: negative.
- Core No. 16 5935 to 5947 feet. Recovered 12 feet.
Siltstone and mudstone; dark grey, fissile, fractured, dense, slickensided and brecciated in few places. Fractures are filled with white, soft, slickensided non-calcareous material slightly resembling talcum.
Fourth and fifth feet grade into very fine sandstone made up of quartz, feldspar, mica, dark rock fragments and carbonaceous matter.
Apparent dip of 25°
Density: 2.46. No evidence of oil or gas.

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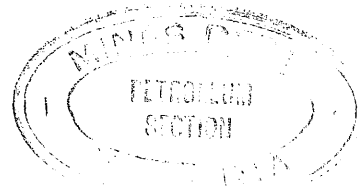
- Core No. 17 6070 to 6080 feet. Recovered 6 feet.
Sandstone; white, friable, uniform and slightly cross bedded, made up of clear, mainly medium to very coarse, angular to subround, subhedral quartz with some distinctive light orange to pink garnets and possibly some feldspar, set in a white, siliceous, kaolinitic, non-calcareous matrix. Some mica fragments and thin coal streaks appear near the base of the core. Four inches from the base a large, grey mudstone fragment occurred.
No apparent dip. Density: 2.5.
No evidence of oil or gas. Ultra violet: negative.
- Core No. 18 6376 to 6388 feet. Recovered 4 feet.
Sandstone; white to light grey, made up of clear, medium to granule, angular, subhedral, poorly sorted quartz with orange and pink garnet, (about 5%) and few black, hard, mineral grains, possibly ilmenite, set in a siliceous, clayey matrix which is not as abundant as in Core No. 17. A few thin streaks of carbonaceous matter appear near the bottom of the core.
No bedding apparent. Density: 2.3.
No evidence of oil or gas. Ultra violet: negative.
- Core No. 19 6690 to 6702 feet. Recovered 7 feet, 6 inches.
1 foot sandstone; light brown, compact, slightly dolomitic and ankeritic, made up of clear to light grey, fine to very coarse angular and subhedral quartz, sometimes nearly euhedral with fresh, nicely developed faces probably resulting from secondary crystallisation. Matrix is light brown, siliceous, clayey, slightly dolomitic or ankeritic. The rest of the core is light grey, highly porous, cross bedded sandstone differing from the top by the absence of dolomitic-ankeritic matrix and porosity only. As accessories, light violet, pink or blood red garnets, black, heavy and hard possible ilmenite and some odd soft black graphite occur.
Apparent dip of 10° to 25°. Density: 2.33
No evidence of oil or gas. Ultra violet: negative.
- Core No. 20 7200 to 7214 feet. Recovered 14 feet.
Sandstone; light grey, white, friable, made up of light grey, clear, fine to very coarse, angular to subround, poorly sorted quartz with evidence of secondary crystallisation, and white, siliceous, silty, clayey matrix.
One foot in the centre of the core is sandstone, brown, slightly calcareous or dolomitic. Few coal streaks with evidence of cross bedding appear in the bottom part with one or two gas bubbles emanating from this coal only.
No apparent dip. Acetone test: negative.
No other evidence of oil or gas. Ultra violet: negative.



- Core No. 21 7585 to 7597 feet. Recovered 12 feet
 Sandstone; light grey, consisting of clear to light grey and white, fine to coarse and some very coarse, angular to subround poorly sorted quartz and nearly entirely with a siliceous matrix (cf. Waarre Formation, Port Campbell No. 2). Not as porous as Cores Nos. 18 to 20 and is harder. Few coaly bands and prominent quartz veining.
 Apparent dip: 10° . Density: 2.42.
 No evidence of oil or gas. Ultra violet: negative.
- Core No. 22 7883 to 7895 feet. Recovered 6 feet.
 Diabase; dark grey to dark green, dense, veined, porphyritic, metamorphosed basic rock. Phenocrysts, medium to dark green in some sections, translucent to transparent exhibiting monoclinic to rhombic sections and occasional poor prismatic cleavage and basal parting, very soft, often with yellow marginal alterations. Could be monoclinic proxene ?augite and olivine altered to uralite, serpentine and even to chlorite. The phenocrysts are set in a microcrystalline, dense, ash-like, glittering matrix with tiny lath-like ?feldspar crystals showing ophitic structure in places and some sulphide crystals - ?pyrite. Veins and fractures are filled with secondary calcite usually stained red with iron oxide, and ?chlorite. Rock is slightly magnetic.
 Density: 2.8.
- Core No. 23 8112 to 8129 feet. Recovered 16 feet.
 Diabase; dark grey, dark green, porphyritic, altered igneous rock with veins and fractures. Phenocrysts of green, usually granular, stubby, prisms of olivine with pyramid terminations. Common aggregations within olivine grains probably alterations to ?serpentine, ?pyroxene, ?amphybole and chlorite. In the middle part of the core some olivine is replaced by clear ?quartz and chlorite. Elongated prismatic green phenocrysts are possibly pyroxene. Small lath-like, vitreous, not very conspicuous feldspars apparently fairly fresh are set in a fine crystalline ash-like matrix with numerous milk-white granular minerals possibly primary zeolites or kaolin and $CaMg$ carbonates. Numerous fractures are filled with chlorite, zeolite or carbonates possibly magnesite, sometimes stained by iron oxide.

