CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON FORT ST. JOHN CALGARY

OIL ANALYSIS

CONTAINER IDENTITY

LABORATORY NUMBER: C82-18396-2

LICENCE NUMBER

OPERATOR NAME: LYLETON CORPORATION

LOCATION: 11-30-2-28 WP

WELL NAME: Lyleton et al S. Pierson 11-30-2-28

ELEVATIONS KB (metres) GRD: 467.0 462.2

FIELD OR AREA

POOL OR ZONE: MC-3

NAME OF SAMPLER

COMPANY: V & D Oilfield Testing

TEST TYPE: DST NO.: 1

MULTIPLE RECOVERY: X

TEST RECOVERY: 10 m drilling mud; 4 m water; 93 m gassy oil

SAMPLING POINT: Middle

AMT & TYPE OF CUSHION

MUD RESISTIVITY @ 25°C

Test Interval (metres): 990 - 995

Perforations (metres)

TYPE OF PRODUCTION: PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES

WATER m³/d OIL m³/d GAS 10³m³/d

SEPARATOR TREATER RESERVOIR SOURCE

GAUGE PRESSURE kPa

SEPARATOR TREATER RESERVOIR SOURCE

TEMPERATURE °C

DATE SAMPLED (Y-M-D)	DATE RECEIVED (Y-M-D)	DATE REPORTED (Y-M-D)	ANALYST	OTHER INFORMATION
1982-12-04	1982-12-09	1982-12-30	D. Barber	

SAMPLE PROPERTIES

COLOR OF CLEAN OIL	B.S. & W. (VOLUME FRACTION) WATER	SEDIMENT	TOTAL
Brown	0.006	0.001	0.007

DENSITY

RELATIVE AS RECEIVED	RELATIVE AFTER CLEANING	ABSOLUTE kg/m³ AS RECEIVED	ABSOLUTE kg/m³ AFTER CLEANING
	0.839		838

TOTAL SULFUR (MASS FRACTION)	TOTAL SALT g/m³	POUR POINT °C U.S.B.M.	POUR POINT °C A.S.T.M.
0.0166		+13	

RVP kPa

CARBON RESIDUE (MASS FRACTION) CONRADSON: 0.0547 RAMSBOTTOM

VISCOSITY

TEMP °C	ABSOLUTE mPa·s	KINEMATIC mm²/s
20	7.98	9.55
40	5.15	6.21
50	4.07	4.95

DISTILLATION

VOLUME FRACTION DISTILLED	TEMP °C
I.B.P.	55
0.05	82
0.10	103
0.15	128
0.20	150
0.25	170
0.30	200
0.35	231
0.40	251
0.45	265
0.50	283
0.55	
0.60	
0.65	
0.70	
0.75	
0.80	
0.85	
0.90	
0.95	
1.00	
F.B.P.	
CRACKED	296

METHOD: Hempel ASTM (D-285)

BAROM PRESS kPa(abs): 87.8 ROOM TEMP °C: 23.0

DISTILLATION SUMMARY (VOLUME FRACTION)

200°C NAPHTHA	275°C KEROSENE	350°C LIGHT GAS OIL
0.30	0.16	

RECOVERED RESIDUE DISTILLATION LOSS

RELATIVE DENSITY

DISTILLATE RESIDUE

BASE TYPE: Mixed

CHARACTERIZATION FACTOR: 12.1

Total Sulfur: 16.6 g/kg

BS & W determined on sample as received. Remainder of analysis determined on sample after cleaning by centrifuging.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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OIL ANALYSIS

CONTAINER IDENTITY

LABORATORY NUMBER: C83-0841

LICENCE NUMBER

OPERATOR NAME: LYLETON CORPORATION

LOCATION: 14-24-2-29 W1

WELL NAME: Lyleton et al S.Pierson 14-24-2-29

ELEVATIONS K.B. (metres) GRD

FIELD OR AREA

POOL OR ZONE: Mississippian

NAME OF SAMPLER

COMPANY

TEST TYPE NO

TEST RECOVERY

MULTIPLE RECOVERY Y N

SAMPLING POINT

AMT & TYPE OF CUSHION

MUD RESISTIVITY @ 29°C

Test interval (metres)

TYPE OF PRODUCTION

PUMPING FLOWING GAS LIFT SWAB

PRODUCTION RATES

WATER m^3/d OIL m^3/d GAS $10^3m^3/d$

Perforations (metres)

SEPARATOR TREATER RESERVOIR SOURCE

GAUGE PRESSURE kPa

1005.5 - 1008

SEPARATOR TREATER RESERVOIR SOURCE

TEMPERATURE °C

DATE SAMPLED (Y-M-D)	DATE RECEIVED (Y-M-D)	DATE REPORTED (Y-M-D)	ANALYST	OTHER INFORMATION
	1983-06-20	1983-06-29	S. Sargious	

