

APPENDIX 2

EAST MERENIE NO. 10

CORE DESCRIPTIONS

Core No. 1: 4983 to 5005 feet

Core No. 2: 5585 to 5616.5 feet

OILMIN N.L

CORE DESCRIPTION

Well : East Merene No. 10.

Core No : 1 Fm: P1.

Interval Cored : 4983' - 5005' * Cut : 22' Recovered : 22' % Rec: 100

Type and Size Core Head : MC. 201 7. 27/32" Desc. by : D. Catherall Date 14/10/82

DEPTH	CORE RATE Mh/Ft	POROSITY	HYDRO-CARBON SHOWS		REMARKS	LITHOLOGY	GRAIN SIZE PROFILE				Descriptive Lithology		
			Fluor.	Cut Fluor.			Silt	V. Fine	Fine	Medium		Coarse	
	50	0	20	0									
4985'													4983'-4983.5' : Black shaley silt, finely laminated.
87'													4983.5'-4985.7' : Light grey sand lenses, encompassed by black shaley silt laminae - bioturbated and churned.
89'													4985.7'-4987.5' : Pale grey quartzite with thin wisps of black shale-late.
4990'													silicification replacement.
92'													4987.5'-4989.3' : Light grey bioturbated sand lenses - oily.
94'													4989.5'-4989.5' : Thin quartzite band.
96'													4989.5'-4995' : Light grey sand, friable, petroliferous odour when freshly broken, high porosity. Thin silica lenses as shown at
98'													4990', 4991.5' and more solid at base 4994'-4995'.
5000'													4995'-4996.5' : Pale grey quartzite with thin wisps of shale.
02'													4996.5'-4999' : Mainly black shale with odd narrow lenticular sand laminae.
04'													4999'-5000.3' : Pale grey sandy shale, low & tight formation, wispy shale laminae throughout.
5005'													5000.3'-5001.5' : Shale quartzite band.
													5001.5'-5004' : Bioturbated, pale grey sand with wispy laminae of shale; worm burrows common.
													5004'-5005' : Black shale.

Remarks : * To match electric logs the cored interval will be corrected.

Core No 1 interval 4987' to 5009'.

x Measured helium injection porosity.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4983 to 4985.7 ft. (2.7 ft.)

Drill Rates: 43, 29, 33 (mins/ft.)

Lithology: Dark grey to black silty shale, micaceous and finely pyritic, poorly laminated, fissile, hard. Occasional clots and lenses, up to 5mm of fine grained white sandstone, subangular, well cemented with silica, with scattered mica flakes.

Porosity and
Permeability: Nil.

Hydrocarbons: No stain or odour. No fluorescence.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4985.7 to 4987.5 ft. (1.8 ft.)

Drill Rates: 33, 50, 48 (mins/ft.)

Lithology: White, very fine grained, subangular to subrounded, clean, well silicified sandstone with lenses of silty, black, micaceous shale.

Porosity and Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4987.5 to 4989.3 ft. (1.8 ft.)

Drill Rates: 48, 27, 33 (mins/ft.)

Lithology: Thinly interbedded sandstone, siltstone and shale, with intervals of mixed streaks and sandstone lenses, possibly bioturbated.

Sandstones: White, very fine grained, sub-angular to subrounded, clean, well silicified, fissile.

Siltstones: Brown, quartz grains sub-angular to subrounded, argillaceous matrix.

Shales: Grey to black, micaceous, pyritic, fissile.

Porosity and Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4989.3 to 4989.5 ft. (0.2 ft.)

Drill Rates: 33 (mins/ft.)

Lithology: Quartzite: White, very fine grained with occasional silty, clean, siliceous cement, flinty break. Small zone, 10mm x 1mm, has pyrite as cement.

Porosity and Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4989.5 to 4995 ft. (5.5 ft.)

Drill Rates: 33, 5, 13, 7, 3, 18 (mins/ft.)

Lithology: Sandstones: Light grey to off white, medium, well sorted grains, poorly cemented by silica, friable to very friable, sub-angular to subrounded grains, occasionally frosted. Friability compatible with distinct drill break. Thin, irregular lenses of grey-white, silicified, quartzitic sandstone occur near the base and top.

Porosity and Permeability: Good intergranular porosity. Permeability fair to poor.

Hydrocarbons: Strong white to yellow fluorescence, with strong to moderate cut and streaming cut fluorescence.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4995 to 4996.5 ft. (1.5 ft.)

Drill Rates: 25, 48 (mins/ft.)

Lithology: Quartzite: White, very fine grained, sub-angular to subrounded, well cemented by silica, flinty break, occasional black mineral grains, pyritic, and coarse, clear, rounded quartz grains. Small patches have pale green-grey, clayey matrix (?chlorite). Thin wisps of black, micaceous shale mixed with siltstone, brown, argillaceous and very fine sandstone, pale green-grey, clayey matrix in gradational contacts. Colour changes appear to be a post depositional effect.

Porosity and
Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4996.5 to 4999 ft. (2.5 ft.)

Drill Rates: 48, 37, 44 (mins/ft.)

Lithology: Dark grey to black, micaceous, pyritic shales often in clots - grades to and interbedded with siltstone; brown, argillaceous, or pale green-grey, pyritic, occasional thin bands very pyritic. Small clots and lenses of sandstone, very fine grained, mainly pyrite cement with pyrite concentrations around the margins. Shale is hard, flinty, flakey break, with some surfaces shiny.

Porosity and Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 4999 to 5000.3 ft. (1.3 ft.)

Drill Rates: 43, 41 (mins/ft.)

Lithology: White, very fine grained, subangular to subrounded, silica cement, weakly pyritic sandstones, with lenses and wisps being brown to black due to argillaceous matrix and possibly bioturbated. Subfissile to subfriable.

