

ESSO PRODUCTION RESEARCH COMPANY

POST OFFICE BOX 2189

HOUSTON, TEXAS 77001

31. AUG 1970

STRATIGRAPHIC GEOLOGY DIVISION  
EDWARD MCFARLAN, JR., MANAGER

August 20, 1970

Air Mail

EPR PROPRIETARY

Mr. R. E. Anderson  
Esso Exploration Norway Inc.  
Verksгатen 29  
Stavanger 4000, Norway

Dear Sir:

F.I.T. Samples from Esso 25/8-1 Well (7680)

Enclosed are results of some of the analyses that have been performed on F.I.T. samples from the 25/8-1 well, as requested in your letter S-183/70 of June 10, 1970. These include

- (1) Abbreviated assays by the Humble Baytown Refinery laboratory on oils from F.I.T. 1 and F.I.T. 3
- (2) Determinations of percent sulfur and API gravity on the two oils, made by the EPR Production Engineering laboratory
- (3) A standard water analysis of the sample from F.I.T. 2, performed by the EPR Production Engineering laboratory

A summary of results of (2) and (3) was transmitted to you in our cable of July 2, 1970. The oils averaged 0.79 percent sulfur by weight and 21.8° API gravity. The water contained 11,570 ppm total solids and 4,150 ppm chloride.

The refinery assay curves are similar to each other and also similar to the curves for the 25/11-1 well that you received in November, 1967.

Viscosity analyses are still being run on the five production flow test samples mentioned in your July 2 letter S-129/70. These results plus results of geochemical analyses of the core extracts and the oils will be included in a service report that is now being prepared on the 25/8-1 samples. One conclusion is that the oils from 25/8-1 and 25/11-1 are similar. This will be discussed in the forthcoming report.

We will transmit the additional information as soon as the analytical program is completed.

Yours truly,

E. McFarlan, Jr.

*Patrick H. Monaghan*  
By Patrick H. Monaghan

R. E. Metter:rk  
Enclosures

c.c. Messrs. Zeb Mayhew/J. B. Coffman }  
D. H. Roberts } (with enclosures)  
R. J. Loeffler }  
W. R. Eckelmann }

Field: Sample No. 56299A (FIT-1, 25/B-1, 5,763 feet)	REPORT DATE: 8-12-70
COUNTY:	DATE DISTILLED:
REPRESENTATIVE OF:	DATE SAMPLED:
	ASSAY NO.: 1929
	FILE NO.: 81,980-AB.70
	CARDS:
	COST CENTER: 2501-104
	REPORT BY: J. F. HICKERSON

DATA ON CHARGE		DATA ON PRODUCTS			
GRAVITY °API	21.5	VAPOR TEMP., °F	NAPHTHAS		
SULFUR, S. DIETERT	0.77		CS-175	132-250	132-300
FLASH, °F, P.M.		RANGE OF CUT, LVS	0.0-1.4	0.0-3.9	0.0-7.9
S.D. VISCOSITY AT 100°F		YIELD, LVS	1.4	3.9	7.9
20°F		GRAVITY, °API			
60°F		RESEARCH OCTANE NO.			
40°F		+1.5 CC TEL			
R.S. & W., %		+3.0 CC TEL			
WATER BY DISTILLATION, %		MOTOR OCTANE NO.			
REID VAPOR PRESSURE, LB.		+1.5 CC TEL			
POUR POINT, °F	15	+3.0 CC TEL			
SALT AS NACL, PTB		REID VAPOR PRESSURE, LB.			
NEUTRALIZATION VALUE, D664		SULFUR, % LAMP			
HYDROCARBON ANAL., LVS:	---	MERCAPTAN NO., MG/100 CC.	---	---	---
C2 & LIGHTER		% AT 168°F. + LOSS			
C2		212°			
1C4		237°			
NC4		284°			
1CS		302°			
NC5		F.B.P., °F			
MERCAPTAN NO., MG/100 CC.		LOSS, %			
COLOR, SAYBOLT					
COLOR, ROBINSON					

