

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 3-26-67

Run No. STARTUP C-1023

Sample Time: RS 2015; SS _____

FISCHER ASSAY

RAW SHALE SPENT SHALE

25.2 _____ Gal/Ton

.916 _____ S.G., g/ml

9.6 _____ Oil, wt %

1.8 _____ Water, wt %

86.8 _____ Sp. Shale, wt %

1.8 _____ Gas & Loss, wt %

Slight _____ COKING TENDENCY

MINERAL CO₂

17.2 _____ wt %

ASH (SHALE)

68.7 _____ wt %

MOISTURE

0.31 _____ wt %

CARBON

15.7 _____ wt %

HYDROGEN

1.57 _____ wt %

BENZENE EXTRACTABLES

_____ _____ wt %

RETORT SHALE MOISTURE

_____ wt %

RAW SHALE FISCHER ASSAY MOISTURE

0.67 wt %

SHALE RICHNESS DISTRIBUTION
(See attached graph)

SCREEN ANALYSIS
(See back of this sheet)

All results are "as received" unless noted. "Moisture" designates the moisture content of the -48 mesh material used for "Ash", "Mineral CO₂", "Carbon", and "Hydrogen". The "FA Moisture" is for the sample used for the Fischer Assay.

COMMENTS _____

DATE COMPLETED 3-28-67

CHECKED BY REP

LABORATORY ANALYSIS SHEET

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 3-26-67

Run No. C 1023

1800

LIQUID PRODUCTS

D3 PUMPOUT

T3 PUMPOUT

~~20~~
~~20~~

WATER, wt %

29.4

GRAVITY, °API

19.8

OIL ASH, wt %

DISTILLATION (See attached sheet - OSRC-24)

VENT PURGE PRODUCT

OIL WT, g _____

WATER VOL, ml _____

GRAVITY OIL, °API _____

VENT GAS

MAJOR COMPONENTS

C₁ thru C₄, plus n-Pentane

CO₂ _____ vol %

CH₄ _____ vol %

O₂ _____ "

C₂H₄-C₂H₆ _____ "

N₂ _____ "

C₃H₈ _____ "

CH₄ _____ "

C₃H₆ _____ "

CO _____ "

i C₄H₁₀ _____ "

H₂ _____ "

n C₄H₁₀ _____ "

Ar _____ "

∅C₃H₆ _____ "

Others _____ "

n C₅H₁₂ _____ "

CARBON, _____ lbs/MSCFDG

HYDROGEN, _____ lbs/MSCFDG

COMMENTS _____

DATE COMPLETED MAR 28 1967

CHECKED BY REP

OSRC-12B

(Revised 5/3/66)

SCREEN ANALYSIS DATA SHEET (TY-LAB)

RUN NO. C-1023 SAMPLE NO. _____ DATE 3-26-67

UNIT Retort 3 DESCRIPTION Ty Lab

APPROX. SHALE SIZE 1/4" - 1" SHAKING TIME 10 min. ANALYSIS BY Satterfield & Schaeffer

TOTAL SAMPLE WT. GROSS 108.5 - TARE 5.3 = NET 103.2

SCREEN SIZE			WEIGHTS								
SCREENS REQD.	OPENING SIZE	MESH	GROSS LBS.	TARE LBS.	NET WT. RETAINED	SCREEN SIZE	D _i *	1/D _i	% RETAINED	CUM. % RETAINED	% PASSING
	4.25					4.25					
	3.00					3.00	(3.125)	(0.3200)			
	2.50					2.50	(2.625) 2.750	(0.3809) 0.3636			
	2.00					2.00	2.250	0.4444			
	1.50					1.50	1.750	0.5714			
	1.05		30.4	19.2	11.2	1.05	(1.087) 1.275	(0.9199) 0.7843	10.89		89.09
	0.742		62.6	20.5	42.1	0.742	0.896	1.116	40.75		48.14
	0.525		42.7	18.5	24.2	0.525	0.634	1.577	23.54		24.60
	0.371		29.4	19.3	10.1	0.371	0.448	2.232	9.82		14.78
	0.263	3	27.8	18.1	9.4	0.263	0.317	3.154	9.14		5.64
	0.185	4	23.2	19.4	3.8	0.185	0.224	4.464	3.70		1.94
	0.131	6	20.0	19.3	.7	0.131	0.158	6.329	0.68		1.26
	0.093	8	20.4	20.2	.2	0.093	0.112	8.928	0.19	98.91	1.07
	0.065	10	19.3	19.2	.1	0.065			0.10		0.97
	PAN		22.0	21.0	1.0	PAN			0.97		0.00
TOTAL ON SCREENS AND PAN					102.8	LOSS			-	-	-
LOSS (BY DIFFERENCE)					.4	TOTAL			99.98	-	-
TOTAL SAMPLE WEIGHT					103.2						

* NUMBERS IN PARENTHESES SHOULD BE USED WHEN THESE SCREEN SIZES REPRESENT THE TOP OF THE SHALE SIZE RANGE.

REMARKS: _____

$\sum_{+8m}^m D_i$	0.71707	$\sum_{+8m}^m X_i$	
$1/\sum_{+8m}^m D_i$	1.66103	$\sum_{+8m}^m X_i / D_i$	
D _a	0.59547	$\sum_{+8m}^m X_i D_i$	
D _v	0.72497		