LONDON RESOURCES INC.

FINAL REPORT

Test Well
Flat Bay #1
Exploration Permit 96-105

May 12, 1997

Prepared by: Douglas Brett; P.Eng.

Table of Contents:

Introduction

London resources Inc. drilled a stratigraphic test well in order to penetrate a reported petroliferous Anguille Group conglomerate.

The well was drilled by East Coast Drilling Co. Ltd. (owner: Colin Crane), utilizing a mining full core diamond drilling rig, Longyear 34, and was supervised by London Resources Inc. representatives.

The well was spudded 29/10/96 and released 09/11 96. The well was drilled with fresh water through 16.15 m (53 ft) of drift and NW Size casing was set at 16.46 m (54 ft) to a total depth of 153.61 m (504 ft).

Formations penetrated were the Codroy Group - gypsum, anhydrite, limestone; and Anguille conglomerate.

Oil was encountered bleeding from the porous laminations in the limestone from 136.85 - 137.76 m (449 - 452 ft) and from varying degrees over the Anguille conglomerate from 137.76 m (452 ft) to total depth. Free oil was circulated to surface at approximately 145 m (476 ft).

The well was blown dry and shut in from 20:00 - 8/11/96 to 07:30 - 9/11/96. No pressure was recorded.

The well currently stands suspended with a cement plug set from 16.46 - 18.29 m (54 - 60 ft) and a cap on the well.

COPY

GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR

Department of
Mines and Energy
Energy Branch
Petroleum Resource Development Division

1997 06 06

London Resources Inc.
366 Thorburn Road
St. John's, NF.
A1B 4R1

fax: 754-3946

Att: Mr Patrick J. Laracy

Re: London Resources Flat Bay No. 1 Test Hole - Final Report & Security Deposit

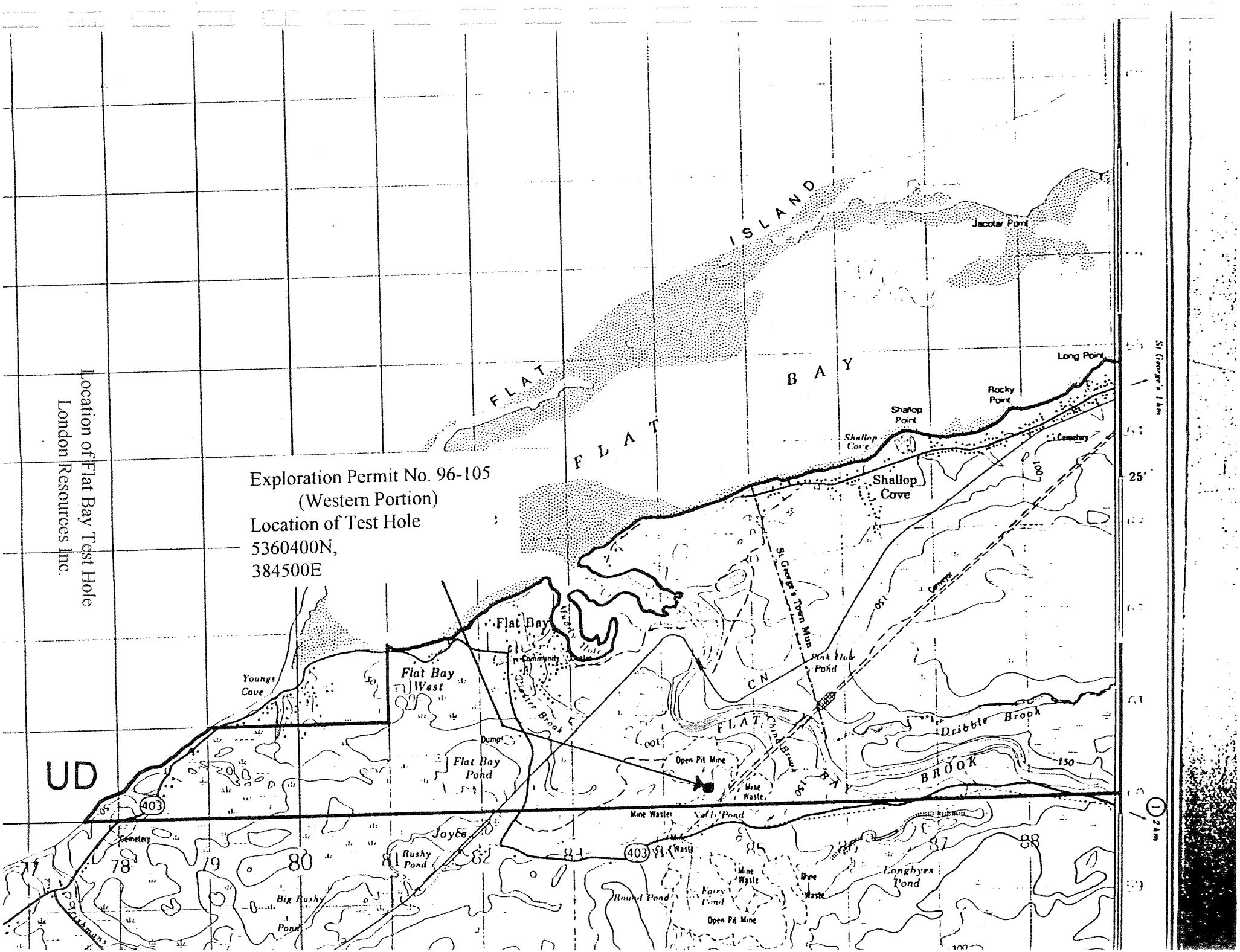
The Department has reviewed the Final Report for the subject Test Hole dated May 12th, 1997 and has determined that it meets the regulatory requirements. As this Test Hole was drilled as a Stratigraphic Well under the Petroleum Regulations, the information contained in the report will have a confidentiality period of five years and is scheduled for public release on Nov 9th, 2001.

As previously discussed, the core obtained from the well that is currently in your possession is to be delivered to the Department upon the expiry of Exploration Permit # 96-105.

The Department conducted an inspection of the drill site on Dec 17th, 1996 and is satisfied that the site restoration has been completed. However, since the well is being maintained in a suspended condition pending future operations. As previously discussed, the Department will accept a certified cheque in the amount of $1,000 as a replacement for the $4,000 cheque currently in its possession as security against the proper abandonment of the test Hole. Would you please make arrangements at your convenience to effect the cheque exchange.

If you have any questions in this matter, please contact Joseph Gorman at 729-6813.

David W. Hawkins, P. Geo.
Director


Location of Flat Bay Test Hole
London Resources Inc.
Exploration Permit No. 96-105
(Western Portion)
Location of Test Hole
5360400N,
384500E
UD
FLAT ISLAND
FLAT BAY
Jacolar Point
Long Point
Rocky Point
Shallop Point
Shallop Cove
Cemetery
Flat Bay
Flat Bay West
Youngs Cove
Community
Flat Bay Pond
Dump
Open Pit Mine
Mine Waste
Valley Pond
Joyce
Rushy Pond
Big Rushy Pond
Round Pond
Fairy Pond
Longbyes Pond
Dribble Brook
FLAT BROOK
St. George's Town Mun
403
St George's 1 km
25'
2 km

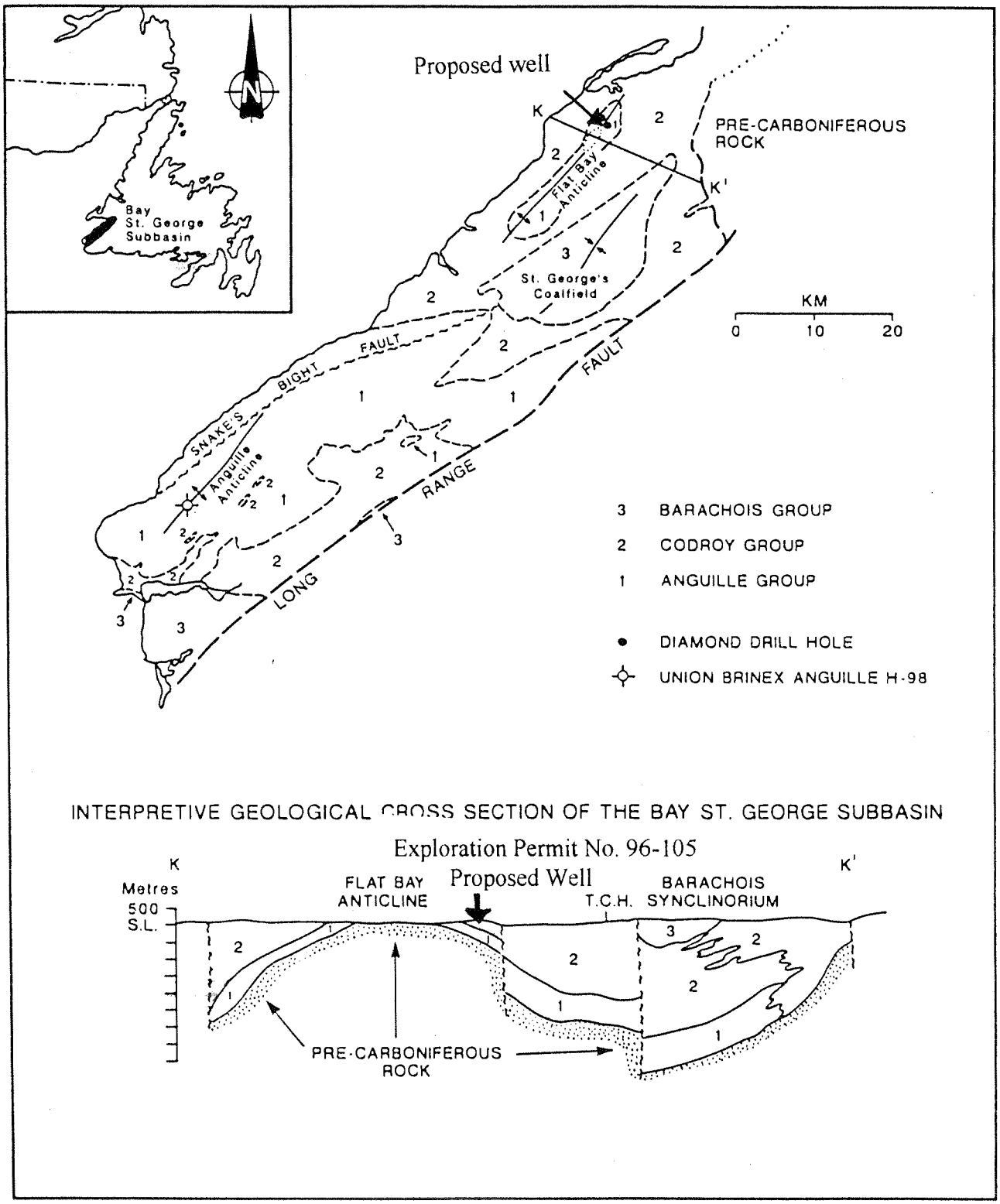


Figure 9. Geological map and cross section of the Bay St. George Subbasin (Knight, 1983).

General Information:

Permittee: London Resources Inc.

Well Name: Flat Bay #1

Location: 5360400N 384500E

Operations Report:

See attached "Daily Drilling Report" - Appendix A

Elevation:

N/A

Total Depth:

153.61 m (504 ft)

Spud Date:

29/10/96 07:30

Date Drilling Completed:

08/11/96 17:00

Rig Release Date:

09/11/96 15:30

Test Hole Status:

Suspended

Hole Sizes and Depths:

Bit Size:	BQ Fordia F-2	0 to 144.16 m
	Boart Series 2	144.16 - 153.61 m

Casing and Cementing Record:

Casing size: NW set @ 16.46 m (54 ft).