VAPOR TEMPERATURE, °F	HEAVY NAPHTHAS			KEROSENE & TURBO FUELS		
	250-375	132-300	350-375	375-530	300-500	375-460
RANGE OF CUT, LVS	1.4-7.9	0.0-3.9		7.9-18.1	3.9-15.8	
YIELD, LVS	6.5	3.9		10.2	11.9	
MIDPOINT OF CUT, °F			---	---	---	---
GRAVITY, °API	43.4	48.7		33.9	35.9	
RESEARCH OCTANE NO., CALC.			---	---	---	---
SULFUR, % LAMP			---	0.077	0.043	---
ADULINE POINT, °F						
MERCAPTAN NO., MG/100 CC.	---	---	---	---	---	---
VISCOSITY, KINEMATIC @ 40°F., CS	---	---	---	---	---	---
VISCOSITY, KINEMATIC @ 30°F., CS	---	---	---	---	---	---
VISCOSITY, KINEMATIC @ 100°F., CS	---	---	---	---	---	---
FREEZING POINT, °F.	---	---				
L.P.T. SMOKE POINT, MM.						
COLOR, SAYBOLT			---			---
AROMATICS, LVS, M.S.	21.4	14.4				
NAPHTHENES, LVS, M.S.	63.3	69.4				
PARAFFINS, LVS, M.S.	15.3	16.2				
AROMATICS, LVS, F.I.A.	---	---		26.9	24.4	---
LUMINOMETER NO.	---	---		---	---	---
REFRACTIVE INDEX @ 20°C						

VAPOR TEMPERATURE, °F	MIDDLE DISTILLATES			GAS OILS		
	430-530	530-650	650-850	850-1000	1000-1850	
RANGE OF CUT, LVS	11.2-18.1	18.1-30.8	30.8-55.0	55.0-67.9		
YIELD, LVS	6.9	12.7	24.2	12.9		
GRAVITY, °API	32.5	27.9	25.1	21.3		
REFRACTIVE INDEX, ND <sub>67</sub> °C						
SULFUR, % DIETERT						
ANILINE POINT, °F						
DIESEL INDEX						
FOUR POINT, °F						
CONRADSON CARBON, %	---					
NITROGEN, WT. %	---					
AROMATIC RINGS, CALC.						
NAPHTHENE RINGS, CALC.						
WET ASH, PPM NI	---	---	---	---		---
V	---	---	---	---		---
FC	---	---	---	---		---
S.U. VISCOSITY AT 100°F	---	---	---	---		---
130°	---	---	---	---		---
150°	---	---	---	---		---
170°	---	---	---	---		---
210°	---	---	---	---		---
NEUTRALIZATION VALUE D874	---	---	---	---		---

VAPOR TEMPERATURE, °F	WAXY LUBE OIL	DEWAXED LUBE	BOTTOMS		CORRELATED DATA	
	790-1000		BEYOND 1050	BEYOND 1000	PHENOL TREATING CHARACTERISTICS ON NARROW LUBE CUT DEWAXED	
RANGE OF CUT, LVS	49.0-67.9			67.9-100.0		
YIELD, LVS	18.9	---		32.1		
GRAVITY, °API	21.7	---		7.0		
SULFUR, % DIETERT	0.63	---		1.10		
ANILINE POINT, °F		---	---	---	S TREAT	V.I.
DIESEL INDEX		---	---	---	6	
S.U. VISCOSITY AT 100°F	---	---	---	---	100	
130°F	---	---	---	---	200	
150°F	272	---	---	---	300	
170°F	---	---	---	---	V.S.C.	
210°F	75.3	---	---	---		
S.U. VISCOSITY AT 120°F	---	---	---	---		
210°	---	---	---	---		
270°	---	---	---	245		
300°	---	---	---	---		
FLASH, °F, C.C.C.	85	---	---	---		
POUR POINT, °F	21	---	---	---		
VISCOSITY INDEX		---	---	---		
NEUTRALIZATION VALUE D664	0.88	---	---	---		*D874
WAX, S.B.A., %	---	---	---	---		
CONRADSON CARBON, %	---	---	---	---		
MOS. IN SOL. IN 80° NAPH.	---	---	---	6.55		
Clay Gel:						
Saturates	---	---	---	16.4		
Aromatics	---	---	---	42.7		
Polars	---	---	---	40.9		
Asphaltenes	---	---	---	0.0		
SOFTENING POINT, °F	---	---	---	---		
PENETRATION AT 77°F	---	---	---	---		
PENETRATION AT 38.2°F	---	---	---	---		
DUCTILITY AT 77°F	---	---	---	---		
SOLUBLE IN CC14	---	---	---	---		



