



AGAT Engineering

BAY 1, 3650 - 21 ST. N.E.  
CALGARY, ALTA. T2E 6V6  
230-2477

*WCH File*

CONTAINER IDENTIFICATION

P.B. #1

# OIL ANALYSIS

LABORATORY NUMBER

5869

OPERATOR NAME

ROXY PETROLEUM LIMITED

UNIQUE WELL IDENTIFIER

9-28-1-26 WPM

WELL NAME

ROXY-ANDEX ET AL WASKADA 9-28-1-26 WPM

ELEVATIONS  
AS IN GRD IN

FIELD OR AREA

POOL OR ZONE

NAME OF SAMPLER

K. RYAN

COMPANY

ROXY

TEST TYPE

NO

TEST RECOVERY

SAMPLING POINT

WELL HEAD

AMT & TYPE OF CUSHION

MUD RESISTIVITY/D m

@ 25 °C

TEST INTERVAL OR PERFS

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10 m³/d

GAUGE PRESSURE MPa

SEPARATOR

TREATER

RESERVOIR

SOURCE

SAMPLED

RECEIVED

TEMPERATURE °C

DATE SAMPLED (Y-M-D)

83-11-08

DATE RECEIVED (Y-M-D)

83-11-22

DATE REPORTED (Y-M-D)

83-11-24

ANALYST

S.J.

OTHER INFORMATION

## SAMPLE PROPERTIES

B.S. & W. (VOLUME FRACTION)

COLOR OF CLEAN OIL

BROWN

WATER

0.000

SEDIMENT

0.006

TOTAL

0.006

+ Performed the BS & W test  
in the oil portion only.

COLOR NUMBER ASTM D-155

D<sub>8</sub> A.S.T.M.

RELATIVE

DENSITY

ABSOLUTE  $\rho_{40} = \rho_{15} \times 0.999016$

AS RECEIVED

AFTER CLEANING

AS RECEIVED

AFTER CLEANING

838.4

API GRAVITY @ 15°C = 37.12

TOTAL SULPHUR  
(MASS FRACTION)

0.00671

TOTAL SALT g/m³

U.S.B.M.

A.S.T.M.

3

POUR POINT / °C

CARBON RESIDUE  
(MASS FRACTION)

CONRADSON

RAMSBOTTOM

WPP/KPa

## VISCOSITY

TEMP / °C

ABSOLUTE  $\rho_{40} = \rho_{15} \times 0.999016$

KINEMATIC  $\nu_{40} = \nu_{15} \times 0.999016$

25

3.72

4.47

30

2.82

3.42

50

2.26

2.77

## DISTILLATION

METHOD

A.S.T.M. - D - 86\*

INITIAL BOILING POINT: 68.5°C

ABS BAROM PRESSURE

88.1

ROOM TEMP. / °C

21.5

DISTILLATION SUMMARY  
(VOLUME FRACTION)

200°C

NAPHTHA

0.30

275°C

KEROSENE

0.43

350°C

LIGHT GAS OIL

0.60

RECOVERED

0.85

RESIDUE

0.12

DISTILLATION LOSS

0.03

RELATIVE DENSITY

DISTILLATE

RESIDUE

BASE TYPE:

CHARACTERIZATION FACTOR: 11.8

REMARKS: + This sample contained:  
free water = 34.7%  
free oil = 65.3%

\* The distillation temperatures have been  
corrected to 101.3 kPa (abs).



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230-2477

CONTAINER IDENTIFICATION

P.B. #4

## OIL ANALYSIS

LABORATORY NUMBER

5912

OPERATOR NAME

ROXY PETROLEUM LIMITED

UNIQUE WELL IDENTIFIER

9-26MC-3a-1-2-6

WELL NAME

ROXY ANDEX WASKADA 9-26MC3a-1-2-6

ELEVATIONS

KB m

GRD m

FIELD OR AREA

WASKADA

POOL OR ZONE

NAME OF SAMPLER

COMPANY

ROXY

TEST TYPE

NO

TEST RECOVERY

TEST INTERVAL OR PERFS

SAMPLING POINT

WELLHEAD

AMT & TYPE OF CUSHION

MUD RESISTIVITY/II =

@ 25 °C

TYPE OF PRODUCTION

PUMPING

FLOWING

GAS LIFT

SWAB

PRODUCTION RATES

WATER

m³/d

OIL

m³/d

GAS

10³ m³/d

GAUGE PRESSURE kPa

TEMPERATURE °C

SEPARATOR

TREATER

RESERVOIR

SOURCE

SAMPLED

RECEIVED

DATE SAMPLED (Y-M-D)

83-11-30

DATE RECEIVED (Y-M-D)

83-12-05

DATE REPORTED (Y-M-D)

83-12-07

ANALYST

S.J.

OTHER INFORMATION

### SAMPLE PROPERTIES

S.S. & W. (VOLUME FRACTION)

COLOR OF CLEAN OIL

DARK BROWN

WATER

0.008

SEDIMENT

0.002

TOTAL

0.010

COLOR NUMBER ASTM D-155

D<sub>8</sub> A.S.T.M.

BS & W test was performed in the oil portion only.

DENSITY

RELATIVE

AS RECEIVED

AFTER CLEANING

AS RECEIVED

ABSOLUTE  $\rho_{40} \times 10^3$

AFTER CLEANING

850.6

API GRAVITY @ 15°C = 34.7

TOTAL SULPHUR (MASS FRACTION)

0.00976

TOTAL SALT g/m³

U.S.B.M.

A.S.T.M.

3

POUR POINT / °C

U.S.B.M.

A.S.T.M.

3

CARBON RESIDUE (MASS FRACTION)

CONRADSON

RAMSBOTTOM

100%<sub>10</sub>

### VISCOSITY

TEMP. °C	ABSOLUTE $\eta_{40}$ cP	KINEMATIC $\nu_{40}$ cSt
25	5.19	6.15
30	3.57	4.27
35	2.73	3.30

### DISTILLATION

METHOD

A.S.T.M. - D - 86\*

INITIAL BOILING POINT: 58.5°C

ABN BAROM PRESSURE

88.5

ROOM TEMP. / °C

21.5

### DISTILLATION SUMMARY (VOLUME FRACTION)

200°C NAPHTHA	275°C KEROSENE	350°C LIGHT GAS OIL
0.29	0.445	0.590

RECOVERED

0.895

RESIDUE

0.085

DISTILLATION LOSS

0.020

### RELATIVE DENSITY

DISTILLATE

RESIDUE

BASE TYPE:

CHARACTERIZATION FACTOR: 11.8

REMARKS: This sample contained: oil: 82.9% by vol, free water: 17.1%,  
\* The distillation temperatures have been corrected to 101.3 kPa (abs).

VOLUME FRACTION	TEMP. / °C
0.05	96.0
0.10	116.0
0.15	133.5
0.20	156.0
0.25	179.0
0.30	209.0
0.35	231.0
0.40	254.5
0.45	279.5
0.50	304.5
0.55	330.0
0.60	355.0
0.65	376.0
0.70	391.0
0.75	399.5
0.80	407.0
0.85	
0.90	
0.95	
1.00	
F.B.P.	407.0
CRACKED	