Cement: nil

Drilling Fluid:

Fresh water

Fluid Disposal:

nil

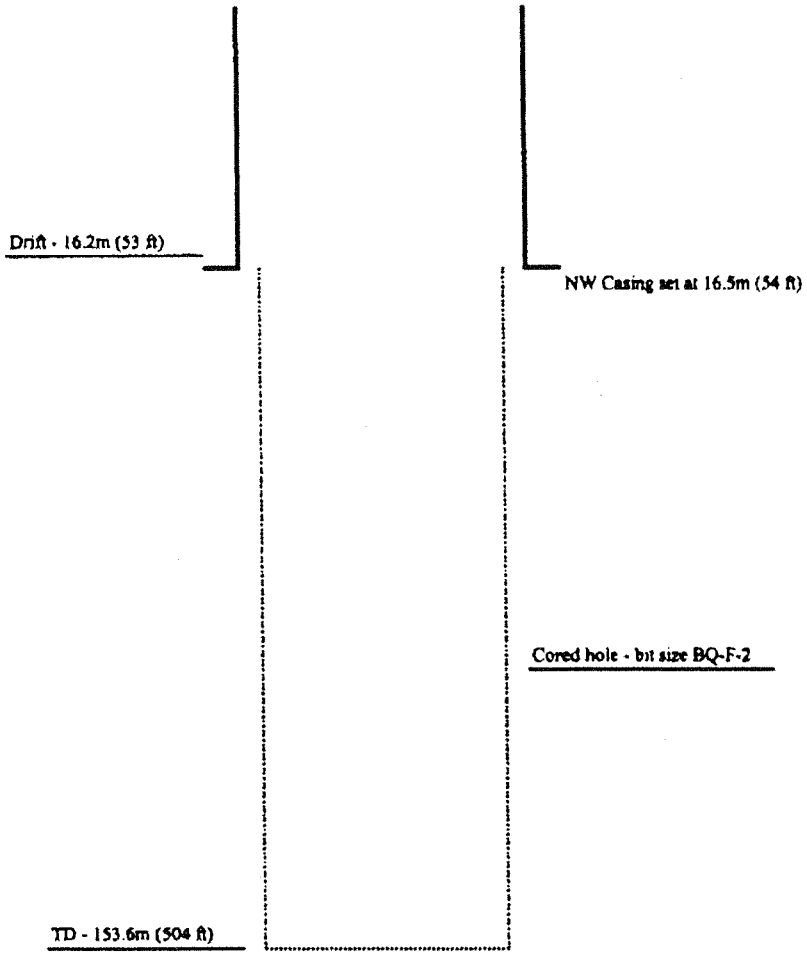
Fishing Operations:

nil

Formation Flow Tests:

At total depth, we blew well clean with an air compressor and monitored surface pressure. Zero pressure was recorded.

WELL BORE SCHEMATIC - FLAT BAY #1



Kicks:

nil

Abandonment/Suspension Plugs:

Fresh water: 18.29 - 153.61 m (60 - 504 ft)

Cement: portland cement set for suspension plug from 16.46 - 18.29 m (54 - 69 ft)

Well cap: yes

Fluid Samples:

Oil sample collected and tested: see Appendix B

Drill Cuttings:

nil

Cores:

Continuous core: 16.46 - 153.61 m (54 - 504 ft)

Description: see Appendix C

Lithology/Stratigraphic Column/Bio-stratigraphic Data:

Description: see Appendix D

APPENDIX A

Daily Drilling Report

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME
London Resources Inc.
Vulcan Minerals Inc.

DATE: 29/10/96

BORE HOLE # 96-105

OVERBURDEN DEPTH: _____

CSG SIZE: NW

BIT SIZE (NAME & #): _____

OFF PRESSURE: 40 PSI

RPM: 60/80 PUMP PRESSURE: 0-10 PSI APPROX GPM: 8-10

FOOTAGE/HRS ON BITS: _____

STANDBY: _____

FUEL: _____

OPERATIONS IN SEQUENCE:

0700 TO 1700 = 10 HRS

Move Rig F/Port Au Port East/RIU

1700 TO 1800 = 1 HRS

Drill F/ Surface to 8'

_____ TO _____ = _____ HRS

_____ TO _____ = _____ HRS

_____ TO _____ = _____ HRS

COMMENTS:

Stuck truck in mud right up to the doors

OPERATOR: _____

CONTRACTOR Colin Crane

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME

DATE: 31/10/96

London Resources Inc.

BORE HOLE # 96-105

OVERBURDEN DEPTH: 53'

CSG SIZE: NW

BIT SIZE (NAME & #): BQ Fordia F-2

OFF PRESSURE: 100 PSI

RPM: 800-1000 PUMP PRESSURE: 0-10 PSI APPROX GPM: 8-10

FOOTAGE/HRS ON BITS: 108/19

STANDBY:

FUEL:

OPERATIONS IN SEQUENCE:

0000 TO 0700 = 7 HRS

Continued cutting core F/60' to 108'

0700 TO 1400 = 7 HRS

Continued drilling down CSG F/14' to 20'

1400 TO 2000 = 6 HRS

Work on x 10 pipe twisted off in x 10 to NW CSG

2000 TO 2400 = 4 HRS

Continued drilling down CSG F/20' to 35'

____ TO ____ = ____ HRS

COMMENTS:

OPERATOR:

CONTRACTOR Colin Crane

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME

DATE: 02/11/96

London Resources Inc.

BORE HOLE # 96-105

OVERBURDEN DEPTH: 53'

CSG SIZE: NW/54'

BIT SIZE (NAME & #): BQ F-2

OFF PRESSURE: 100 PSI

RPM: 800 - 1000 PUMP PRESSURE: 80 - 150 APPROX GPM: 8 - 10

FOOTAGE/HRS ON BITS: 300/ 53

STANDBY:

FUEL:

OPERATIONS IN SEQUENCE:

0000 TO 1000 = 10 HRS

Cut BQ Core F/200' to 264

1000 TO 1230 = 2 ½ HRS

Work stuck bit free

1230 TO 1700 = 4 ½ HRS

Pooh F/264/unplug bit/RIH to 264

1700 TO 2400 = 7 HRS

Cut BQ core F/264 to 300'

____ TO ____ = ____ HRS

COMMENTS:

Recommend to start using Matex 1200 F/200' on to T.D.

OPERATOR:

CONTRACTOR Colin Crane

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME

DATE: 04/11/96

London Resources Inc.

BORE HOLE # 96-105

OVERBURDEN DEPTH: 53 '

CSG SIZE: NW/54'

BIT SIZE (NAME & #): BQ - F-2

OFF PRESSURE: 120 PSI

RPM: 800 - 1000 PUMP PRESSURE: 160 PSI APPROX GPM: 8 - 10

FOOTAGE/HRS ON BITS: 472/ 101

STANDBY:

FUEL:

OPERATIONS IN SEQUENCE:

0000 TO 2400 = 24 HRS

Continued cut BQ core F/ 425 to 472'

____ TO ____ = ____ HRS

____ TO ____ = ____ HRS

____ TO ____ = ____ HRS

____ TO ____ = ____ HRS

COMMENTS:

Core blocking F/ 425 to 472

OPERATOR:

CONTRACTOR Colin Crane

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME

DATE: 06/11/96

London Resources Inc.

BORE HOLE # 96-105

OVERBURDEN DEPTH: 53'

CSG SIZE: NW/54'

BIT SIZE (NAME & #): Boart Series 2

OFF PRESSURE: 140 PSI

RPM: 800-1000 PUMP PRESSURE: 150 PSI APPROX GPM: 8 - 10

FOOTAGE/HRS ON BITS:

STANDBY: 3

FUEL:

OPERATIONS IN SEQUENCE:

0000 TO 0130 = 1 ½ HRS

RIH F/400' to 473

0130 TO 0430 = 3 HRS

Change out twisted off pipe

0430 TO 1700 = 12 ½ HRS

Continued cut BQ core f/ 473' to 478'

1700 TO 2000 = 3 HRS

Shut in well & monitor. Press build up

____ TO ____ = ____ HRS

No press build up recorded

COMMENTS:

Reason for shut in well oil to surface

OPERATOR:

CONTRACTOR Colin Crane

EAST COAST DRILLING CO. LTD.
DAILY DRILLING REPORT

COMPANY NAME

DATE: 08/11/96

London Resources Inc.

BORE HOLE # 96-105

OVERBURDEN DEPTH: 53'

CSG SIZE: NW (54')

BIT SIZE (NAME & #): Boart Series 2

OFF PRESSURE: 200 - 250

RPM: 600-1200 PUMP PRESSURE: 150 APPROX GPM: 8 - 10

FOOTAGE/HRS ON BITS:

STANDBY: 12

FUEL:

OPERATIONS IN SEQUENCE:

0800 TO 1030 = 2 ½ HRS

Continued cut core F/ 501 to 504

1030 TO 1700 = 6 ½ HRS

Plu compressor blow hole clean

TO = HRS

Return compressor shut in well

1700 TO 2000 = HRS

Monitor Press build up (no press recorded)

TO = HRS

COMMENTS:

Recovered sample F/ 452 to 480. Shut in well - let sit overnight, observe press build up

OPERATOR:

CONTRACTOR Colin Crane

APPENDIX B

Oil Sample Analysis

Natural Resources Canada

Geological Survey of Canada (Calgary)
3303-33rd Street N.W., Calgary, Alberta T2L 2A7

Telephone: (403) 292-7000 Fax: (403) 292-5377
Internet: calgary@gsc.nrcan.gc.ca

Ressources naturelles Canada

Commission géologique du Canada (Calgary)
3303, 33e Rue N.-O. Calgary, Alberta T2L 2A7

Téléphone: (403) 292-7000 Télécopieur: (403) 292-5377
Internet: calgary@gsc.nrcan.gc.ca

Patrick Laracy
Vulcan Minerals Inc.
366 Thorburn Road
St. John's
Newfoundland A1B 4R1

23rd December 1996

Dear Patrick:

Here is a brief report on the oil we extracted from the Flat Bay test hole core sample that you sent us. Sorry about the delay in sending you this report but I have been sick for most of the last week. I hope that this has not inconvenienced you in any degree.

Enclosed with this report is a saturated fraction gas chromatogram (SFGC), m/z 217 and m/z 191 mass fragmentograms showing the distributions of steranes and terpanes respectively and two tables that give the peak identifications.

The gross composition of the bitumen extracted from the core was as follows:

% hydrocarbons		75.6
% resins + asphaltenes	22.0	
% saturated hydrocarbons	55.0	
% aromatic hydrocarbons	20.6	
saturates/aromatics	2.67	

The high amount of hydrocarbons in the extract relative to the NSO fractions suggests that these are migrated mature hydrocarbons. The SFGC is dominated by n-alkane peaks indicating that the sample has not been biodegraded. The carbon number distribution of the n-alkanes is not dissimilar to those seen from several other Carboniferous samples from eastern Canada (e.g.

