

CHEMICAL & GEOLOGICAL LABORATORIES LTD.



Operator Socony Mobil Oil Of Canada Limited Interval Cored Core #1: 944' 964'
Core #2: 1289' To 1309'
 Well No. S.M.W.M. Birch Y.T. B-34 Coring Fluid ---
 Lab. No. F2323 Elevation --- Formation ---

Comments The following analysis shows a total of 266.61 porosity feet with an average of 14.5 % porosity and 253 md.

Sample numbers 25 and 26 were fractured and unsuitable for horizontal permeability measurements.

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FULL DIAMETER CORE STUDY

OPERATOR Socony Mobil Oil Of Canada Limited FIELD Eagle Plain, Yukon WELL NO. S.M.W.M. Birch Y.T. B-34

LOCATION FORMATION --- DEPTHS Core #1: 944' - 964' DATE Received: LAB NO. F2323
Core #2: 1289' - 1309' June 11, 1965

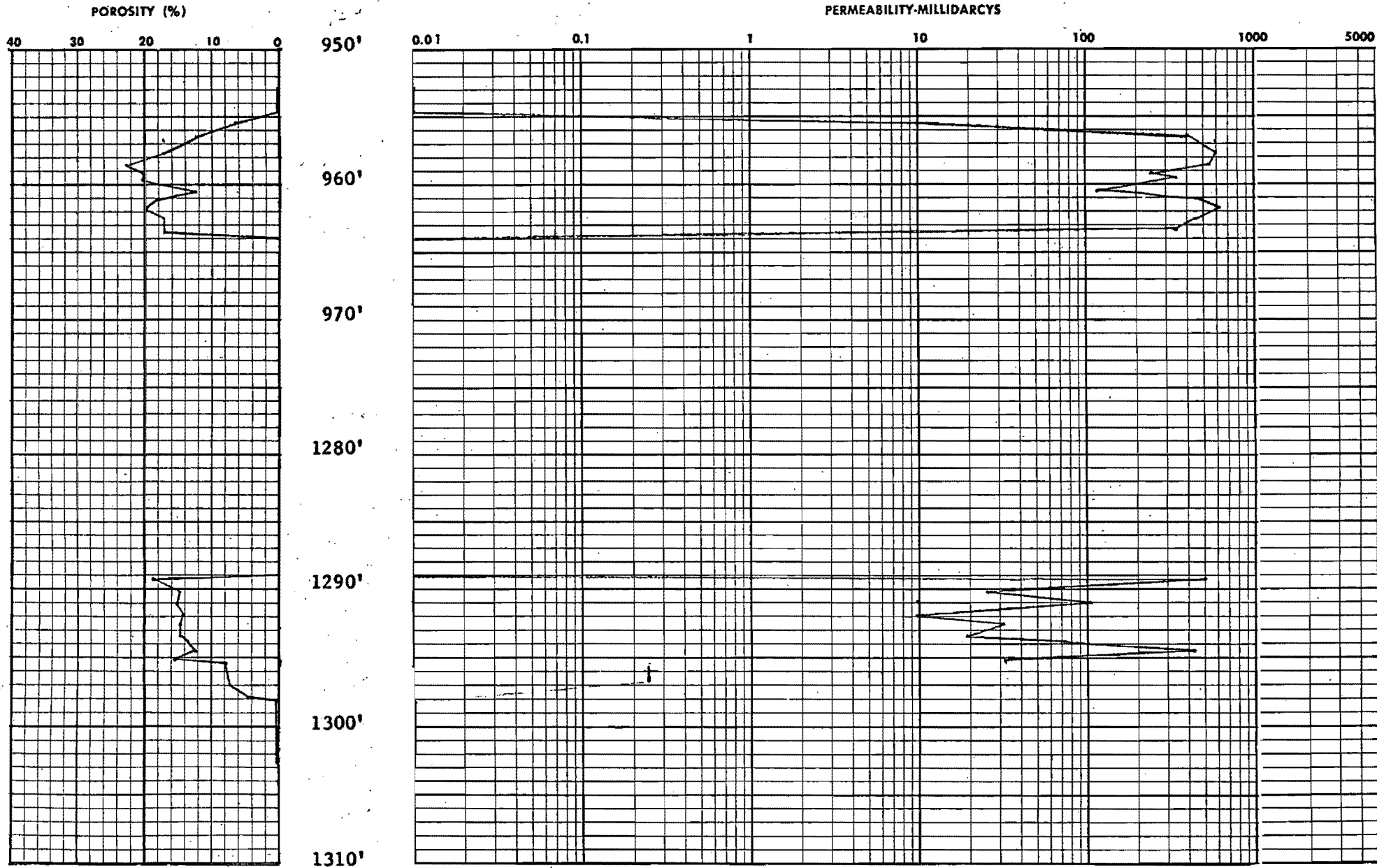
Footage of formation cored	40.0'	No. of representative samples selected for analysis	25.
<u>FEET OF CORE:</u>			
Received at laboratory for analysis	24.9'	Compared (to tested samples)	---
Not Accounted For	15.1'	Dense sections not represented	6.5'
Represented by samples	18.4'	Badly fractured sections not represented	---
<u>SUMMARY OF REPRESENTED SECTIONS:</u>		(1) $\frac{\text{represented}}{\text{received}} = \frac{18.4'}{24.9'}$	(2) $\frac{\text{represented}}{\text{cored}} = \frac{18.4'}{40.0'}$
Weighted average porosity	14.5 %	Maximum porosity	22.6 %
Weighted average K_H permeability on 16.6'	253. md.	Minimum porosity	4.7 %
Weighted average K' permeability on 16.2'	242. md.	Maximum K_H permeability	628. md.
Weighted average vertical permeability on 18.0'	68. md.	Minimum K_H permeability	0.25 md.
Weighted average maximum permeability	md.	Maximum vertical permeability	296. md.
Porosity Feet	266.61	Minimum vertical permeability	0.03 md.

