

21. SEP 1970

# ESSO EXPLORATION INC.

1270 AVENUE OF THE AMERICAS • NEW YORK, N. Y. 10020

ZEB MAYHEW  
PRESIDENT

*File  
CORA (L.W.) w/att.*

September 16, 1970

PROPRIETARY  
EXPLORE

No. 117

25. SEP 1970

Mr. R. J. Loeffler  
Esso Exploration Norway Inc.  
P. O. Box 1369  
Oslo 1, Norway

Dear Sir:

Attached are two copies of the crude  
assay on well 25/8-1 in the Norway North Sea.

Yours very truly,

ZEB MAYHEW

By   
for J. L. Roman

NN/bbw  
Attachment

CRUDE	NO. 123
LOCATION	
REPRESENTATIVE OF	
Reference:	Letter #S-218/70, dated July 2, 1970, from R. E. Anderson to G. M. Eberly

FILE NO.	SL.91C-AB.70
REPORT DATE	August 1970
REPORT BY	<i>G. M. Eberly</i>

DATE RECEIVED	July 1970
DATE DISTILLED	7-20-70
HUMBLE ASSAY NO.	1522
COST CENTER	2515-100

ASSAY RUN BY	HUMBLE OIL & REFINING COMPANY REFINING DEPARTMENT REFINERY LABORATORY BAYTOWN, TEXAS
--------------	---

SPONSORED BY	ESSO EXPLORATION, INC.
--------------	------------------------

TABLE 1

SAMPLES RECEIVEDRLM  
Code:

	<u>Tag Data</u>	<u>°API</u>	<u>Pour °F</u>	<u>Sulfur % Wt.</u>	<u>Visc. @ 100°F Kin. cs.</u>	<u>Univ. sec.</u>
No-1	25/8-1, 29/6-70, 2000 Flow Period 4, JW1	21.2	15	0.82	55.7	259
No-2	25/8-1, 30/6-70, 0800 Flow Period 4, JW4	21.2	10	0.84	55.8	259
No-3	25/8-1, 30/6-70, 0400 Flow Period 4, JW3	21.3	10	0.80	56.3	262

NOTE:

- (A) 5 gallon Jerry cans on coded samples numbered No-2 and No-3 were less half full
- (B) After consulting with Esso Exp., Inc., above three samples were composited and assay run on mixture, coded No-123.

TABLE 2

CRUDE	NO. 123	SL.91C-AB.70
-------	---------	--------------

WHOLE CRUDE DATA		
GRAVITY	°API	21.2
SPECIFIC GRAVITY	60/60	0.9267
SULFUR	WT%	0.84
POUR POINT	°F	10
MERCAPTAN SULFUR	PPM	
WATER & SEDIMENT	VOL %	0.05
SALT CONTENT, NaCl	PTB	1.7
REID VAPOR PRESSURE	PSI	0.65
H <sub>2</sub> S (DISSOLVED)	PPM	0.0
FLASH, PM	°F	
NEUT. NO. (D 664)	mg KOH/gm	1.91
VISCOSITIES	KINEMATIC @	100 °F, cs 80 °F, cs 60 °F, cs 40 °F, cs
	SAYBOLT UNIVERSAL @	100 °F, sec 80 °F, sec 60 °F, sec 40 °F, sec
		56.7
		231
		263
		1,070

LIGHT HYDROCARBONS		SEE TABLE 3
% ON CRUDE	WEIGHT	VOLUME
ETHANE & LIGHTER PROPANE		
ISO BUTANE NORMAL BUTANE		
ISO PENTANE NORMAL PENTANE		

TABLE 3

CRUDE

NO. 123

SL.91C-AB.70

## LIGHT ENDS - COMPOSITION AND CALCULATIONS

	ASSAY STILL GAS			C <sub>5</sub> /158°F. VT NAPHTHA		TOTAL LIGHT ENDS Liq. Vol. % On Crude	G. C. ANALYSIS OF WHOLE CRUDE Liq. Vol. %
	Mol. % From M. S.	0.40 Liq. Vol. % on Crude		0.78 Liq. Vol. % on Crude			
		Liq. Vol. %		Liq. Vol. % From G. C.			
		On Cut	On Crude	On Cut	On Crude		
C <sub>2</sub> & Lighter	32.7	25.0	0.10			0.10	0.06
C <sub>3</sub>	14.2	15.0	0.06			0.06	0.04
i-C <sub>4</sub>	36.3	40.0	0.16	1.6	0.01	0.17	0.15
n-C <sub>4</sub>	10.1	12.5	0.05	1.6	0.01	0.06	0.06
i-C <sub>5</sub>	4.8	5.0	0.02	12.3	0.10	0.12	0.15
n-C <sub>5</sub>	1.9	2.5	0.01	6.1	0.05	0.06	0.06
C <sub>6</sub> +				78.4	0.61		
Total	100.0	100.0	0.40	100.0	0.78		