Chowdhury et al., 1991; Fowler et al., 1993; Hamblin et al., 1995) with the relatively high abundance of C_{20+} homologues. The Flat Bay SFGC is very different to Ordovician oil and source rock SFGCs which show a predominance of C_{15}-C_{19} n-alkanes with a pronounced odd carbon number preference (e.g. Fowler et al., 1995). In fact, the Flat Bay sample shows an even carbon number preference over the C_{14}-C_{18} range which although not a common feature in Carboniferous extracts has been observed before in some samples. Acyclic isoprenoids such as pristane and phytane are in low abundance relative to n-alkanes (pristane/nC_{17} = 0.24; phytane/nC_{18} = 0.21), again suggesting a mature unbiodegraded sample. The ratio of pristane/phytane is 1.1 which is in the range we have observed for Carboniferous oils and seeps in eastern Canada. ß-Carotane, a compound not commonly reported in oils and extracts but characteristic of Carboniferous lacustrine source rocks and their derived oils in eastern Canada, is present in the Flat Bay sample.

The biomarker distributions of the Flat Bay sample also show characteristics that suggest a Carboniferous lacustrine source rather than a Ordovician source. This can be seen by comparing the m/z 191 and 217 mass fragmentograms of the Flat Bay sample with those for Carboniferous (e.g. Fowler et al., 1993) and Ordovician (Fowler et al., 1995) oils and oilseeps. In particular, the relative abundance of C_{27}-C_{29} regular steranes (i.e. C_{29}>C_{28}>C_{27}), the very low abundance of diasteranes and the low abundance of C_{31}-C_{35} 17α(H)-hopanes suggest a source similar to the Carboniferous oils and seeps previously examined from this area of Canada.

Based on the SFGC, the low concentration of biomarkers, the high abundance of tricyclic terpanes and rearranged hopanes relative to the 17α(H)-hopanes, the hydrocarbons in the Flat Bay oil sample are interpreted to be relatively mature, probably generated in the later part of the oil window.

In summary, based on the results of our analyses and some local knowledge, I would interpret this sample to be a mature unbiodegraded Lower Carboniferous lacustrine source oil sample.

REFERENCES

Chowdhury, A.H., Fowler, M.G. and Noble, J.P.A. (1991) Petroleum geochemistry and geology

of the Albert Formation, Moncton Subbasin, New Brunswick, Canada. Bulletin of Canadian Petroleum Geology **39**, 315-331.

Fowler, M.G., Hamblin, A.P., MacDonald, D.J. and McMahon, P.G. (1993) Geological occurrence and geochemistry of some oil shows in Nova Scotia. Bulletin of Canadian Petroleum Geology. **41**, 422-436.

Hamblin, A.P., Fowler, M.G., Utting, J., Hawkins, D. and Riediger, C.L. (1995) Sedimentology, palynology and source rock potential of Lower Carboniferous (Tournaisian) rocks, Conche area, Great Northern Peninsula, Newfoundland. Bulletin of Canadian Petroleum Geology **43**, 1-19.

Fowler, M.G., Hamblin, A.P., Hawkins, D., Stasiuk, L.D. and Knight, I. (1995) Petroleum geochemistry and hydrocarbon potential of Cambrian and Ordovician rocks of western Newfoundland. Bulletin of Canadian Petroleum Geology **43**, 187-213.

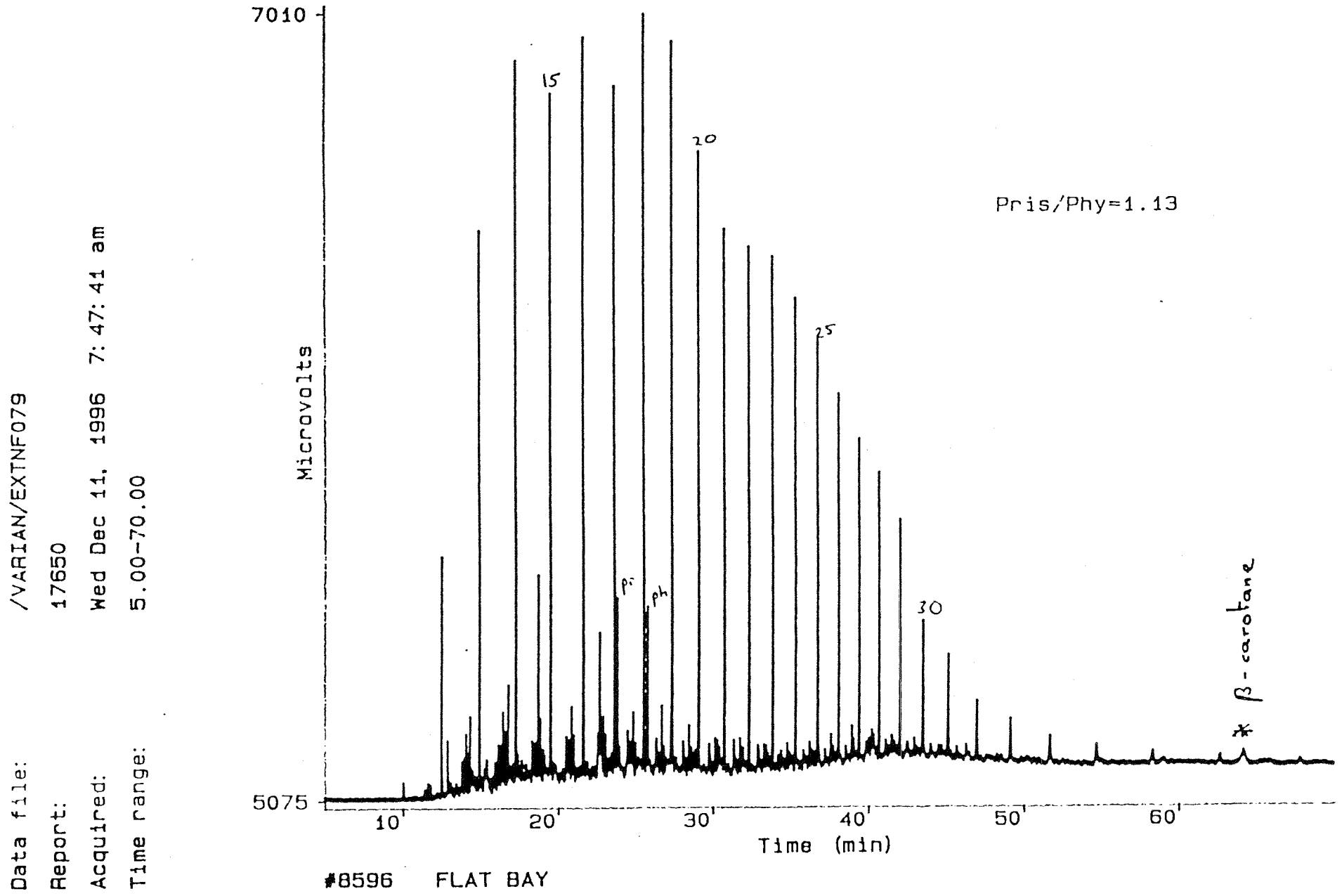
If you have any additional questions about the above or have any problems obtaining the papers I refer to, let me know.

Yours Sincerely

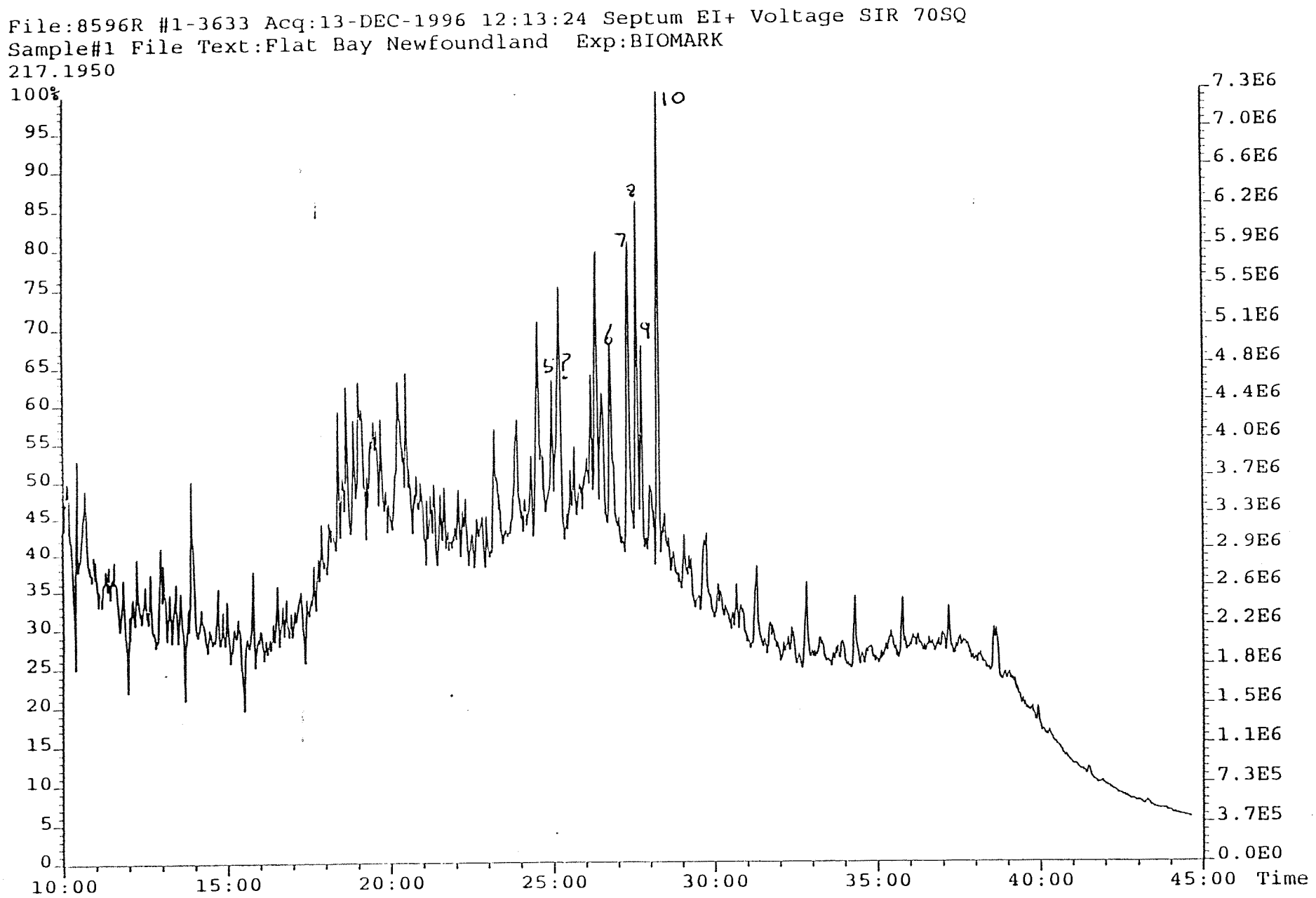
Martin Fowler.