CORE WITH MAXIMUM PERMEABILITY:

	10.0 md. or greater	between 1.0 and 9.9 md. inclusive	less than 1.0 md.
Footage	15.0	1.9	1.5
Weighted average porosity	15.8 %	10.2 %	6.8 %
Weighted average K_H permeability	280. md.	9.9 md. on 0.6'	0.25 md. on 1.0'
Weighted average vertical permeability	83. md. on 14.6'	2.8 md.	0.20 md.
Porosity feet	236.94	19.42	10.25

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Operator Sbcny Mobil Oil Of Canada Limited Well No. S.M.W.M. Birch Y.T. B-34 Lab. No. F2323 Date Received: June 11, 1965

Sample Number	Midpoint of Sample in Ft.	Representative of Feet	Footage Rep.	Vertical	Permeability md.		% Porosity	Porosity Feet	Description
					K _H	K'			
	CORE #1	944' - 964'			CORED 20.0'				RECEIVED IN LABORATORY 11.2'
No Sample		952.8-954.7	1.9	---	---	---	---	---	Sh
2	955.4	954.7-955.8	1.1	0.24	11.	8.2	6.4	7.04	Cg
3	956.4	955.8-956.6	0.8	73.	400.	385.	12.5	10.00	Cg
4	956.7	956.6-957.3	0.7	260.	468.	444.	21.4	14.98	CSS-Cg I
5	957.6	957.3-958.2	0.9	185.	592.	548.	17.2	15.48	CSS-Cg I
6	958.5	958.2-958.7	0.5	296.	549.	526.	22.6	11.30	CSS I
7	959.1	958.7-959.4	0.7	145.	257.	243.	20.1	14.07	CSS I
8	959.6	959.4-960.0	0.6	159.	353.	336.	20.3	12.18	CSS-Cg I
9	960.5	960.0-960.9	0.9	15.	111.	101.	12.5	11.25	Cg
10	961.2	960.9-961.5	0.6	117.	499.	466.	18.5	11.10	CSS-Cg I
11	961.8	961.5-962.1	0.6	45.	628.	592.	19.9	11.94	CSS-Cg I
12	962.5	962.1-962.9	0.8	132.	448.	410.	17.1	13.68	CSS-Cg I
13	963.4	962.9-964.0	1.1	89.	348.	325.	17.2	18.92	Cg-CSS I

CORE DESCRIPTION SYMBOLS

(a)	Unsuitable for test	NR	Not reactive to cold 15% HCl
A	Anhydrite		
(b)	Fractured during test	O	Open
B1Sh	Black Shale	OccV	Occasional Vugs
Bit	Bitumen	ool	oolitic
Bn	Bentonite	PV	
Br	Brecciated	PPV	Pin Point Vugs
Bt	Buttoned	PTSL	Paper Thin Shale Laminations
		Py	Pyrites
Ca	Calcite	Pyb	Pyrobitumen
Cg	Conglomerate		
Ch	Chert	R1	Slightly reactive to cold 15% HCl
Co	Coralline Fragments	R2	Reactive to cold 15% HCl
CSS	Coarse Sandstone	RC	Random Cracks
		RF	Random Fractures
D	Dense		
Dol	Dolomite	S	Stained
ds	Dense Siderite	Sd	Sand
		Sdy	Sandy
FD	Full diameter	Sh	Shale
Fg	Fragmental	ShL	Shale Lenses
fSL	Fine Sand Lenses	Shy	Shaly
fSS	Fine Sandstone	Sil	Siltstone
foss	Fossiliferous	SI	Slightly Intergranular
fSSL	Fine Sandstone Lenses	SL	Sand Lenses
Gl	Glauconitic	SP	Small Plug
		St	Stylolite
HC	Horizontal Crack	SV	Slightly Vuggy
HF	Horizontal Fracture		
		TR	Trace
I	Intergranular	U	Unconsolidated
InB	Interbedded		
		V	Vuggy
K ^o	Taken 90° to K _H	VC	Vertical Crack
K _H	Maximum Horizontal Permeability Measured	VF	Vertical Fracture
		VSI	Very Slightly Intergranular
Ls	Limestone		
LV	Large Vugs	X	Crystals
MSS	Medium Sandstone	NB _o	K _H and K ^o are transverse permeability measurements on full diameter samples.
mudst	Mudstone		