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DETAILED LITHOLOGICAL DESCRIPTION

Glencly Group = Heytesbury Group

Surface to 420 feet

Limestone; light grey, fossiliferous, slightly glauconitic, porous, with some thin bands of silty limestone and glauconitic, calcareous siltstone.

420 to 1120 "

Marl; grey to blue-grey, puggy, fossiliferous.

1120 to 1256 "

Limestone; light brown, fossiliferous, limonitic with some scattered glauconite fragments, interbedded with grey to brown grey, fossiliferous, puggy, silty marl.

Knight Group = Wangerrip Group

1256 to 1770 feet

Sandstone; yellow-brown, dirty, fine to granule, unsorted, set in limonitic matrix, interbedded with light to dark brown, micaceous, pyritic, laminated siltstone-mudstone.

1770 to 1905 "

Siltstone-mudstone; dark brown to dark grey, laminated, micaceous, interbedded with thin beds of very fine to fine, clear, loose sand. Pyrite abundant, fossiliferous.

1905 to 2370 "

Sandstone; yellow to clear, dirty, medium to coarse, unsorted, set in limonitic matrix, interbedded with brown laminated, micaceous, pyritic siltstone. Dolomite bands in places.

Paaratte Formation

2370 to 2598 feet

Siltstone; dark grey to brown-grey, micaceous, pyritic, with dolomite bands interbedded with sandstone, yellow to clear, fine to coarse.

Belfast Mudstone

2598 to 2770 feet

Siltstone; sandy, dark grey to greenish-grey, micaceous, glauconitic, fossiliferous, pyritic and carbonaceous.

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Flaxmans Beds

2770 to 2922 feet

Sandstone; clear to brown, dirty, limonitic, medium to very coarse, pyritic, interbedded with dark grey glauconitic sandstone.

Merino Group

2922 to 3005 feet

Sandstone; light green-grey, fine to coarse, mainly medium grained, quartz, dark rock fragments, feldspar, chlorite, and some pink grains.

3005 to 3150 "

Siltstone; sandy, light grey, micaceous.

3150 to 3200 "

Sandstone; light grey to light greenish-grey, fine to coarse.

3200 to 3485 "

Siltstone-mudstone; light to medium grey to greenish-grey, composed of clear quartz grains, feldspar, mica, in silty clayey matrix, interbedded with light greenish-grey, very fine sandstone to subgreywacke with the same constituents.

3485 to 3522 "

Sandstone; light greenish-grey with quartz, feldspar and dark rock fragments; slightly calcareous in parts.

3522 to 3565 "

Siltstone; light grey to greenish-grey, interbedded with sandstone.

3565 to 3618 "

Sandstone; light greenish-grey.

3618 to 3705 "

Siltstone; light grey to greenish-grey, interbedded with sandstone.

3705 to 3745 "

Sandstone; light grey to greenish-grey.

3745 to 3835 "

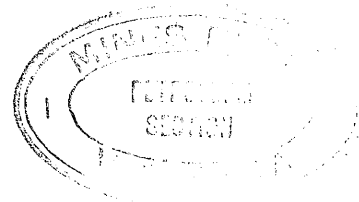
Siltstone; light grey to greenish-grey, micaceous, carbonaceous, interbedded with sandstone, light grey to greenish-grey. Fine grained, made up of quartz, feldspar, dark rock fragments and chlorite in silty matrix.