TABLE 3

TABLE 4

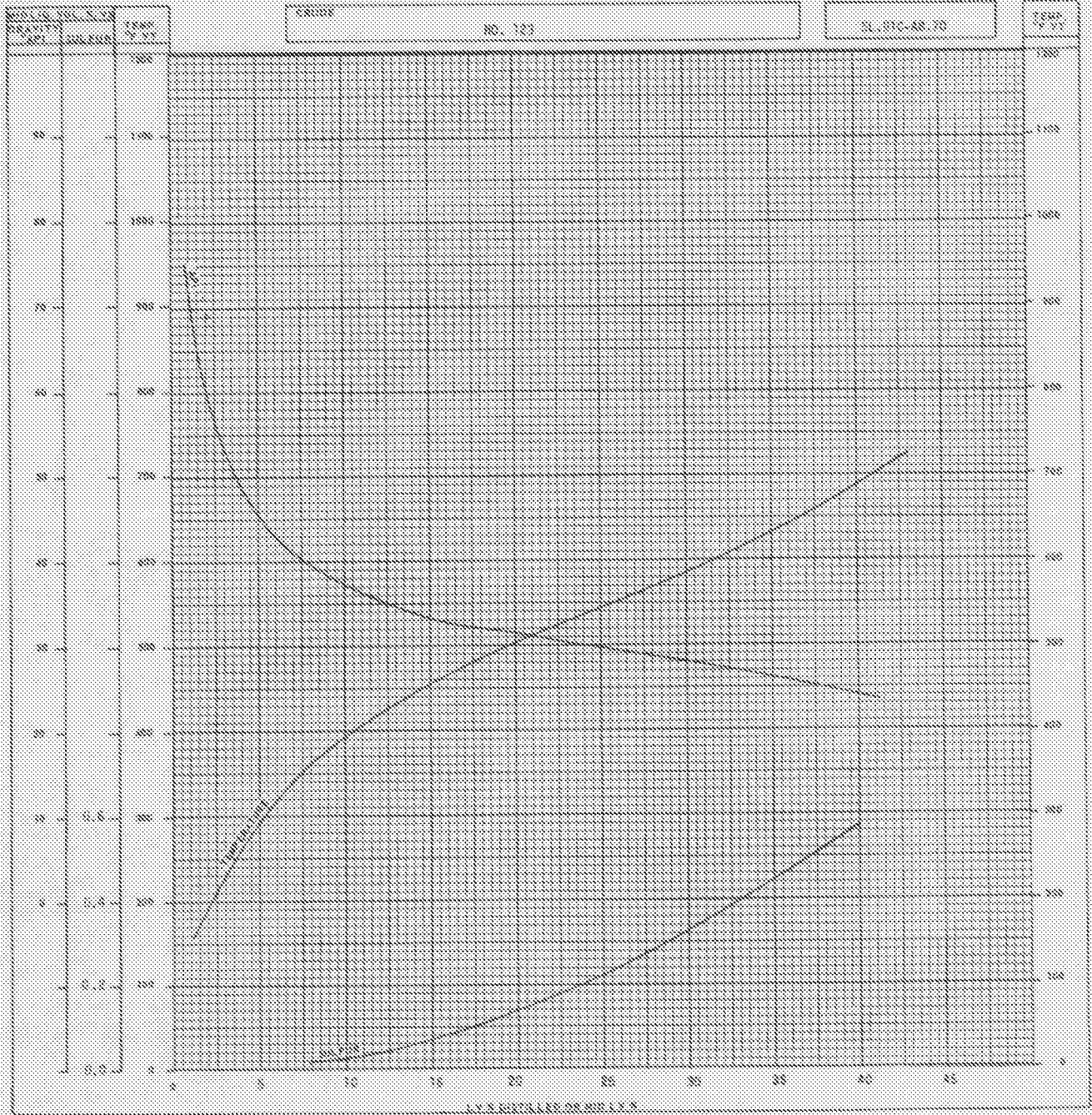
Range, °F V.T.	CRUDE: 123			ASSAY NO. 1522				SL.91C-AB.70			
	68/158	158/212	158/302	302/401	401/509	509/650	650/725	302/725	347/725	650+	725+
Range of Blend											
Int. Vol. %, °F	0.4	1.2	1.2	5.4	10.3	20.7	36.8	5.4	7.6	36.8	43.0
Fin. Vol. %, °F	1.2	4.3	5.4	10.3	20.7	36.8	43.0	43.0	43.0	100.0	100.0
Yield Vol. %, °F	0.8	3.1	4.2	4.9	10.4	16.1	6.2	37.6	35.4	63.2	57.0
Mid Point Vol. %, °F	0.8	2.8	3.3	7.9	15.5	28.8	39.9	24.2	25.3		
Gravity, °API	75.3	52.9	50.9	39.9	33.0	28.4	24.1	30.1	29.5	14.9	14.0
Sulfur, Wt. %	0.0004	0.0002	0.001	0.0152	0.075	0.28	0.57		0.26	1.04	1.18
Mercap. Sul. PPM	2.8			27.9							
R.V.P. Psi	9.8										
Aniline Point, °F.		105	101	107	124	140	144				
Freeze Point, °F.				-89	-67						
Cloud Point, °F.											
Pour Point, °F						-10	30	-8	-6	50	50
Smoke Point, °F				17	15			-20	-20		
Paraffins by M.S., Vol. %		16.1	15.8	14.9	18.6						
Naphthenes by M.S., Vol. %		75.4	70.2	64.6	51.9						
Aromatics by M.S., Vol. %		8.5	14	20.5	29.5						
Furoil Visc. Secs. @ 122°F										368 (B)	764 (B)
Kin. Visc., Cs. @ 100°F				1.11	2.17	5.51	14.6	3.67	4.02	2168	5217
@ 122°F										780 (A)	1620 (A)
@ 150°F					1.40	2.89	5.95	2.10	2.29	260	490
@ 210°F										50.9	80.9
Color, Saybolt				+30	+30						
Nitrogen, Wt. %										0.35	
Carbon, Wt. %										6.46	
MNI, Wt. %										1.18	
Metals, Ni, PPM											8.8
V, PPM											26.8
Fe, PPM											6.8

(A) Interpolated

(B) Converted from Kinematic

Actual yields and inspections shown are those as cut from the assay still

GRAPH NO. 1



1. 00 00 00 1. X X

