

LABORATORY ANALYSIS SHEET

1513 012-002

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 3-21-67

Run No. C 1020 STARTUP

Sample Time: RS 1300; SS \_\_\_\_\_

FISCHER ASSAY

RETORT SHALE MOISTURE

RAW SHALE       SPENT SHALE

RAW SHALE FISCHER ASSAY MOISTURE

24.7      \_\_\_\_\_ Gal/Ton  
.916      \_\_\_\_\_ SiG., g/ml  
9.5      \_\_\_\_\_ Oil, wt %  
1.9      \_\_\_\_\_ Water, wt %  
86.8      \_\_\_\_\_ Sp. Shale, wt %  
1.8      \_\_\_\_\_ Gas & Loss, wt %  
Slight      \_\_\_\_\_ COKING TENDENCY

0.80 wt %

MINERAL CO<sub>2</sub>

17.5       \_\_\_\_\_ wt %

ASH (SHALE)

68.9       \_\_\_\_\_ wt %

MOISTURE

0.29       \_\_\_\_\_ wt %

SHALE RICHNESS DISTRIBUTION  
(See attached graph)

CARBON

15.6       \_\_\_\_\_ wt %

SCREEN ANALYSIS  
(See back of this sheet)

HYDROGEN

1.65       \_\_\_\_\_ wt %

BENZENE EXTRACTABLES

\_\_\_\_\_       \_\_\_\_\_ wt %

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 MAR 23 1967

CHECKED BY REP

OSRC-12A

Revised 6/20/66

LABORATORY ANALYSIS SHEET

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 3-21-67

Run No. C1020

Sample Time: RS 2100; SS \_\_\_\_\_

FISCHER ASSAY

RETORT SHALE MOISTURE

*FAA*

RAW SHALE       SPENT SHALE

*FAA*

RAW SHALE FISCHER ASSAY MOISTURE

|               |       |                  |
|---------------|-------|------------------|
| <u>25.2</u>   | _____ | Gal/Ton          |
| <u>.914</u>   | _____ | S.G., g/ml       |
| <u>9.6</u>    | _____ | Oil, wt %        |
| <u>1.8</u>    | _____ | Water, wt %      |
| <u>86.9</u>   | _____ | Sp. Shale, wt %  |
| <u>1.7</u>    | _____ | Gas & Loss, wt % |
| <u>slight</u> | _____ | COKING TENDENCY  |

0.77 wt %

MINERAL CO<sub>2</sub>

*FAA*  17.0       \_\_\_\_\_ wt %

ASH (SHALE)

*FAA*  69.0       \_\_\_\_\_ wt %

MOISTURE

*FAA*  0.17       \_\_\_\_\_ wt %

CARBON

*R*  15.6       \_\_\_\_\_ wt %

HYDROGEN

*R*  1.56       \_\_\_\_\_ 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 MAR 27 1967

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Revised 6/20/66

LABORATORY ANALYSIS SHEET

ANVIL POINTS OIL SHALE RESEARCH CENTER

Date Sampled 3-21-67

Run No. C1020 START UP  
1910 hrs

LIQUID PRODUCTS

D3 PUMPOUT

T3 PUMPOUT

*P.H.*

WATER, wt %

1  
33.0

2  
~~\_\_\_\_\_~~

3  
~~\_\_\_\_\_~~

4  
~~\_\_\_\_\_~~

1  
~~\_\_\_\_\_~~

2  
~~\_\_\_\_\_~~

GRAVITY, °API

19.7

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

CO<sub>2</sub> \_\_\_\_\_ vol %  
O<sub>2</sub> \_\_\_\_\_ "  
N<sub>2</sub> \_\_\_\_\_ "  
CH<sub>4</sub> \_\_\_\_\_ "  
CO \_\_\_\_\_ "  
H<sub>2</sub> \_\_\_\_\_ "  
Ar \_\_\_\_\_ "  
Others \_\_\_\_\_ "

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> \_\_\_\_\_ "

CARBON, \_\_\_\_\_ lbs/MSCFDG

HYDROGEN, \_\_\_\_\_ lbs/MSCFDG

COMMENTS \_\_\_\_\_

DATE COMPLETED MAR 23 1967

CHECKED BY REP

OSRC-12B

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