3835 to 3882 "

Sandstone; light grey to greenish-grey.

3882 to 4004 "

Sandstone; light grey to greenish-grey, interbedded with siltstone, light grey to greenish-grey, few coal seams.



Merino Group (Cont'd)

4004 to 4890 feet

Siltstone; grey to greenish-grey, composed of quartz, feldspar, dark rock fragments, micaceous, interbedded with sandstone of the same composition. Several coal bands.

4890 to 5102 "

Sandstone to subgreywacke; light to medium grey, mottled, fine to medium, made up of quartz, feldspar, dark rock fragments, chlorite, mica. Interbedded with siltstone, grey, micaceous, laminated and several coal bands.

5102 to 5400 "

Siltstone; grey, micaceous, laminated with coal bands, interbedded with sandstone to subgreywacke, light to medium grey, mottled.

5400 to 5550 "

Sandstone to subgreywacke; grey-green to blue-green, fine to coarse but mainly medium grained, very well sorted, made up from quartz, feldspar, dark rock fragments, mica, slightly calcareous. Interbedded with siltstone, grey to green-grey, micaceous and several coal bands.

5550 to 5935 "

Siltstone; light to medium grey to green-grey, sandy to clayey in places, calcareous. Interbedded with sandstone to subgreywacke, grey to green-grey.

5935 to 5964 "

Siltstone to mudstone; dark grey, fissile, very fractured, slickensided, interbedded with sandstone, made up of quartz, feldspar, mica, dark rock fragments and carbonaceous material.

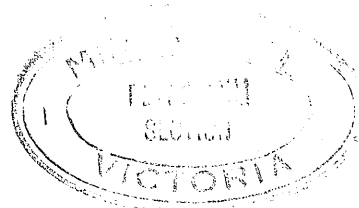
Basal Sandstone

5964 to 7874 feet

Sandstone; made up of white to clear quartz, fine to very coarse, angular to subrounded with some well developed secondary crystal facies, contains very distinctive, translucent, orange-red to pink ?garnet fragments. The matrix is white, very fine, siliceous material. Generally noncalcareous but bands of dolomite and dolomitic cement appear. Interbedded with a few beds of light to medium grey mudstones and coal.

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Cambrian Basement Complex

7874 to 8129 feet

Dark grey to greenish-grey, ultrabasic igneous rock which appears to have originally been an olivine dolerite and has since been strongly weathered and altered to diabase. Very fractured and slickensided with ferro-calcite along fractures.

Petroleum Technology Laboratory, Bureau of Mineral Resources Geology and Geophysics Canberra.

Date: 4th December, 1964

CORE ANALYSIS RESULTS

Notes:- (i) Unless otherwise stated, the porosities and permeabilities were determined on two small plugs (V & H) cut at right angles from the core or sample. Ruska porosimeter and permeameter were used, with mercury at 750 p.s.i.g. and dry nitrogen, respectively, as the saturating and flowing media. (ii) Residual oil and water saturations were determined using Sozhet type apparatus. (iii) Acetone test precipitates and fluorescence of solvent after extraction are recorded as, nil, trace, fair, strong or very strong.

Well or Area	Core or Sample No.	Depth in ft. From:- To:-	Lithology	Effective Porosity in % by Vol		Absolute Permeability in Millidarcys		Avg. density in gms./cc		Fluid Saturation in % Pore Space		Acetone Test		Solvent after Extraction.		Remarks.
				V	H	V	H	Dry Bulk	Apparent Grain	Water	Oil	Colour	Precipitate	Colour	Fluor	
Pretty Hill No. 1	1	1284' 1286'	Siltstone and shale	35	35	3	4	2.00	3.08	27	Trace	Orange	Very strong	Trace	Trace	
	2	1816' 1818'	Siltstone and sandstone	40		N.D.		1.84	3.03	48	Nil	Pale yellow	Nil	Trace	Fair	Pieces only; insufficient for plugs.
	3	NIL CORE RECOVERY														
	4	2389' 2391'	Siltstone and sandstone	36	37	Nil	33	1.91	3.08	21	Trace	Pale yellow	Very strong	Trace	Trace	Pyrites obvious
	5	NIL CORE RECOVERY														
	6	2728' 2730'	Siltstone and sandstone	N.D.	42	N.D.	39	1.95	3.39	30	Nil	Trace	Nil	Nil	Trace	All vertical plugs crumbled
	CORE NO.		7 REPORTED OCTOBER 1962													
	8	3342' 3344'	Siltstone	32	32	Nil	Nil	2.00	2.93	31	Nil	Pale yellow	Nil	Pale yellow	Fair	

Additional Information:

General File No. 62/399
Well File No. 62/1115

Petroleum Technology Laboratory, Bureau of Mineral Resources Geology and Geophysics Canberra.