MARTIN FOWLER

C_{15+} SATURATE FRACTION GAS CHROMATOGRAM



m/z 217 steranes



m/z 191 terpane distributions

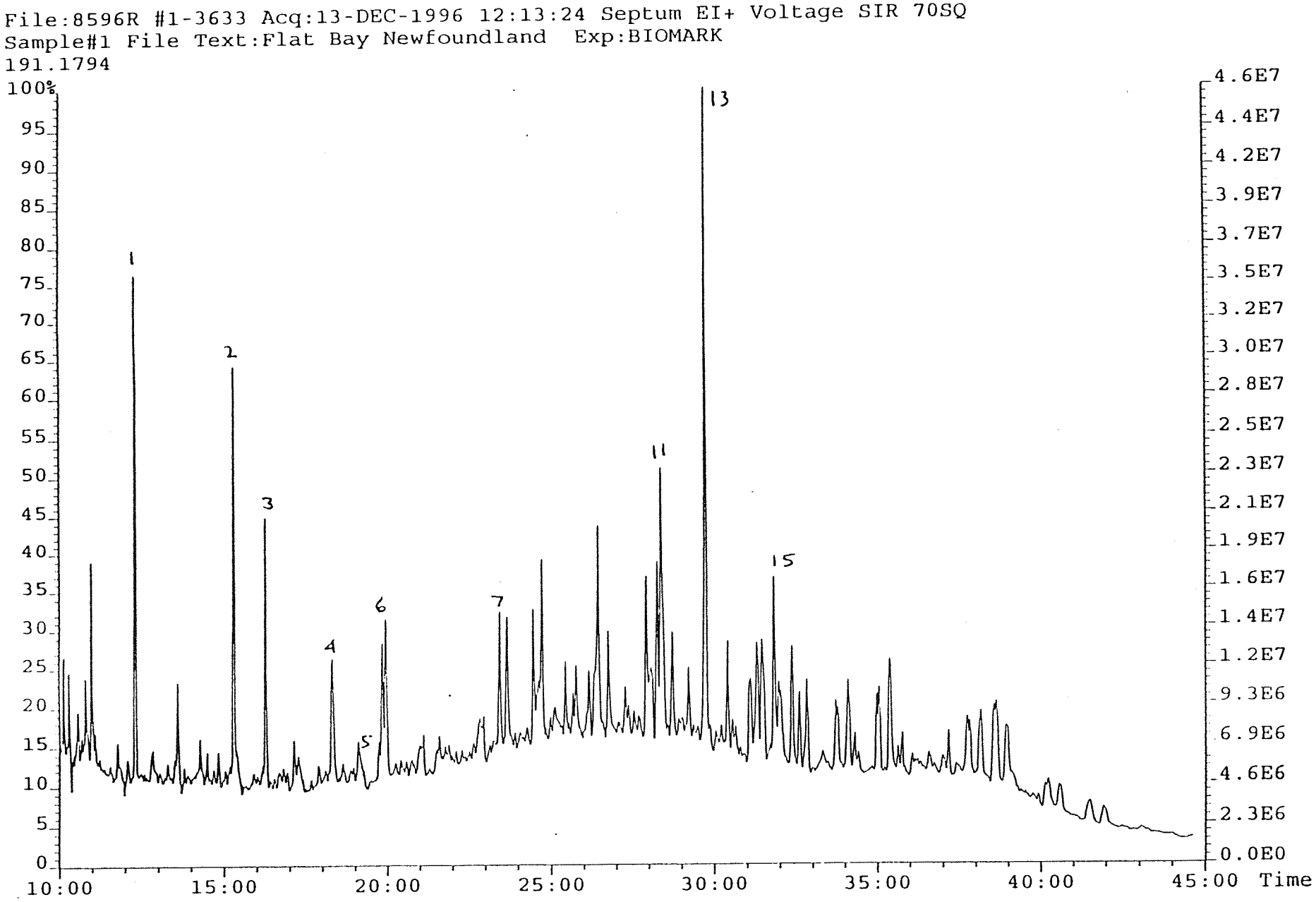


Table 5	
Peak	Compound
1	C_{21} tricyclic terpane
2	C_{23} tricyclic terpane
3	C_{24} tricyclic terpane
4	C_{25} tricylic terpane
5	C_{24} tetracyclic terpane
6	C_{26} tricyclic terpanes
7	C_{28} tricyclic terpanes
8	C_{29} tricyclic terpanes
9	18α(H)-trisnorhopane (Ts)
10	17α(H)-trisnorhopane (Tm)
11	17α(H), 21β(H)-norhopane
12	18α(H), 30-norneohopane
13	17α(H), 21β(H)-hopane
14	17β(H), 21α(H)-moretane
15	20(S) and 20(R) 17α(H), 21β(H)-homohopanes
16	20(S) and 20(R) 17α(H), 21β(H)-bishomohopanes

Table 4	
Peak	Compound
1	C_{21} sterane
2	C_{22} sterane
3	13β(H), 17α(H)-diacholestane (20S)
4	5α(H), 14α(H), 17α(H)-diacholestane (20R)
5	5α(H), 14α(H), 17α(H)-cholestane (20R)
6	24-methyl-5α(H), 14α(H), 17α(H)-cholestane (20R)
7	24-ethyl-5α(H), 14α(H), 17α(H)-cholestane (20S)
8	24-ethyl-5α(H), 14β(H), 17β(H)-cholestane (20R)
9	24-ethyl-5α(H), 14β(H), 17β(H)-cholestane (20S)
10	24-ethyl-5α(H), 14α(H), 17α(H)-cholestane (20R)

APPENDIX C

Core Analysis

CORE ANALYSIS REPORT

FOR

LONDON RESOURCES INC.

LONDON RESOURCES FLATBAY #1

FLATBAY, NEWFOUNDLAND

CORE LABORATORIES

Company : LONDON RESOURCES INC.
Well : LONDON RESOURCES FLATBAY #1
Location :
Province : NEWFOUNDLAND

Field : FLATBAY
Formation : CARBONIFEROUS
Coring Equip.: DIAMOND
Coring Fluid : WATER BASE MUD

File No.: 52131-96-0506
Date : 96-11-29
Analysts: DJB
Core Dia: 1 1/2 INCHES

C O R E A N A L Y S I S R E S U L T S

SAMPLE NUMBER	DEPTH ft	INTVL REP ft	POROSITY (HELIUM) %	CAPACITY (HELIUM) ϕ-ft	GRAIN DENSITY gm/cc	DESCRIPTION
	CORE NO. 1 452.0 - 512.2 ft (CORE RECEIVED 47.2 ft) (5 BOXES)					
1	452.0- 53.9	1.9	2.1	4.0	2.73	cgl grnl pbl calc dol
2	453.9- 54.7	0.8	2.4	1.9	2.71	cgl pbl calc dol
-	454.7- 55.3	0.6				ss calc pbly
3	455.3- 55.9	0.6	6.7	4.0	2.69	cgl grnl calc lam
-	455.9- 56.7	0.8				ss calc
AST 1	456.7- 56.9	0.2	2.1	0.4	2.73	cgl grnl pbl calc dol
-	456.9- 57.1	0.2				ss calc
AST 2	457.1- 57.9	0.8	2.4	1.9	2.71	cgl pbl calc dol
AST 3	457.9- 58.7	0.8	6.7	5.4	2.69	cgl grnl calc lam
-	458.7- 59.4	0.7				ss calc
4	459.4- 60.2	0.8	3.7	3.0	2.70	cgl grnl pbl calc pyr
-	460.2- 61.1	0.9				ss calc
5	461.1- 62.0	0.9	2.9	2.6	2.71	cgl pbl calc pyr
6	462.0- 62.5	0.5	3.3	1.6	2.68	cgl pbl calc pyr
-	462.5- 62.8	0.3				ss calc
7	462.8- 63.8	1.0	4.6	4.6	2.66	ss f m c calc lam
8	463.8- 64.7	0.9	3.6	3.2	2.70	cgl grnl pbl calc pyr
-	464.7- 65.7	1.0				ss calc
9	465.7- 67.0	1.3	2.3	3.0	2.73	cgl grnl pbl calc dol
-	467.0- 67.4	0.4				ss calc
10	467.4- 68.0	0.6	3.1	1.9	2.70	cgl pbl calc pyr sshy
11	468.0- 68.7	0.7	3.1	2.2	2.70	cgl grnl calc pyr lam
-	468.7- 70.9	2.2				ss calc
AST 9	470.9- 71.8	0.9	2.3	2.1	2.73	cgl grnl pbl calc dol
-	471.8- 72.1	0.3				ss calc

CORE LABORATORIES

Company : LONDON RESOURCES INC.
Well : LONDON RESOURCES FLATBAY #1

Field : FLATBAY
Formation : CARBONIFEROUS

File No.: 52131-96-0506
Date : 96-11-29

CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH ft	INTVL REP ft	POROSITY (HELIUM) %	CAPACITY (HELIUM) ϕ-ft	GRAIN DENSITY gm/cc	DESCRIPTION
12	472.1- 73.4	1.3	3.0	3.9	2.70	cgl grnl pbl calc
-	473.4- 73.7	0.3				ss calc
AST 12	473.7- 74.0	0.3	3.0	0.9	2.70	cgl grnl pbl calc
-	474.0- 74.3	0.3				cgl calc
13	474.3- 75.2	0.9	4.6	4.1	2.68	cgl grnl pbl calc lam
14	475.2- 75.8	0.6	3.4	2.0	2.68	cgl grnl pbl calc lam
-	475.8- 76.7	0.9				ss calc
15	476.7- 78.2	1.5	2.2	3.3	2.72	cgl grnl pbl calc dol
AST 9	478.2- 79.0	0.8	2.3	1.8	2.73	cgl grnl pbl calc dol
AST 15	479.0- 79.5	0.5	2.2	1.1	2.72	cgl grnl pbl calc dol
-	479.5- 79.9	0.4				cgl calc
AST 15	479.9- 80.1	0.2	2.2	0.4	2.72	cgl grnl pbl calc dol
-	480.1- 80.7	0.6				ss calc
16	480.7- 81.5	0.8	3.1	2.5	2.70	cgl grnl pbl calc
-	481.5- 82.1	0.6				ss calc
AST 16	482.1- 82.6	0.5	3.1	1.5	2.70	cgl grnl pbl calc
17	482.6- 83.5	0.9	4.7	4.2	2.71	cgl grnl pbl calc dol
18	483.5- 86.2	2.7	4.4	11.9	2.68	cgl grnl pbl calc lam
-	486.2- 86.5	0.3				ss calc
19	486.5- 87.7	1.2	2.9	3.5	2.69	cgl grnl pbl calc
20	487.7- 88.8	1.1	3.0	3.3	2.69	cgl grnl pbl calc
-	488.8- 89.0	0.2				ss calc
AST 20	489.0- 89.5	0.5	3.0	1.5	2.69	cgl grnl pbl calc
-	489.5- 90.1	0.6				ss calc
21	490.1- 90.9	0.8	4.4	3.5	2.69	cgl grnl pbl calc
-	490.9- 91.1	0.2				ss calc
AST 21	491.1- 91.7	0.6	4.4	2.6	2.69	cgl grnl pbl calc
-	491.7- 91.9	0.2				ss calc
AST 21	491.9- 92.9	1.0	4.4	4.4	2.69	cgl grnl pbl calc

CORE LABORATORIES

Company : LONDON RESOURCES INC.
Well : LONDON RESOURCES FLATBAY #1

Field : FLATBAY
Formation : CARBONIFEROUS

File No.: 52131-96-0506
Date : 96-11-29

CORE ANALYSIS RESULTS

SAMPLE NUMBER	DEPTH ft	INTVL REP ft	POROSITY (HELIUM) %	CAPACITY (HELIUM) ϕ-ft	GRAIN DENSITY gm/cc	DESCRIPTION
22	492.9- 93.4	0.5	6.4	3.2	2.68	cgl grnl pbl calc lam
-	493.4- 93.5	0.1				ss calc
AST 22	493.5- 93.6	0.1	6.4	0.6	2.68	cgl grnl pbl calc lam
-	493.6- 93.9	0.3				ss calc
23	493.9- 94.8	0.9	3.3	3.0	2.69	cgl grnl pbl calc lam
-	494.8- 95.2	0.4				ss calc
AST 22	495.2- 95.3	0.1	6.4	0.6	2.68	cgl grnl pbl calc lam
-	495.3- 95.5	0.2				ss calc
24	495.5- 96.5	1.0	3.3	3.3	2.70	cgl grnl pbl calc
-	496.5- 97.5	1.0				cgl calc
25	497.5- 98.0	0.5	2.3	1.1	2.72	cgl grnl pbl calc dol
-	498.0- 98.2	0.2				ss calc
26	498.2- 98.7	0.5	2.1	1.0	2.71	cgl grnl pbl calc dol
-	498.7- 99.2	0.5				ss calc
	499.2- 12.2	13.0				Lost core