Porosity and Permeability: Poor.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 5000.3 to 5001.5 ft. (1.2 ft.)

Drill Rates: 41, 60 (mins/ft.)

Lithology: Narrow zone of dark grey to black shale, micaceous, finely pyritic, fissile, indurated; encompassed top and bottom by white, very fine grained quartzite, sub-angular grains, highly silica cemented, poor to zero porosity, flinty fracture, extremely hard and abrasive.

Porosity and Permeability: Nil to very poor.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 5001.5 to 5004 ft. (2.5 ft.)

Drill Rates: 60, 37, 45 (mins/ft.)

Lithology: White, very fine grained, subangular to subrounded, weakly pyritic sandstone with 50% brown to black due to argillaceous and carbonaceous matrix. All types well mixed, bioturbated, with wisps, lenses and clots of each. Subfissile to subfriable.

Porosity and Permeability: Nil.

Hydrocarbons: Nil.

CORE NO. 1 - 4983 to 5005 ft. CUT 22 ft. RECOVERED 22 ft.

Interval: 5004 to 5005 ft. (1 ft.)

Drill Rates: 41 (mins/ft.)

Lithology: Dark grey to black, silty, micaceous,
finely pyritic, poorly laminated, fissile,
hard shale with flakey break.

Porosity and
Permeability: Nil.

Hydrocarbons: Weak petroliferous odour on breaking.
Moderate white cut and streaming, yellow
fluorescence.

OILMIN N.L

CORE DESCRIPTION

Well : East Mercenia No. 10...

Core No : 2 Fm: P3,

Interval Cored : 5585.1' - 5616.5' Cut : 31.5' Recovered : 31.5' % Rec: 100.

Type and Size Core Head : MC 201 7.27/32" Desc. by : D. Warner Date 26/11/82

DEPTH	CORE RATE Min/Ft	POROSITY	HYDRO-CARBON SHOWS			LITHOLOGY	GRAIN SIZE PROFILE				Descriptive Lithology
			Fluor.	Cut Fluor.	Remarks		Silt	V. Fine	Fine	Medium	
5586'											Red fine to medium grained sandstone with minor shale laminae (not greater than 1"). Minor load structures along basal shale contacts. Shale is grey green. Sandstone is red stained probably iron staining.
87'											
88'											
89'											Red, minor white and light green fine to medium grained sandstone. Rare very thin shale laminae. Planar cross stratification common. Minor thin coarse horizons cross stratification sub horiz. to 20° from horizontal. Minor white blobs around black detrital fragments.
90'											
91'											
92'											
93'											Common 2° iron staining making identification of depositional structures hard.
94'											
95'											
96'											
97'											
98'											
99'											Sandstone A/A but more homogenous fine to medium grained and red colouration.
5600'											

Remarks : 3 Cores for analysis to Core Lab at 5605 ft.

5613 ft.

5616 ft.

Note more permeable parts of core sweating light oil - probably filiates.

No hydrocarbon odour in any of core.

x Measured helium injection porosity.

OILMIN N.L

CORE DESCRIPTION

Well : East Merced No. 10

Core No : 2 Fm: P3

Interval Cored : 5585' - 5616.5' Cut : 31.5' Recovered : 31.5' % Rec: 100.

Type and Size Core Head : MC 201 7.27/32" Desc. by : D. Warner Date 26/11/82

DEPTH	CORE RATE Min / Ft	POROSITY	HYDRO-CARBON SHOWS Fluor. Cut Fluor. Remarks	LITHOLOGY	GRAIN SIZE PROFILE				Descriptive Lithology
					Silt	Fine	Medium	Coarse	
5602'									
03'									
04'									
05'									
06'									Sub vertical fracture - open with little mineral infilling - good permeability channel.
07'									
08'									
09'									
10'									Red stained white sandstone with minor discontinuous sub horizontal blebs of gypsum/anhydrite.
11'									
12'									Red stained homogenous fine to medium grained sandstone.
13'									
14'									
15'									Minor laminated sand / shale horizon.
5616'									

Remarks : No correction of core needed to match electric logs.

x Measured helium injection porosity.

CORE DESCRIPTION

Core No : 2, Fm: P3.

Type and Size Core Head : MC 201 7. 27/32" Desc by : D. Warner Date 26/11/82

[illegible]

CORE NO. 2 - 5585 to 5616.5 ft. CUT 31.5 ft. RECOVERED 31.5 ft.

Interval: 5585 to 5616.5 ft. (31.5 ft.)

Drill Rates: 53, 28, 36, 58, 51, 60, 48, 51, 50, 54, 55,
38, 48, 67, 49, 53, 60, 60, 47, 36, 24, 28,
43, 58, 64, 65, 44, 37, 46, 33, 28 (mins/ft.)

Lithology: The section cored is a fine to medium grained, quartzose sandstone with minor thin siltstone horizons and coarse to very coarse sandstones. The sandstone has been almost totally stained red with a red haematitic cement. Minor zones and belbs of white sandstone occur throughout. A strong siliceous cement is ubiquitous. The sandstones are often cross-stratified in sets not exceeding 6" in thickness. The cross laminae are often silty and micaceous.

Sandstones: Red, minor white, quartzose, siliceous, haematitic, sublithic, fine to medium grained, subangular to subrounded, moderately sorted, silica cement, black fine lithics and minor red shale inclusions.

Siltstones: Grey, greenish, some red and very shaley, micaceous in part, especially along cross laminae.

Porosity and Permeability: Both parameters are poor except between 5606 to 5608 ft. where a conspicuous sub-vertical fracture occurs.

Hydrocarbons: Nil.