

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 7-25-67

Run No. 0-1053 START  
Fill

Sample Time: RS Swing SS \_\_\_\_\_

FISCHER ASSAY

RAW SHALE  SPENT SHALE

<u>3</u>	_____	Gal/Ton
<u>88.36</u>	_____	S.G., g/ml
<u>.915</u>	_____	Oil, wt %
<u>10.8</u>	_____	Water, wt %
<u>1.5</u>	_____	Sp. Shale, wt %
<u>85.0</u>	_____	Gas & Loss, wt %
<u>2.9</u>	_____	COKING TENDENCY
<u>SL. 9.67</u>	_____	

RETORT SHALE MOISTURE \_\_\_\_\_ wt %

RAW SHALE FISCHER ASSAY MOISTURE 0.62 wt %

MINERAL CO<sub>2</sub>

3 \_\_\_\_\_ wt %

ASH (SHALE)

65.9 \_\_\_\_\_ wt %

MOISTURE

0.30 \_\_\_\_\_ wt %

CARBON

17.8 \_\_\_\_\_ wt %

HYDROGEN

1.80 \_\_\_\_\_ wt %

BENZENE EXTRACTABLES

\_\_\_\_\_ 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 CO<sub>2</sub>", "Carbon", and "Hydrogen". The "FA Moisture" is for the sample used for the Fischer Assay.

COMMENTS \_\_\_\_\_

DATE COMPLETED JUL 31 1967

CHECKED BY RCP

LABORATORY ANALYSIS SHEET

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 7-29-67

Run No. C-1053-STARTUP

Sample Time: RS 2:15; SS \_\_\_\_\_

FISCHER ASSAY

<input checked="" type="checkbox"/> RAW SHALE	<input checked="" type="checkbox"/> SPENT SHALE	
<u>28.7</u>	<u>0.0</u>	Gal/Ton
<u>.914</u>	<u>.901</u>	S.G., g/ml
<u>10.9</u>	<u>0.0</u>	Oil, wt %
<u>1.5</u>	<u>0.5</u>	Water, wt %
<u>85.2</u>	<u>99.2</u>	Sp. Shale, wt %
<u>2.4</u>	<u>.3</u>	Gas & Loss, wt %
<u>Slight</u>	<u>N/A</u>	COKING TENDENCY

RETORT SHALE MOISTURE \_\_\_\_\_ wt %

RAW SHALE FISCHER ASSAY MOISTURE 0.78 wt %

MINERAL CO<sub>2</sub>

<input checked="" type="checkbox"/> <u>18.6</u>	<input checked="" type="checkbox"/> <u>15.1</u>	wt %
<input checked="" type="checkbox"/> <u>18.9</u>		

ASH (SHALE)

<input checked="" type="checkbox"/> <u>66.0</u>	<input checked="" type="checkbox"/> <u>83.7</u>	wt %
	<input checked="" type="checkbox"/> <u>69.6</u>	

MOISTURE

<input checked="" type="checkbox"/> <u>0.26</u>	<input checked="" type="checkbox"/> <u>0.07</u>	wt %
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CARBON

<input checked="" type="checkbox"/> <u>17.8</u>	<input checked="" type="checkbox"/> <u>6.17</u>	wt %
	<input checked="" type="checkbox"/> <u>6.2</u>	

HYDROGEN

<input checked="" type="checkbox"/> <u>1.74</u>	<input checked="" type="checkbox"/> <u>0.19</u>	wt %
	<input checked="" type="checkbox"/> <u>0.2</u>	

SHALE RICHNESS DISTRIBUTION  
(See attached graph)

SCREEN ANALYSIS  
(See back of this sheet)

BENZENE EXTRACTABLES

<input type="checkbox"/> _____	<input type="checkbox"/> _____	wt %
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All results are "as received" unless noted. "Moisture" designates the moisture content of the -48 mesh material used for "Ash", "Mineral CO<sub>2</sub>", "Carbon", and "Hydrogen". The "FA Moisture" is for the sample used for the Fischer Assay.

COMMENTS \_\_\_\_\_

DATE COMPLETED AUG 1 1967

CHECKED BY REP

OSRC-12A  
Revised 6/20/66

LABORATORY ANALYSIS SHEET

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 7-29-67

Run No. C-1053 S.U.

*Liquid Product & Gas*

LIQUID PRODUCTS

D3 PUMPOUT

T3 PUMPOUT

*pfl.*  
 WATER, wt %  
 GRAVITY, °API  
 OIL ASH, wt %

	1	2	3	4	1	2
WATER, wt %	<u>10.8</u>					
GRAVITY, °API	<u>19.7</u>					
OIL ASH, wt %						

DISTILLATION (See attached sheet - OSRC-24)

VENT PURGE PRODUCT

OIL WT, g \_\_\_\_\_  
 WATER VOL, ml \_\_\_\_\_  
 GRAVITY OIL, °API \_\_\_\_\_

*101294  
 111446  
 -----  
 12940*

VENT GAS

*pfl.*  MAJOR COMPONENTS

CO <sub>2</sub>	<u>26.9</u>	vol %
O <sub>2</sub>	<u>c.c.</u>	"
N <sub>2</sub>	<u>57.3</u>	"
CH <sub>4</sub>	<u>1.6</u>	"
CO	<u>4.2</u>	"
H <sub>2</sub>	<u>5.0</u>	"
Ar	<u>c.7</u>	"
Others	<u>4.3</u>	"

C<sub>1</sub> thru C<sub>4</sub>, plus n-Pentane

CH <sub>4</sub>	_____	vol %
C <sub>2</sub> H <sub>4</sub> -C <sub>2</sub> H <sub>6</sub>	_____	"
C <sub>3</sub> H <sub>8</sub>	_____	"
C <sub>3</sub> H <sub>6</sub>	_____	"
i C <sub>4</sub> H <sub>10</sub>	_____	"
n C <sub>4</sub> H <sub>10</sub>	_____	"
∅C <sub>3</sub> H <sub>6</sub>	_____	"
n C <sub>5</sub> H <sub>12</sub>	_____	"

*pfl.*  CARBON, 12.8 lbs/MSCFDG

*pfl.* HYDROGEN, 0.81 lbs/MSCFDG

COMMENTS \_\_\_\_\_

DATE COMPLETED JUL 31 1967

CHECKED BY \_\_\_\_\_

*REP*  
 OSRC-12B  
 (Revised 5/3/66)