CORELAB

CODE KEY - DESCRIPTIONS

A	=	(Prefix A) Horizontal matrix permeability measured by pressure decay profile permeametry through a probe tip due to induced fractures
ACA	=	Removed for advanced core analysis
anhy	=	Anhydrite
AST	=	Appears similar to
bit	=	Bitumen
bk	=	Break
bldr	=	Boulder
c	=	Coarse
calc	=	Calcite (calcareous)
carb	=	Carbonaceous
cbl	=	Cobble
CEC	=	Cation exchange capacity
cem	=	Cemented
cgl	=	Conglomerate
cht	=	Chert
coal	=	Coal/coal inclusion
dol	=	Dolomite
f	=	Fine
FD	=	Full diameter analysis including three directional permeabilities, porosity and densities
foss	=	Fossil (fossiliferous)
frac	=	Fracture (undifferentiated)
fri	=	Friable
glauc	=	Glauconite (glauconitic)
grnl	=	Granule
gyp	=	Gypsum
hfrac	=	Horizontal fracture
hal	=	Halite (salt)
i	=	Intercrystalline
incl	=	Inclusions
lam	=	Laminae (laminated)
lmy	=	Limy
ls	=	Limestone
lv	=	Large vug
m	=	Medium
mi	=	Mud invaded
mic	=	Micaceous
mv	=	Medium vug
NA	=	Not analyzed by request
NP	=	No permeability measurement possible due to poor sample quality
NR	=	Not received
ool	=	Oolitic
OB	=	Overburden sample (permeability and porosity measured at net overburden stress)
P	=	Preserved for future studies
pbl	=	Pebble
PET	=	Removed for petrographic analysis
ppv	=	Pinpoint vug
PSA	=	Particle size analysis
pyr	=	Pyrite (pyritic)
pyrbit	=	Pyrobitumen
ru	=	Rubble
SA	=	Sieve analysis
sdy	=	Sandy
SEM	=	Scanning electron microscope analysis
sh	=	Shale
SPH	=	Humidity analysis of small plug sample at 60 degrees Celsius and 50 percent relative humidity
SPT	=	Small Plug used for tracer analysis
shy	=	Moderately shaly (20% - 40%)
sid	=	Siderite
sltst	=	Siltstone
slty	=	Silty
SP	=	Small plug (sample drilled from core in maximum horizontal direction and parallel to bedding plane where possible) permeability, porosity and grain density are measured
ss	=	Sandstone
sshy	=	Slightly shaly (<20%)
sty	=	Stylolite (ic)
sulf	=	Sulphur
sv	=	Small vug
TEC	=	Thermal Extraction Chromatography to determine oil richness
TS	=	Thin section
uncon	=	Unconsolidated
vc	=	Very coarse
vfrac	=	Vertical fracture
vf	=	very fine
VIS	=	Viscosity of oil measured
VOB	=	Vertical overburden sample (vertical permeability measured at net overburden stress)
vshy	=	Very shaly (>40%)
VSP	=	Vertical small plug drilled from whole core to measure vertical permeability and occasionally porosity
vug	=	Vuggy (vuggular)
ws	=	Water sand
XRD	=	X-ray diffraction
*	=	Perm unavailable due to broken core

CORE LABORATORIES

Company : LONDON RESOURCES INC.
Well : LONDON RESOURCES FLATBAY #1

Field : FLATBAY
Formation : CARBONIFEROUS

File No.: 52131-96-0506
Date : 96-11-29

ANALYTICAL PROCEDURES AND QUALITY ASSURANCE

HANDLING & CLEANING

Core Transportation :
Solvent : TOLUENE
Extraction Equipment : VAPOUR PHASE EXTRACTOR
Extraction Time : 10 DAYS
Drying Equipment : GRAVITY OVEN
Drying Time : 7 DAYS
Drying Temperature : 115 DEGREES C.

ANALYSIS

Grain volume measured by Boyle's Law in a matrix cup using He
Bulk volume by Archimedes Principle
Core Gamma Composite

CORE LABORATORIES

Company : LONDON RESOURCES INC.
Well : LONDON RESOURCES FLATBAY #1

Field : FLATBAY
Formation : CARBINIFEROUS

File No.: 52131-96-0506
Date : 96-11-29

TABLE I

SUMMARY OF CORE DATA

ZONE AND CUTOFF DATA

ZONE:
- Identification -------- CARBINIFEROUS
- Top Depth ---------- 452.0 ft
- Bottom Depth ---------- 512.2 ft
- Number of Samples -------- 40

DATA TYPE:
- Porosity ---------- (HELIUM)
- Permeability ----------

CUTOFFS:
- Porosity (Minimum) ------- 0.0 %
- Porosity (Maximum) ------- 100.0 %
- Permeability (Minimum) ---
- Permeability (Maximum) ---
- Water Saturation (Maximum)
- Oil Saturation (Minimum) -
- Grain Density (Minimum) -- 2.00 gm/cc
- Grain Density (Maximum) -- 3.00 gm/cc
- Lithology Excluded ------- NONE

CHARACTERISTICS REMAINING AFTER CUTOFFS

ZONE:

Number of Samples -----	40
Thickness Represented -	32.5 ft

POROSITY:

Storage Capacity ------	111.4 ϕ-ft
Arithmetic Average ----	3.4 %
Minimum ----------	2.1 %
Maximum ----------	6.7 %
Median ----------	3.1 %
Standard Deviation ----	±1.4 %

GRAIN DENSITY:

Arithmetic Average ----	2.70 gm/cc
Minimum ----------	2.66 gm/cc
Maximum ----------	2.73 gm/cc
Median ----------	2.70 gm/cc
Standard Deviation ----	±0.02 gm/cc

PERMEABILITY:
- Flow Capacity ---------
- Arithmetic Average ----
- Geometric Average -----
- Harmonic Average ------
- Minimum ----------
- Maximum ----------
- Median ----------
- Standard Dev. (Geom) --

HETEROGENEITY (Permeability):
- Dykstra-Parsons Var. --
- Lorenz Coefficient ----

