



AGAT Engineering

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

03423

CONTAINER IDENTIFICATION		OIL ANALYSIS		LABORATORY NUMBER	
P.B. #1				5528	
OPERATOR NAME ROXY PETROLEUM LIMITED					
UNIQUE WELL IDENTIFIER 10-26-1-26		WELL NAME ROXY-ANDEX WASHADA 10-26-1-26		ELEVATIONS KB m GRD m	
FIELD OR AREA		POOL OR ZONE		NAME OF SAMPLER	
TEST TYPE		TEST RECOVERY		COMPANY	
NO					
TEST INTERVAL OR PERFS		SAMPLING POINT WELLHEAD		AMT & TYPE OF CUSHION	
		TYPE OF PRODUCTION		MUD RESISTIVITY/11 m @ 25 °C	
		PUMPING			
		FLOWING			
		GAS LIFT			
		SWAB			
		PRODUCTION RATES			
		WATER m³/d		OIL m³/d	
				GAS 10³ m³/d	
		SEPARATOR		TREATER	
		RESERVOIR		SOURCE	
		SAMPLED		RECEIVED	
		GAUGE PRESSURE MPa			
		TEMPERATURE °C			
DATE SAMPLED (Y-M-D) 83-07-19		DATE RECEIVED (Y-M-D) 83-07-21		DATE REPORTED (Y-M-D) 83-07-25	
		ANALYST S. JONEJA		OTHER INFORMATION	

SAMPLE PROPERTIES			
B.S. & W. (VOLUME FRACTION)			
COLOR OF CLEAN OIL DARK BROWN	WATER 0.000	SEDIMENT 0.008	TOTAL 0.008
COLOR NUMBER ASTM D-155 D <sub>8</sub> A.S.T.M.			
DENSITY			
RELATIVE AS RECEIVED	AFTER CLEANING	ABSOLUTE p/kg = m³ AS RECEIVED	AFTER CLEANING
			840.6

API GRAVITY @ 15°C = 36.7

TOTAL SULPHUR (MASS FRACTION)		TOTAL SALT g = m³		POUR POINT / °C	
0.0077				-8	
CARBON RESIDUE (MASS FRACTION)		CONRADSON		RAMSBOTTOM	
RVP/ps					

VISCOSITY		
TEMP. °C	ABSOLUTE/MPa = s	KINEMATIC/MPa = s-1
20		4.73
30		3.70
40		2.82

VOLUME FRACTION	TEMP. / °C
0.05	95.5
0.10	113.5
0.15	133.0
0.20	155.0
0.25	178.0
0.30	200.5
0.35	231.0
0.40	258.0
0.45	289.5
0.50	312.0
0.55	340.0
0.60	359.5
0.65	379.5
0.70	390.0
0.75	397.0
0.80	403.0
0.85	408.0
0.90	
0.95	
1.00	
F.B.P.	408.0
CRACKED	

DISTILLATION		
METHOD A.S.T.M.-D-86*		
INITIAL BOILING POINT=66°C		
ABS BAROM PRESS/ps 88.2		ROOM TEMP./°C 26
DISTILLATION SUMMARY (VOLUME FRACTION)		
200°C NAPHTHA 0.30	275°C KEROSENE 0.425	350°C LIGHT GAS OIL 0.57
RECOVERED 0.90	RESIDUE 0.09	DISTILLATION LOSS 0.01
RELATIVE DENSITY		
DISTILLATE		RESIDUE
BASE TYPE:		
CHARACTERIZATION FACTOR: 11.9		

REMARKS:

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



CORE LABORATORIES - CANADA LTD.  
Petroleum Reservoir Engineering  
CALGARY ALBERTA



Plastic CONTAINER IDENTITY		OIL ANALYSIS		7022-83-269 LABORATORY NUMBER	
Roxy Petroleum Ltd. OPERATOR		1 of 5 PAGE			
LSD 16-28-1-26 WPM LOCATION		Roxy-Andex et al W Waskada 16-28-1-26 WELL OR SAMPLE LOCATION NAME		KB ELEV. m GRD ELEV. m	
West Waskada, Manitoba FIELD OR AREA		Mississippian POOL OR ZONE		SAMPLER	
TEST TYPE & NO. Wellhead		TEST RECOVERY		@ °C	
		POINT OF SAMPLE		MUD RESISTIVITY	
		PUMPING FLOWING GAS LIFT SWAB			
		WATER m <sup>3</sup> /d OIL m <sup>3</sup> /d GAS m <sup>3</sup> /d			
TEST INTERVALS OR PERFS. (m)					
SEPARATOR RESERVOIR		CONTAINER WHEN SAMPLED		CONTAINER WHEN RECEIVED	
PRESSURES, kPa				TEMPERATURES, °C	
83 03 31		83 04 07		83 03 08	
DATE SAMPLED (Y/M/D)		DATE RECEIVED (Y/M/D)		DATE ANALYSED (Y/M/D)	
		BVF		ANALYST	
				REMARKS	

SAMPLE PROPERTIES

0.060		Trace		0.060	
COLOR OF CLEAN OIL		WATER		TOTAL BS&W	
GRAVITY		A.P.I. @ 15.6°C		36.0	
SPECIFIC		AS RECEIVED		AFTER CLEANING	
0.8448					
AS RECEIVED		AFTER CLEANING			
POUR POINT		U.S.B.M.		A.S.T.M.	
0.0070		<0.002		-3°C	
TOTAL SULPHUR (MASS FRACTION)		TOTAL SALT (kg/m <sup>3</sup> )		CARBON RESIDUE	
0.0070		<0.002			
R.V.P.		CONRADSON		RAMSBOTTOM	

VISCOSITY

TEMP °C	mPa's	mm <sup>2</sup> /s	
20	7.307	8.689	
30	4.435	5.318	
40	3.320	4.010	

DISTILLATION

FRACTION DISTILLED	TEMP. °C
0.05	86
0.10	107
0.15	127
0.20	154
0.25	177
0.30	192
0.35	214
0.40	239
0.45	262
0.50	283
0.55	304
0.60	328
0.65	348
0.70	356
0.74	361*

ASTM	87.9
METHOD	BAROM. PRESS. KPS OF HG
20	52
ROOM TEMP. (°C)	INITIAL BOIL PT. (°C)

DISTILLATION SUMMARY

204°C NAPHTHA	274°C KEROSENE
343°C LIGHT GRAV./OIL	0.74 RECOVERED
0.25 RESIDUE	0.01 DISTILLATION LOSS
SPECIFIC GRAVITY	
DISTILLATE	RESIDUE
BASE TYPE	
CHARACTERIZATION FACTOR	

REMARKS 0.080 mass fraction free water in sample  
as received. Density at 15°C - 844.3 kg/m<sup>3</sup>  
Total Sulphur - 7.0 gm/kg