Date: 4th December, 1964

CORE ANALYSIS RESULTS

Notes:- (i) Unless otherwise stated, the porosities and permeabilities were determined on two small plugs (V & H) cut at right angles from the core or sample. Ruska porosimeter and permeameter were used, with ~~xxxxxxx~~ ^{air} at ~~xxxx~~ ¹⁰⁰⁰ p.s.i.g. and dry nitrogen, respectively, as the saturating and flowing media. (ii) Residual oil and water saturations were determined using Sozhet type apparatus. (iii) Acetone test precipitates and fluorescence of solvent after extraction are recorded as, nil, trace, fair, strong or very strong.

Well or Area	Core or Sample No.	Depth in ft. From:- To:-	Lithology	Effective Porosity in % by Vol		Absolute Permeability in Millidarcys		Avg. density in gms./cc		Fluid Saturation in % Pore Space		Acetone Test		Solvent after Extraction.		Remarks.
				V	H	V	H	Dry Bulk	Apparent Grain	Water	Oil	Colour	Precipitate	Colour	Fluor	
Pretty Hill No. 1	9	3812' 3814'	Sandstone	26	27	Nil	3	2.09	2.83	11	Nil	Faint trace	Nil	Nil	Trace	Pyrites obvious.
	10	4317' 4319'	Siltstone and shale	25	25	Nil	Nil	2.13	2.88	17	"	Pale yellow	Trace	Pale yellow	Fair	Pyrites obvious.
	11	4635' 4640'	Siltstone and shale	22	22	"	"	2.23	2.84	16	"	Pale yellow	Trace	Pale yellow	Fair	Pyrites obvious.
	12	4640' 4642'	Shale	22	22	"	"	2.25	2.89	23	"	Trace	Nil	Trace	Trace	
C O R E S			N O S. 13 AND 14	R E P O R T E D		O C T O B E R		1962								
	15	5420' 5424'	Sandstone	N.D.	21	N.D.	Nil	2.18	2.74	21	Nil	Trace	Nil	Nil	Trace	Small pieces only. No "V" plug.
C O R E S			N O S. 16 TO 21	R E P O R T E D		O C T O B E R		1962								
	22	7885' 7887'	Dolerite	6	3	Nil	Nil	2.74	2.85	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	Pyrites obvious.

Additional Information:

General File No. 62/399
Well File No.

Petroleum Technology Laboratory, Bureau of Mineral Resources Geology and Geophysics Canberra.

Date: 4th December, 1964

CORE ANALYSIS RESULTS

Notes:- (i) Unless otherwise stated, the porosities and permeabilities were determined on two small plugs (V & H) cut at right angles from the core or sample. Ruska porosimeter and permeameter were used, with ~~air~~ ^{air} at 750 p.s.i.g. and dry nitrogen, respectively, as the saturating and flowing media. (ii) Residual oil and water saturations were determined using Sozhot type apparatus. (iii) Acetone test precipitates and fluorescence of solvent after extraction are recorded as, nil, trace, fair, strong or very strong.

Well or Area	Core or Sample No.	Depth in ft. From:- To:-	Lithology	Effective Porosity in % by Vol		Absolute Permeability in Millidarcys		Avg. density in gms./cc		Fluid Saturation in % Pore Space		Acetone Test		Solvent after Extraction.		Remarks.
				V	H	V	H	Dry Bulk	Apparent Grain	Water	Oil	Colour	Precipitate	Colour	Fluor	
Pretty Hill No. 1	23*	8115' 8117'	Dolerite	37		Nil		2.44	3.81	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	
			* NOTE increase in porosity and grain density compared with core No. 22.													
			Because of this the above characteristics were checked and confirmed													
			by three different methods (1) Air injection (2) Gas expansion (3) Washburn Bunting.													