AVERAGE SATURATIONS (Pore Volume):
- Oil ----------
- Water ----------

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
1	452.075	.014	.00324	
2	452.144	.0144	.00338	
3	452.235	.0281	.00856	
4	452.314	.0315	.00997	
5	452.383	.0441	.0156	
6	452.492	.0254	.00744	
7	452.685	.052	.0194	
8	452.771	.0546	.0207	
9	452.862	.0349	.0114	
10	452.955	.0141	.00328	
11	453.019	.023	.00647	
12	453.131	.133	.0642	
13	453.209	.21	.112	
14	453.296	.0163	.00401	
15	453.387	.0597	.0232	
16	453.458	.0955	.042	
17	453.505	.0347	.0113	
18	453.587	.155	.0772	
19	453.709	.76	.504	
20	453.973	.0172	.00431	
21	454.024	.0271	.00808	
22	454.152	.338	.197	
23	454.230	.159	.0799	
24	454.308	.0389	.0132	
25	454.464	.0822	.035	
26	454.569	.0388	.0132	
27	454.668	.351	.207	
28	454.746	.0723	.0297	
29	454.823	.0183	.00471	
30	454.901	.0181	.00463	
31	454.981	.0183	.00472	
32	455.061	.107	.0487	
33	455.213	.0292	.00898	
34	455.337	.345	.203	
35	455.433	.0175	.00445	
36	455.529	.0185	.00479	
37	455.659	.114	.0528	
38	455.774	.35	.206	
39	455.906	.182	.0944	
40	455.986	.123	.0582	
41	456.059	.348	.204	
42	456.141	.0411	.0142	
43	456.247	.0311	.00978	
44	456.355	.0276	.00832	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
45	456.481	.135	.0655	
46	456.705	.032	.0102	
47	456.784	.0205	.00553	
48	456.865	.0845	.0363	
49	456.962	.0129	.0029	
50	457.080	.018	.00461	
51	457.162	.257	.143	
52	457.206	.0546	.0207	
53	457.302	.0581	.0224	
54	457.411	.0466	.0168	
55	457.499	.292	.167	
56	457.581	.186	.0967	
57	457.796	.264	.147	
58	457.889	.359	.212	
59	458.048	.232	.125	
60	463.448	.642	.415	
61	458.230	.254	.141	
62	458.377	.00899	.00172	
63	458.623	.359	.212	
64	458.708	.0324	.0103	
65	458.857	.253	.14	
66	458.933	.00762	.00135	
67	459.043	.00674	.00113	
68	459.135	.00829	.00153	
69	459.241	.0136	.00311	
70	459.407	.0586	.0227	
71	459.526	.157	.0784	
72	459.660	.374	.223	
73	459.762	.311	.179	
74	459.891	.0669	.0269	
75	459.984	.158	.0791	
76	460.125	.0244	.00704	
77	460.206	.134	.065	
78	460.279	.019	.00463	
79	460.405	.0483	.0176	
80	460.533	.0447	.0158	
81	460.690	.0268	.00797	
82	460.805	.0355	.0117	
83	460.901	.178	.0917	
84	461.012	.139	.0679	
85	461.132	.0222	.00618	
86	461.206	.114	.0531	
87	461.285	.105	.048	
88	461.414	.151	.0752	
89	461.502	.026	.00764	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
90	461.616	.0515	.0191	
91	461.719	.0139	.00321	
92	461.878	.0169	.00422	
93	462.006	.16	.0804	
94	462.093	.0135	.00307	
95	462.274	.366	.217	
96	462.396	.0118	.00255	
97	462.498	.0163	.00402	
98	462.627	.0417	.0145	
99	462.728	.0354	.0115	
100	462.852	.0155	.00373	
101	462.984	.0806	.0341	
102	463.079	.105	.0478	
103	463.163	.0575	.0221	
104	463.250	.531	.333	
105	463.366	.692	.452	
106	463.498	.189	.0988	
107	463.540	.14	.0685	
108	463.707	.425	.257	
109	463.783	.0856	.0367	
110	463.886	.392	.235	
111	464.015	5.22	4.14	
112	464.125	.0296	.00912	
113	464.258	.0554	.0211	
114	464.376	.181	.0936	
115	464.518	2.04	1.51	
116	464.618	1.83	1.34	
117	464.738	.359	.212	
118	464.847	.0843	.0362	
119	465.074	6.02	4.88	
120	465.196	.0508	.0188	
121	465.353	5.15	4.12	
122	465.498	.382	.224	
123	465.572	.0288	.00882	
124	465.661	.0431	.0152	
125	465.778	.0484	.0177	
126	465.883	.3	.164	
127	466.001	.867	.585	
128	466.114	.0159	.00388	
129	466.228	.0531	.0199	
130	466.315	.0798	.0337	
131	466.374	.0347	.0113	
132	466.475	.0323	.0103	
133	466.611	.00863	.00162	
134	466.685	.0439	.0155	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
135	466.769	.21	.112	
136	466.875	.157	.0786	
137	466.932	.0199	.00532	
138	467.048	.0106	.00219	
139	467.163	.00411	.000543	
140	467.309	.781	.52	
141	467.383	.0715	.0294	
142	467.434	.0716	.0292	
143	467.480	.0188	.00491	
144	467.568	1.15	.8	
145	467.682	.0468	.0168	
146	467.756	.0239	.0068	
147	467.821	.166	.0842	
148	467.967	2.35	1.76	
149	468.060	.262	.146	
150	468.138	.0673	.0271	
151	468.199	.288	.163	
152	468.299	.0865	.0374	
153	468.414	.0582	.0225	
154	468.524	.109	.0499	
155	468.774	.0202	.00507	
156	468.846	.00813	.00149	
157	468.929	.0127	.00284	
158	469.007	.0137	.00316	
159	469.086	.0635	.0249	
160	469.194	.0292	.00898	
161	469.307	.0197	.00524	
162	469.397	.0122	.00255	
163	469.519	.0826	.0352	
164	469.586	.0406	.0137	
165	469.638	.0204	.00548	
166	469.722	.0189	.00492	
167	469.842	.0236	.00666	
168	469.948	.0247	.00713	
169	470.047	.0262	.00774	
170	470.213	.0444	.0157	
171	470.321	.0143	.00333	
172	470.446	.0143	.00334	
173	470.563	.0153	.00368	
174	470.707	.0269	.00799	
175	470.802	.192	.1	
176	470.922	.13	.0624	
177	471.030	.0873	.0378	
178	471.081	.315	.181	
179	471.160	.0878	.038	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
180	471.257	.426	.253	
181	471.345	.507	.317	
182	471.428	.0506	.0187	
183	471.522	.0211	.00573	
184	471.625	.354	.208	
185	471.715	.0239	.00684	
186	471.837	.014	.00323	
187	471.959	.0233	.00659	
188	472.104	.0503	.0185	
189	472.177	.32	.185	
190	472.268	.038	.0128	
191	472.380	.0913	.0401	
192	472.458	.105	.048	
193	472.566	.371	.22	
194	472.675	.0353	.0116	
195	472.795	.194	.101	
196	473.008	.0369	.0123	
197	473.130	.0189	.0049	
198	473.230	.0207	.00559	
199	473.445	.0294	.00905	
200	473.617	.141	.0683	
201	473.678	.0214	.00585	
202	473.758	.0221	.00613	
203	473.831	.0254	.00741	
204	473.924	.0154	.00371	
205	474.067	.00792	.00144	
206	474.141	.00729	.00127	
207	474.349	.00981	.00195	
208	474.684	.127	.0605	
209	474.753	.0809	.0343	
210	474.821	.114	.0531	
211	474.903	.137	.0665	
212	474.949	.121	.0568	
213	475.010	.165	.0833	
214	475.088	.135	.0654	
215	475.134	.154	.0767	
216	475.224	.148	.073	
217	475.395	.148	.0734	
218	475.453	.209	.112	
219	475.551	.077	.0322	
220	475.636	.525	.33	
221	475.732	.00654	.00108	
222	475.834	.0864	.0374	
223	475.969	.0258	.00761	
224	476.132	.0134	.00304	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
225	476.493	.0144	.00337	
226	476.587	.046	.0165	
227	476.702	.122	.0575	
228	476.800	.0689	.0279	
229	476.997	.21	.112	
230	477.066	.00768	.00137	
231	477.135	.119	.0558	
232	477.207	.0752	.0313	
233	477.270	.0235	.00665	
234	477.350	.0221	.00611	
235	477.462	.0579	.0223	
236	477.544	.0178	.00451	
237	477.693	.0933	.0411	
238	477.746	.131	.0627	
239	477.929	.0142	.00331	
240	477.982	.0678	.0273	
241	478.188	.0169	.0042	
242	478.277	.159	.0795	
243	478.421	.0152	.00361	
244	478.489	.0327	.0104	
245	478.663	.0223	.0062	
246	478.765	.0275	.00828	
247	478.819	.0267	.00795	
248	478.938	.021	.00571	
249	479.036	.0961	.0426	
250	479.132	.0476	.0172	
251	479.200	.467	.288	
252	479.440	.0043	.000582	
253	479.582	.165	.0842	
254	479.767	.0421	.0147	
255	479.967	.0057	.000882	
256	480.056	.04	.0137	
257	480.135	.0028	.000307	
258	480.338	.0162	.00397	
259	480.540	.026	.00771	
260	480.599	.37	.22	
261	480.656	.131	.063	
262	480.760	.276	.156	
263	481.049	.448	.274	
264	481.155	.173	.0887	
265	481.284	.105	.0478	
266	481.614	.00835	.00155	
267	482.047	.0245	.00708	
268	482.223	.0464	.0167	
269	482.506	.0499	.0184	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
270	482.582	.012	.00259	
271	482.759	.202	.107	
272	482.834	.357	.211	
273	482.907	.31	.178	
274	483.065	.32	.185	
275	483.170	.387	.232	
276	483.247	.215	.115	
277	483.462	.554	.349	
278	483.532	.134	.0649	
279	483.811	.363	.215	
280	483.861	.0511	.019	
281	483.953	1.18	.82	
282	484.008	.107	.0493	
283	484.066	1.63	1.18	
284	484.276	.523	.328	
285	484.325	.835	.561	
286	484.482	.585	.373	
287	484.516	.0875	.0379	
288	484.770	.269	.151	
289	484.868	.257	.143	
290	485.003	.0633	.025	
291	485.403	1.02	.706	
292	485.431	.187	.0978	
293	485.579	.261	.145	
294	485.661	.35	.206	
295	485.740	.0653	.0261	
296	485.807	.541	.341	
297	485.955	.701	.459	
298	485.997	.155	.0775	
299	486.020	.0757	.0316	
300	486.247	.00289	.00032	
301	486.499	.00658	.00109	
302	486.689	.555	.351	
303	486.779	.247	.136	
304	486.871	1.04	.713	
305	486.936	.131	.063	
306	487.075	.0525	.0197	
307	487.139	.216	.116	
308	487.350	.0468	.0169	
309	487.419	.0771	.0324	
310	487.473	.095	.0422	
311	487.748	.0596	.0232	
312	487.839	.116	.0539	
313	487.946	.179	.092	
314	488.084	.9	.611	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
315	488.163	.409	.247	
316	488.249	.122	.0577	
317	488.329	.185	.0961	
318	488.414	.128	.0611	
319	488.482	.217	.116	
320	488.636	.108	.0497	
321	488.715	.0481	.0175	
322	488.896	.0117	.00252	
323	489.120	.068	.0274	
324	489.176	.288	.164	
325	489.249	.246	.135	
326	489.321	1.19	.832	
327	489.398	.22	.119	
328	489.618	.0354	.0117	
329	489.728	.101	.0455	
330	489.796	.252	.14	
331	489.923	.278	.157	
332	489.978	.237	.13	
333	490.185	.222	.119	
334	490.349	.566	.36	
335	490.411	.326	.189	
336	490.498	.246	.136	
337	490.566	.598	.383	
338	490.647	.681	.444	
339	490.723	.371	.22	
340	490.942	.0177	.00451	
341	491.054	.175	.0899	
342	491.117	.0321	.0102	
343	491.196	.0839	.0359	
344	491.496	.119	.056	
345	491.595	.348	.205	
346	491.681	.17	.0865	
347	491.824	.0119	.00256	
348	492.065	.17	.0867	
349	492.144	.223	.121	
350	492.203	.0687	.0278	
351	492.272	.134	.0649	
352	492.365	.337	.197	
353	492.423	1.47	1.05	
354	492.726	1.19	.836	
355	492.779	3.19	2.45	
356	492.870	.815	.545	
357	492.928	.188	.0982	
358	492.980	.208	.111	
359	493.147	.341	.2	

PROFILE PERMEABILITY INDEX

LONDON RESOURCES
FLATBAY #1

POINT	DEPTH *(ft)*	K Air *(mD)*	K Liquid *(mD)*	COMMENTS
360	493.225	.0802	.0339	
361	493.294	.189	.0986	
362	493.453	.0328	.0105	
363	493.543	.137	.0662	
364	493.784	.00911	.00175	
365	493.945	.0226	.00632	
366	494.005	.681	.444	
367	494.177	.187	.097	
368	494.288	.0155	.00369	
369	494.505	.265	.148	
370	494.599	.292	.166	
371	494.708	.372	.22	
372	494.936	.117	.055	
373	495.123	.0464	.0167	
374	495.244	.0491	.018	
375	495.302	.0566	.0215	
376	495.424	.753	.498	
377	495.693	.349	.205	
378	495.797	.609	.39	
379	495.977	.034	.011	
380	496.023	.324	.188	
381	496.171	.0156	.00376	
382	496.284	.432	.263	
383	496.347	.637	.411	
384	496.414	.687	.448	
385	496.748	.0702	.0286	
386	496.808	.21	.112	
387	496.883	.748	.495	
388	497.057	.432	.263	
389	497.133	.365	.216	
390	497.351	.0638	.0253	
391	497.459	.0527	.0197	
392	497.537	.0766	.032	
393	497.711	.0995	.0446	
394	497.820	.0553	.021	
395	497.883	.0772	.0323	
396	498.069	.0135	.00309	
397	498.196	.0391	.0133	
398	498.257	.154	.0764	
399	498.354	.237	.13	
400	498.524	.0583	.0225	
401	498.578	.0657	.0261	
402	498.764	.0164	.00406	
403	499.119	.0862	.0372	

CORRELATION COREGRAPH

LONDON RESOURCES INC.

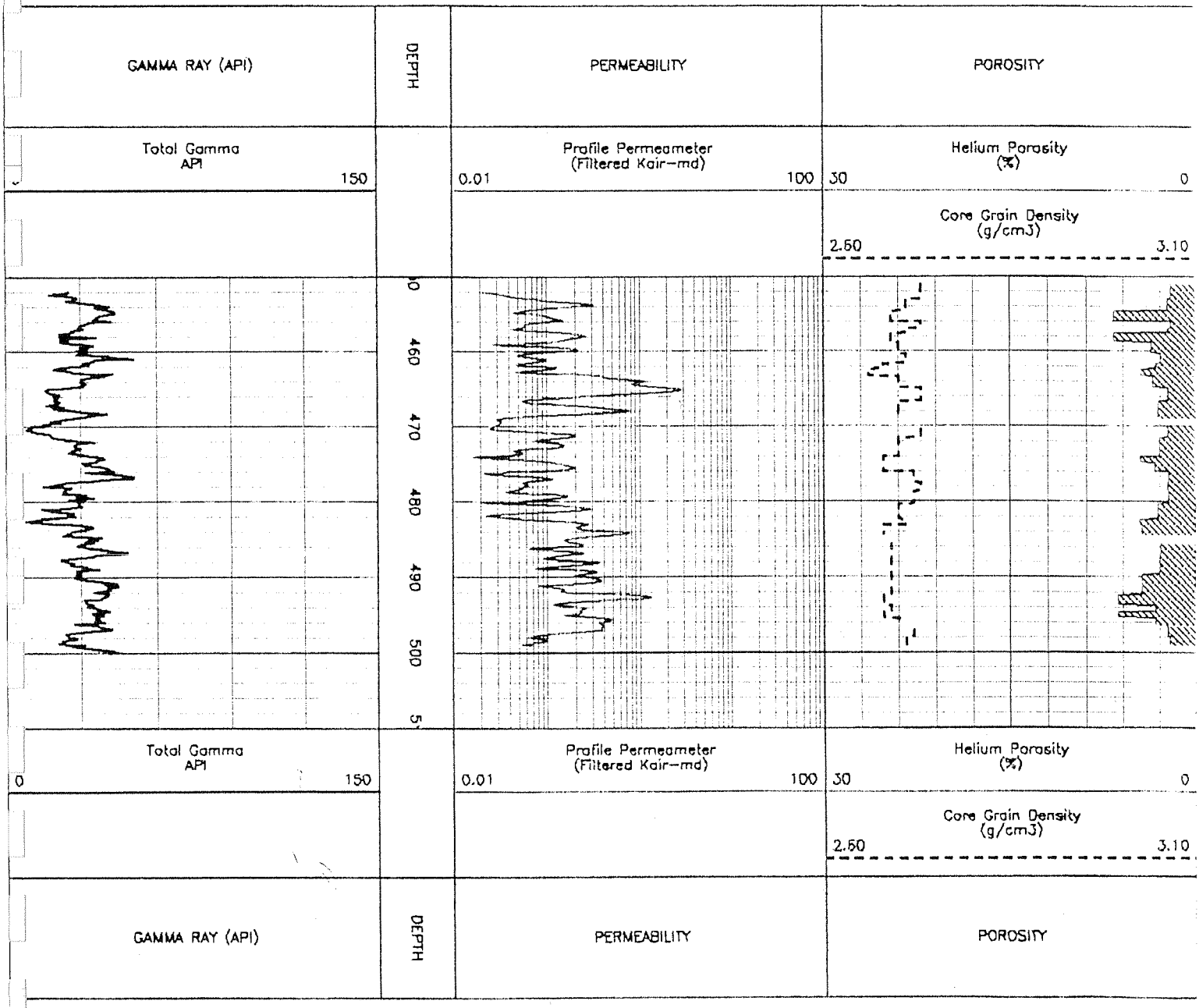
LONDON RESOURCES FLATBAY #1

FLATBAY

CARBONIFEROUS (452.0-512.2 ft)

Vertical Scale: 5 in = 100 ft

Core Laboratories Canada Ltd.