SAMPLE PROPERTIES

COLOR OF CLEAN OIL	BS & W (VOLUME FRACTION) WATER	SEDIMENT	TOTAL
Brown	0.839	Trace	0.839

DENSITY

RELATIVE AS RECEIVED	RELATIVE AFTER CLEANING	ABSOLUTE ρ kg/m^3 AS RECEIVED	ABSOLUTE ρ kg/m^3 AFTER CLEANING
	0.861		860

TOTAL SULFUR (MASS FRACTION)	TOTAL SALT g/m^3	POUR POINT °C U.S.B.M.	POUR POINT °C A.S.T.M.
0.0091		-14	

RVP kPa

CARBON RESIDUE (MASS FRACTION)

CONRADSON	RAMSBOTTOM
0.0516	

VISCOSITY

TEMP °C	ABSOLUTE mPa.s	KINEMATIC mm^2/s
10	53.0	61.3
20	11.1	12.9
40	5.48	6.33

DISTILLATION

VOLUME FRACTION DISTILLED	TEMP °C
I.B.P.	
0.05	
0.10	
0.15	
0.20	
0.25	
0.30	
0.35	
0.40	
0.45	
0.50	
0.55	
0.60	
0.65	
0.70	
0.75	
0.80	
0.85	
0.90	
0.95	
1.00	
F.B.P.	
CRACKED	

METHOD

BAROM PRESS kPa(abs) ROOM TEMP °C

DISTILLATION SUMMARY (VOLUME FRACTION)

200°C NAPHTHA	275°C KEROSENE	350°C LIGHT GAS OIL

RECOVERED	RESIDUE	DISTILLATION LOSS

RELATIVE DENSITY

DISTILLATE	RESIDUE

BASE TYPE:

CHARACTERIZATION FACTOR: 11.9

Total Sulfur: 9.1 g/kg

BS & W determined on sample as received. Remainder of analysis determined on sample after cleaning by centrifuging.

Insufficient recoverable oil for further analysis.

GEOTECH
Bore Services

LYLETON CORPORATION

Lyleton et al Pierson
14-24-2-29W1

OIL ANALYSIS

Sampling Point: Top of Fluid

SAMPLE PROPERTIES

COLOR OF CLEAN OIL	VOLUME FRACTION WATER	BS	TOTAL BS & W
BROWN			

DENSITY

RELATIVE AS RECEIVED	RELATIVE AFTER CLEANING	ABSOLUTE kg m^{-3} AS RECEIVED	ABSOLUTE kg m^{-3} AFTER CLEANING
	0.845		845

TOTAL SULPHUR MASS FRACTION	TOTAL SALT g m^{-3}	POUR POINT °C USBM	POUR POINT °C ASTM
0.0093			

RVP	CARBON RESIDUE CONRADSON	CARBON RESIDUE RAMSBOTTOM

VISCOSITY

TEMP °C	DYNAMIC mPa s	KINEMATIC mm^{2}s^{-1}

REMARKS

DISTILLATION

VOLUME FRACTION DISTILLED	TEMP. °C
FBP	
CRACKED	

METHOD	BAROM PRESS kPa
ASTM D-86	

ROOM TEMP °C	INITIAL BOIL PT °C

DISTILLATION SUMMARY VOLUME FRACTION

204 °C NAPTHA	274 °C KEROSENE

343 °C LIGHT GAS/OIL	RECOVERED

RESIDUE	DISTILLATION LOSS

RELATIVE DENSITY

DISTILLATE	RESIDUE

BASE TYPE

CHARACTERIZATION FACTOR

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GEOTECH Core Services

LYLETON CORPORATION

Lyleton et al Pierson
14-24-2-29W1

OIL ANALYSIS

Sampling Point: Middle

SAMPLE PROPERTIES

COLOR OF CLEAN OIL	VOLUME FRACTION WATER	BS	TOTAL BS & W
BROWN	0.35	0.10	0.75

DENSITY

RELATIVE AS RECEIVED	RELATIVE AFTER CLEANING	ABSOLUTE kg m^{-3} AS RECEIVED	ABSOLUTE kg m^{-3} AFTER CLEANING
	0.843		843

TOTAL SULPHUR MASS FRACTION	TOTAL SALT g m^{-3}	POUR POINT °C USBM	POUR POINT °C ASTM
0.0074			-4

RVP	CARBON RESIDUE CONRADSON	CARBON RESIDUE RAMSBOTTOM

VISCOSITY

TEMP °C	DYNAMIC mPa.s	KINEMATIC mm^2.s^{-1}
20	5.70	6.79
30	4.44	5.33
40	3.57	4.32

REMARKS

DISTILLATION

VOLUME FRACTION DISTILLED	TEMP. °C
0.05	87
0.10	107
0.15	128
0.20	148
0.25	175
0.30	200
0.35	222
0.40	250
0.45	276
0.50	299
0.55	325
0.60	342
FBP	
CRACKED	351

METHOD	BAROM PRESS kPa
ASTM D-86	33.03

ROOM TEMP °C	INITIAL BOIL PT °C
27	52

DISTILLATION SUMMARY VOLUME FRACTION.

204 °C NAPTHA	274 °C KEROSENE
0.31	0.135

343 °C LIGHT GAS/OIL	RECOVERED
0.160	0.63

RESIDUE	DISTILLATION LOSS
0.36	0.01

RELATIVE DENSITY

DISTILLATE	RESIDUE

BASE TYPE

CHARACTERIZATION FACTOR

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