GRAPH NO. 1

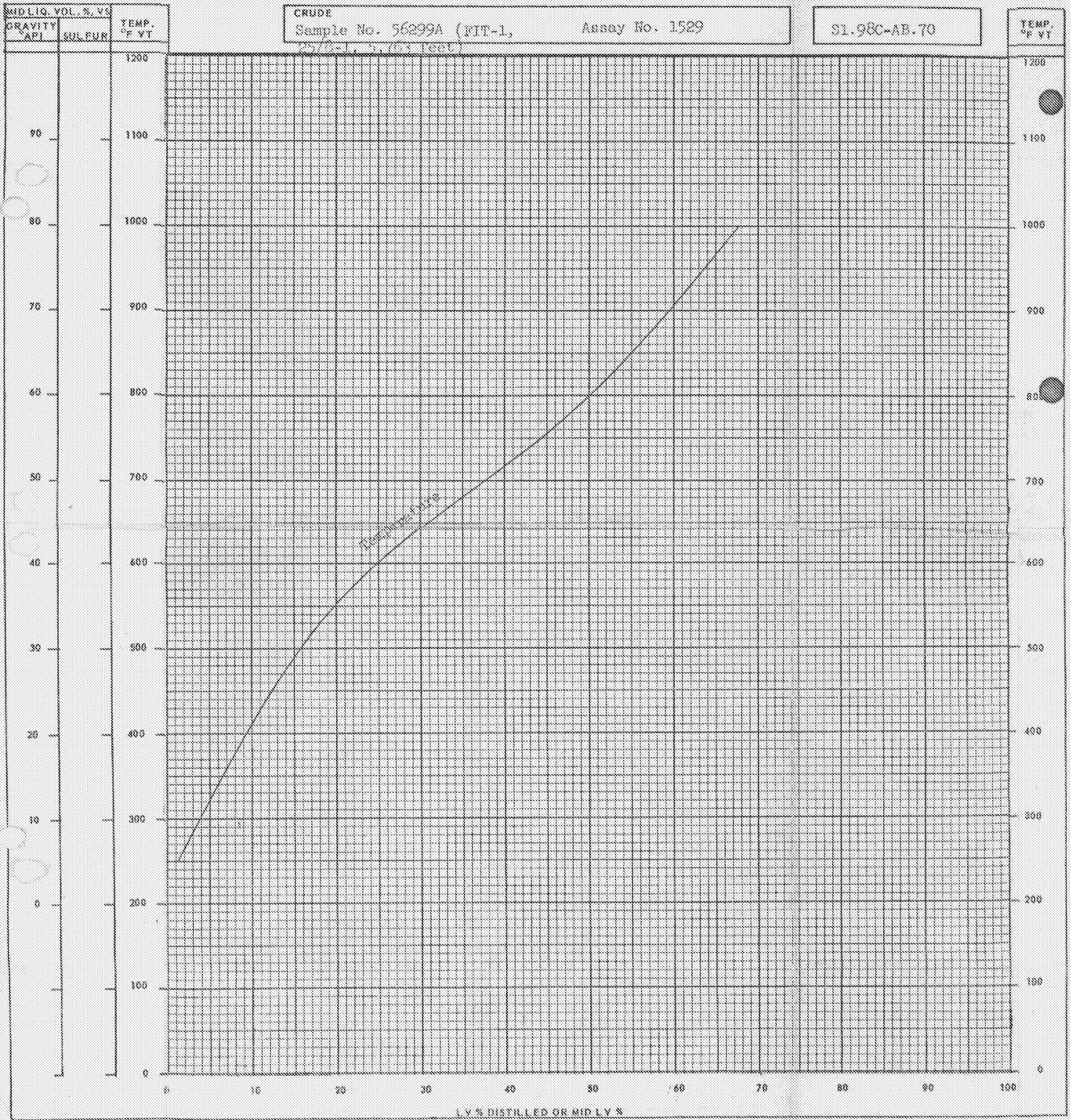


TABLE 1