PROFILE PERMEAMETER

LONDON RESOURCES INC.

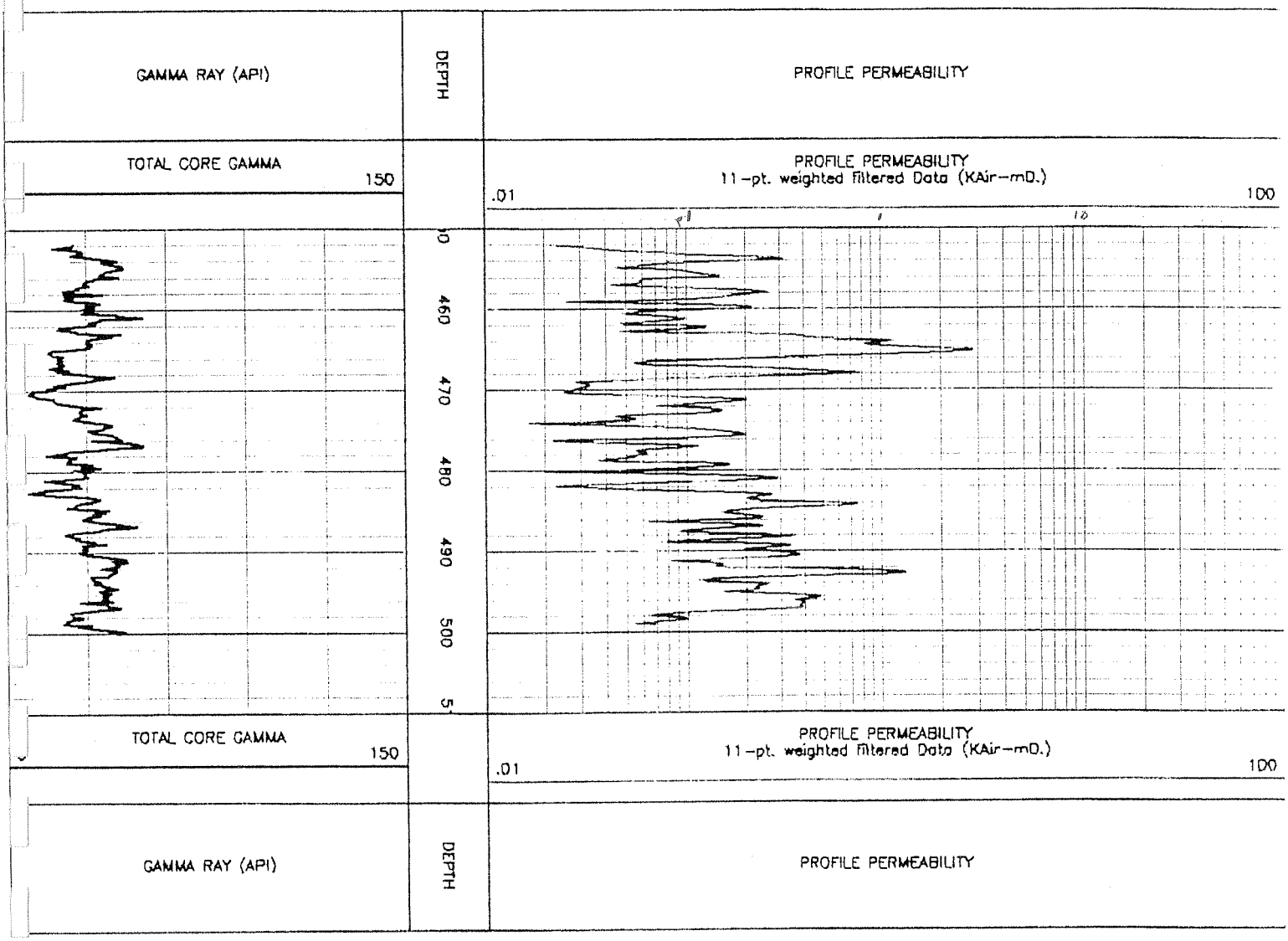
LONDON RESOURCES FLATBAY #1

FLATBAY

CARBONIFEROUS (452.0–512.2 ft)

Vertical Scale: 5 in = 100 ft

Core Laboratories Canada Ltd.



CORRELATION COREGRAPH

LONDON RESOURCES INC.

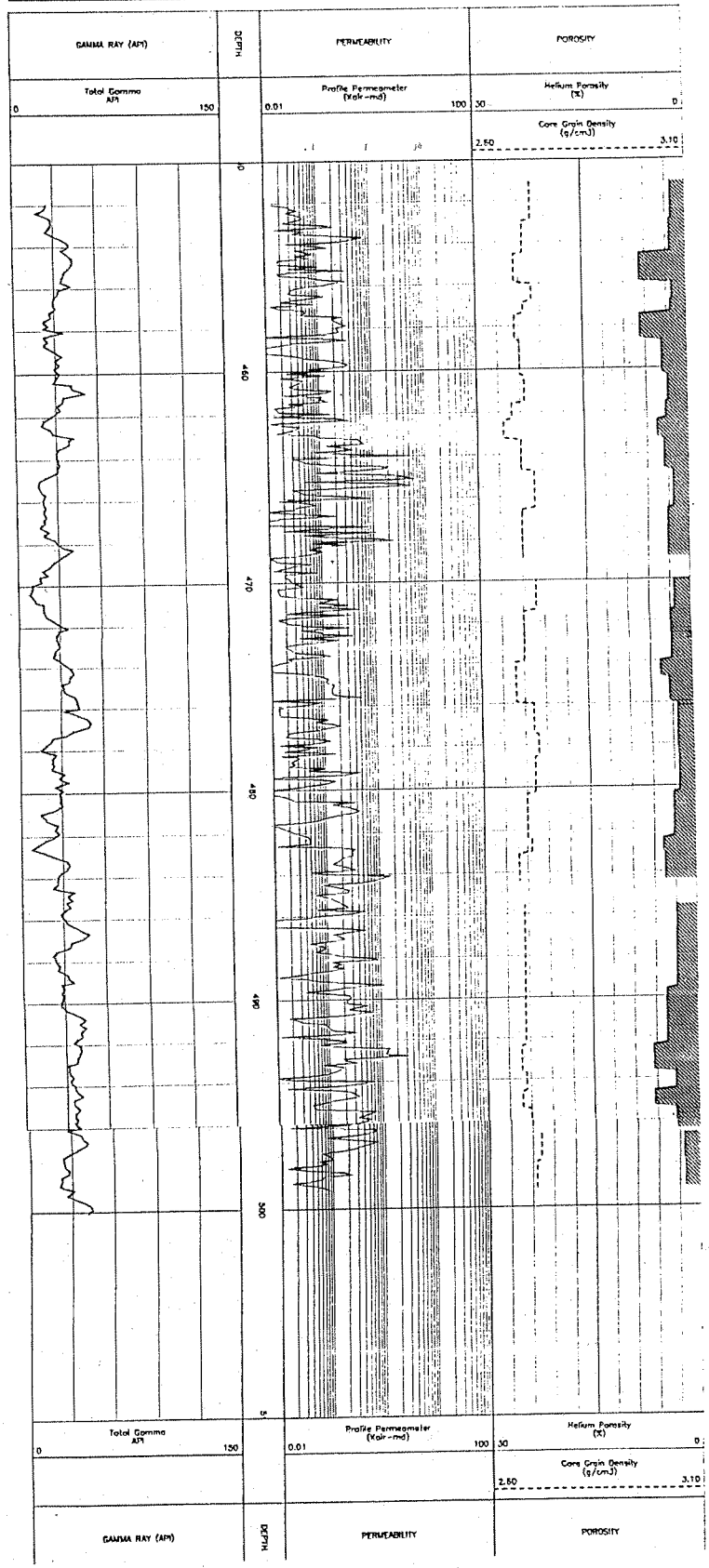
LONDON RESOURCES FLATBAY #1

FLATBAY

CARBONIFEROUS (452.0-512.2 ft)

Vertical Scale: 5 in = 20 ft

Core Laboratories Canada Ltd.



A Reservoir Quality Study of the Anguille Formation (Horton Group)

HUNT OIL COMPANY INC.

1997 03 12 52135-97-3128

Table of Contents

A Reservoir Quality Study of the Anguille Formation (Horton Group)

Introduction

The purpose of this study is to evaluate the reservoir quality of Carboniferous age clastics representing the Anguille Formation (Horton Group). Two outcrop samples were selected for thin section analysis.

Thin sections were prepared by impregnating the samples with blue epoxy to identify porosity and to prevent delicate structures from being destroyed during grinding. Samples were also stained with Alizarin Red and potassium ferricyanide to distinguish calcite (pink) from dolomite (non-stained) and ferroan (iron bearing) minerals (dark blue). One-half of the sample was stained with sodium cobaltinitrate to identify alkali feldspar (yellow).

Petrographic results are summarized in Table 1 and the framework mineralogy is plotted on the Ternary Diagram (Folk, 1968) in Figure 1. Macroviews and described thin section photomicrographs are included after the text and tables.

Petrographic Interpretation

The studied outcrop samples are arkosic sandstones with angular to subrounded grains (Figure 1). Sample TS2 at 463 ft. has a higher amount of rock fragments and is classified as a lithic arkose (Folk, 1968). The high amount of relatively unaltered feldspars indicate rapid deposition in an arid, continental fluvial system. Due to the variability, each sample will be discussed separately.

Sample TS1 (461.1')

The upper sample is a medium to coarse grained, moderately well sorted arkose. Framework mineralogy shows subequal amounts of alkali feldspar (30%), monocrystalline quartz (22%) and plagioclase feldspar (20%). Other framework grains include opaque heavy minerals (5%) and polycrystalline quartz (3%). Accessory heavy minerals (mostly zircon) are present within the framework.