Additional Information:

General File No. 62/399
Well File No.

Petroleum Technology Laboratory, Bureau of Mineral Resources, Geology and Geophysics, Canberra.

Date: 15th October, 1962

CORE ANALYSIS RESULTS

Notes: (i) Unless otherwise stated, the porosities and permeabilities were determined on two small plugs (V & H) cut at right angles from the core or sample. Ruska field porometer and permeameter were used, with air and dry nitrogen, respectively, as the saturating and flowing media. (ii) Oil and water saturations were determined using Soxhlet type extraction apparatus. (iii) Acid solubilities were determined using 15% commercial hydrochloric acid. (iv) N.D. means Not Determined.

Well or Area	Core or Sample Number	Depth in ft. From: To:	Effective Porosity % by Vol.		Absolute Permeability Millidarcies		Avg. density in gms/cc.		Fluid Saturation			Acid solubility % by vol.	Oil Characteristics			Virgin Bulk Dens. gms/cc	Salinity of core water P.P.M. Na Cl.
			V.	H.	V.	H.	Dry Bulk	Grain	Water: % pore space	Oil: % pore space	Oil: Metric tons/acre ft.		Fluorescence in solvent	Colour of extracted oil	Fluorescence of extracted oil		
Pretty Hill No. 1	7	2928' 2940'	N.D.	38	N.D.	70	1.65	2.66	82	Nil	Nil	Nil	N.D.	Nil Oil	N.D.	1.96	17,350
"	13	4940' 4961'	25	24	Nil	Nil	2.04	2.71	80	1	3	25	Bluish-white	Yellow-Brown	Whitish-yellow	2.24	21,100
"	14	5400' 5420'	20	18	Nil	Nil	2.20	2.71	95	Not Measurable		30	Bluish-white	N.D.	N.D.	2.38	19,900
"	16	5935' 5947'	19	18	Pencil split	Nil	2.29	2.80	77	3	6	21	Strong bluish White; green-yellow bloom	Yellow-brown	Greenish-yellow	2.44	21,600
"	17	6070' 6080'	24	22	2	No Pencil	2.07	2.65	80	Not Measurable		9	Faint bluish-white	N.D.	N.D.	2.26	18,400
"	18	6376' 6388'	22	22	2,097	2,756	2.07	2.64	70	Nil	Nil	13	Nil	Nil Oil	N.D.	2.22	6,250

General File No. 62/399

Well File No. 62/1115

Additional information: Acetone Tests:

Core No. 7 - Negative
 " " 13 - Faint positive
 " " 14 - Negative

Core No. 16 - Positive
 " " 17 - Faint positive
 " " 18 - Negative

Petroleum Technology Laboratory, Bureau of Mineral Resources, Geology and Geophysics, Canberra

Date: 13th November, 1962.

CORE ANALYSIS RESULTS

Notes (i) Unless otherwise stated, the porosities and permeabilities were determined on two small plugs (V & H) cut at right angles from the core or sample. Ruska field porometer and permeameter were used, with air and dry nitrogen, respectively, as the saturating and flowing media. (ii) Oil and water saturations were determined using Soxhlet type extraction apparatus. (iii) Acid solubilities were determined using 15% commercial hydrochloric acid (iv) N.D. means Not Determined.

Well or Area	Core or sample number	Depth in ft. from: To:	Effective porosity % by Vol.		Absolute permeability millidarcys.		Avg. density in gms/cc.		Fluid saturation			Acid solubility % by vol.	Oil Characteristics			Core Water Salinity P.P.M. Na Cl.
			V.	H.	V.	H.	Dry Bulk	Grain	Water: % pore space	Oil: % pore space	Oil: Metric tons/acre ft.		Fluorescence in solvent	Colour of extracted oil.	Fluorescence of extracted oil.	
Pretty Hill No. 1	19	6690' 6702'	25	21	967	363	2.11	2.73	79	Nil	Nil	N.D.	Nil	Nil Oil	N.D.	3,140
"	20	7200' 7214'	23	22	198	197	2.15	2.77	81	"	"	"	"	" "	"	2,990
"	21	7585' 7597'	20	19	525	865	2.19	2.72	74	"	"	"	"	" "	"	3,200

Additional information: Acetone tests carried out on all samples gave negative results

General file no. 62/399

J.

Well file no. 62/1115