Alkali feldspars show a yellow stain with sodium cobaltinitrate. In addition, tartan twinning is common and alkali feldspars generally show a lack of alteration. Monocrystalline quartz occurs as inclusion free grains with very minor (1%) quartz overgrowths. Plagioclase feldspars are commonly twinned and contain clay (chlorite) alteration along cleavage plains. Opaque heavy minerals are tentatively identified as leucoxene (i.e. a general term for fine grained, opaque, whitish alteration products of ilmenite, commonly consisting mostly of rutile, and occurring in some igneous rocks). Polycrystalline quartz contain several quartz crystals sutured together to form a single detrital grain. Inclusions of clay (likely illite and chlorite) are associated with the polycrystalline quartz grains. Zircon has a very high relief and extreme birefringence.

Authigenic minerals are mainly calcite (14%) with lesser chlorite (3%) and minor pyrite (1%) and quartz (1%). At least two phases of calcite are identified, with an early non-ferroan calcite (10%) followed by a late stage ferroan (iron-bearing) calcite (4%) distinguished by the mauve to purple stain. Non-ferroan calcite (pink stained) is interpreted as a subsurface cement, however, this calcite could be a surface cement in these outcrop samples. The iron-bearing calcite is definitely a deep burial diagenic event. Chlorite is a green clay which is often rimming plagioclase grains. In addition, chlorite and calcite are present within fractures.

Calcite lined fractures (90-100% mineralized) are truncated by younger, clay (chlorite) filled fractures. Other minor cements include quartz overgrowths and disseminated pyrite. Detrital matrix clay is very minor (1%) in this high energy sandstone. Petrographic and textural data indicate an illitic composition for the detrial matrix clay.

Thin section (effective) porosity is 1%, consisting almost exclusively of natural fractures. Minor secondary porosity (<1%) is associated with highly altered plagioclase feldspars. Other pore types include trace amounts of micro-porosity associated with clays and trace primary intergranular porosity.

Estimated permeability and reservoir quality is poor, reflecting the high amount of calcite occluding effective porosity. Open fractures are conduits for hydrocarbon migration, but are almost completely cemented with calcite.

Sample TS2 (463.0')

The study sample is a fine to coarse grained, moderately sorted, lithic arkose. Relatively poor sorting and significant lithic fragments characterizes this rock. Framework mineralogy includes alkali feldspar (18%), plagioclase feldspar (18%), monocrystalline quartz (16%), igneous lithoclasts (9%), carbonate peloids (7%) and polycrystalline quartz (5%). Accessory sedimentary lithoclasts, glauconite, dolomite grains, muscovite, biotite, heavy minerals and organic material are present within the framework. The framework mineralogy indicates the providence is likely a mixed source of igneous and sedimentary terrains. The high amount of relatively unaltered feldspar suggests rapid deposition in an arid, continental fluvial system.

PETROGRAPHIC SUMMARY
OF THE ANGUILLE FORMATION (HORTON GROUP)
HUNT OIL COMPANY INC.

SAMPLE #	TS 1	TS 2					
Depth (ft)	461.10	463.00					
ROCK TYPE (FOLK, 1968)	Arkose	Lithic Arkose					
FRAMEWORK GRAINS							
Monocrystalline Quartz	22	16					
Polycrystalline Quartz	3	5					
Chert							
Alkali Feldspar	30	18					
Plagioclase Feldspar	20	18					
Sedimentary Lithoclasts		1					
Igneous Lithoclasts		9					
Carbonate Peloids		7					
Glauconite		trace					
Opaque Heavy Minerals	5						
Heavy Minerals	trace	trace					
Mica		trace					
AUTHIGENIC MINERALS							
Quartz	1	1					
Calcite	10	16					
Ferroan Calcite	4						
Dolomite		2					
Ferroan Dolomite							
Siderite							
Chlorite	3	2					
Kaolinite							
Pyrite	1	1					
MATRIX							
Primary	1	4					
Pseudo-matrix		minor					
TEXTURE							
Grain Size	medium-coarse	fine-coarse					
Sorting	moderately well	moderate					
Roundness	angular-subround	angular-subround					
Grain Contacts	straight,curved	straight,curved					
PORE TYPES							
Intergranular	trace	trace					
Dissolution	minor	main					
Fracture	main						
Microporosity	trace	common					
RESERVOIR PROPERTIES							
TS POROSITY (%)	1	3					
QUALITY	Poor	Poor					

Feldspars and quartz types are similar to the study sample at 461.1'. Igneous lithoclasts show quartz and feldspar grains (mostly alkali feldspar) within a single detrial grain. Igneous lithoclasts have an acidic composition (i.e. granitic). Carbonate peloids are rounded, micritic grains which lack internal structure. Compaction and deformation of these relatively ductile grains has formed a pseudomatrix within the intergranular pore space. Sedimentary lithoclasts include massive shale and argillaceous siltstone grains which are also compacted and deformed between the more competent framework constituents. Relatively soft glauconite peloids have a green color and granular microtexture under cross-polarized light and form a minor pseudomatrix within intergranular pores. Dolomite grains contain several crystals forming a single rounded detrital grain. Muscovite and biotite are platey minerals and the cleavage is often parallel to bedding. Zircon is the main heavy mineral identified and organic material occurs as opaque material often deformed between the more competent framework. Organic material is partially altered to pyrite.

Alteration of framework grains is generally minor, however, secondary porosity is associated with some highly altered plagioclase feldspars. In addition, plagioclase feldspar and polycrystalline quartz grains often contain inclusions of clay (chlorite) along cleavage planes.

Calcite is the main authigenic mineral (16% of the rock volume) and has a pink stain indicating an iron free compostion. Ferroan (iron-bearing) calcite is not present in the study sample at 463.0'. Other minor authigenic minerals include dolomite (2%), chlorite (2%), quartz (1%) and pyrite (1%). Dolomite is distinguished from calcite by a rhombic structure and the lack of stain. Chlorite is present as a grain rimming cement often associated with plagioclase feldspars. Syntaxial quartz overgrowths are in optical continuity with the host quartz grain. Disseminated pyrite is often associated with organic material.

Detrital matrix clay accounts for 4% of the rock volume and petrographic plus textural data suggent this material is illitic and chlorite. Minor pseudomatrix, formed by the compaction of the relatively ductile rock fragment constituents, occludes effective porosity.

Thin section (effective) porosity is 3%. Secondary porosity associated with highly altered feldspars and calcite dissolution is the main pore type. A small proportion of the total pore volume is attributed to non-effective microporosity associated with clays and micritic peloids. Trace "preserved" primary intergranular porosity is also evident.

Permeability and reservoir quality is poor, reflecting the high amount of calcite occluding effective porosity (i.e. primary intergranular porosity). Low reservoir quality is also attributed to relatively poor sorting (tortuous pore throats), and a relatively high amount of authigenic and detrial clay. From petrographic examination it appears that the study sample is non-reservoir, however, the calcite may be dissolved in other areas of the formation to provide significant secondary porosity.

Prepared by:

Jim M. Stepic, P.Geol.
Reservoir Geologist
Geological Sciences

Richard Thom, P.Geol.
Supervisor
Geological and Imaging Services

DIGITAL IMAGING

LONDON RESOURCES

London Resources Flatbay #1

White Light/Ultra Violet Photography

1996 12 17 **52139-96-4748**

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

Top 469.8 ft

Bottom 478.3 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

Top 469.8 ft

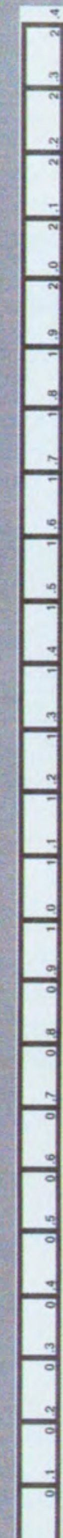
Bottom 478.3 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

Top 478.3 ft



Bottom 487.7 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

Top 478.3 ft

Bottom 487.7 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

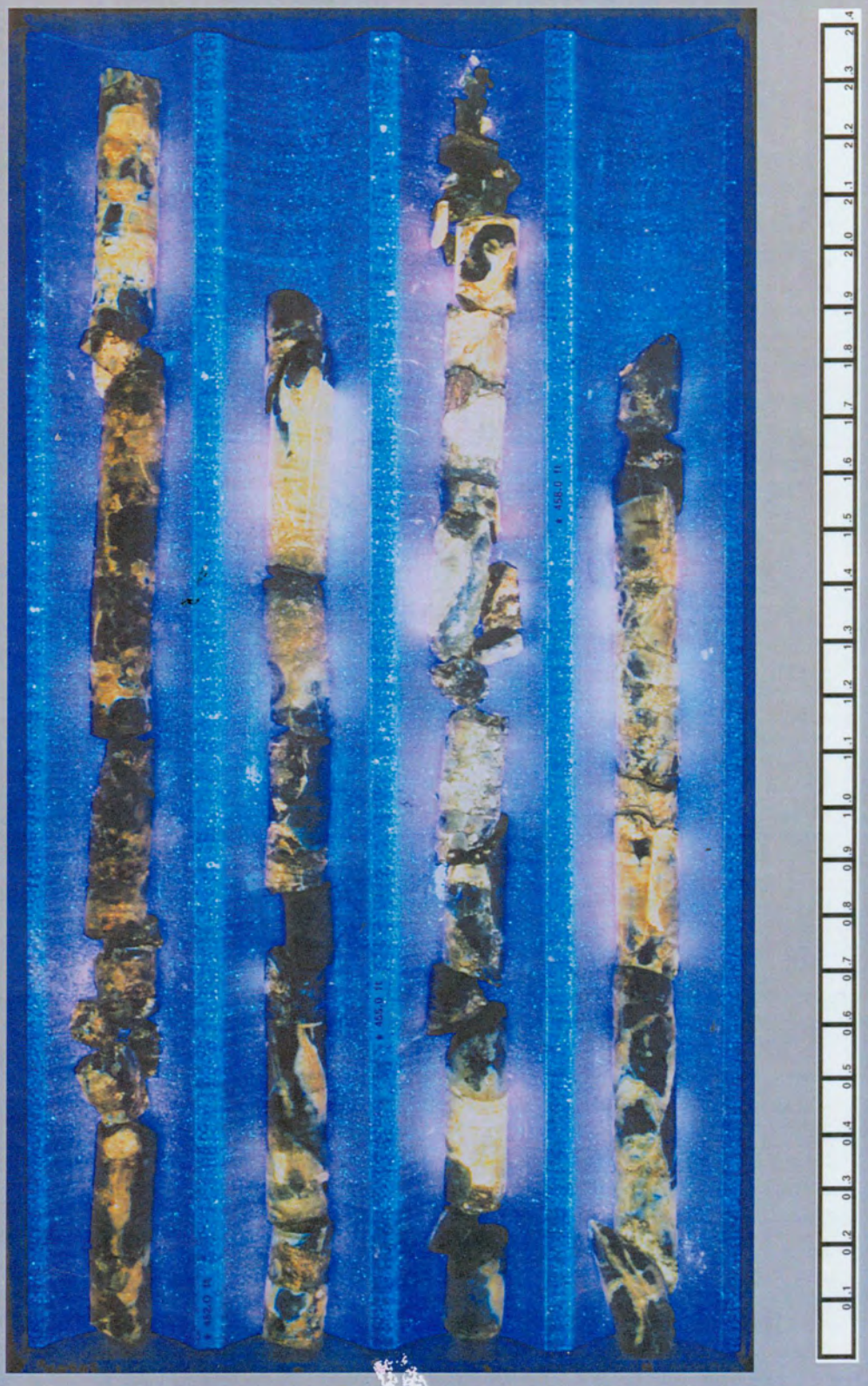
Top 452.0 ft

Bottom 460.5 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14



Top 452.0 ft

Bottom 460.5 ft

CORELAB

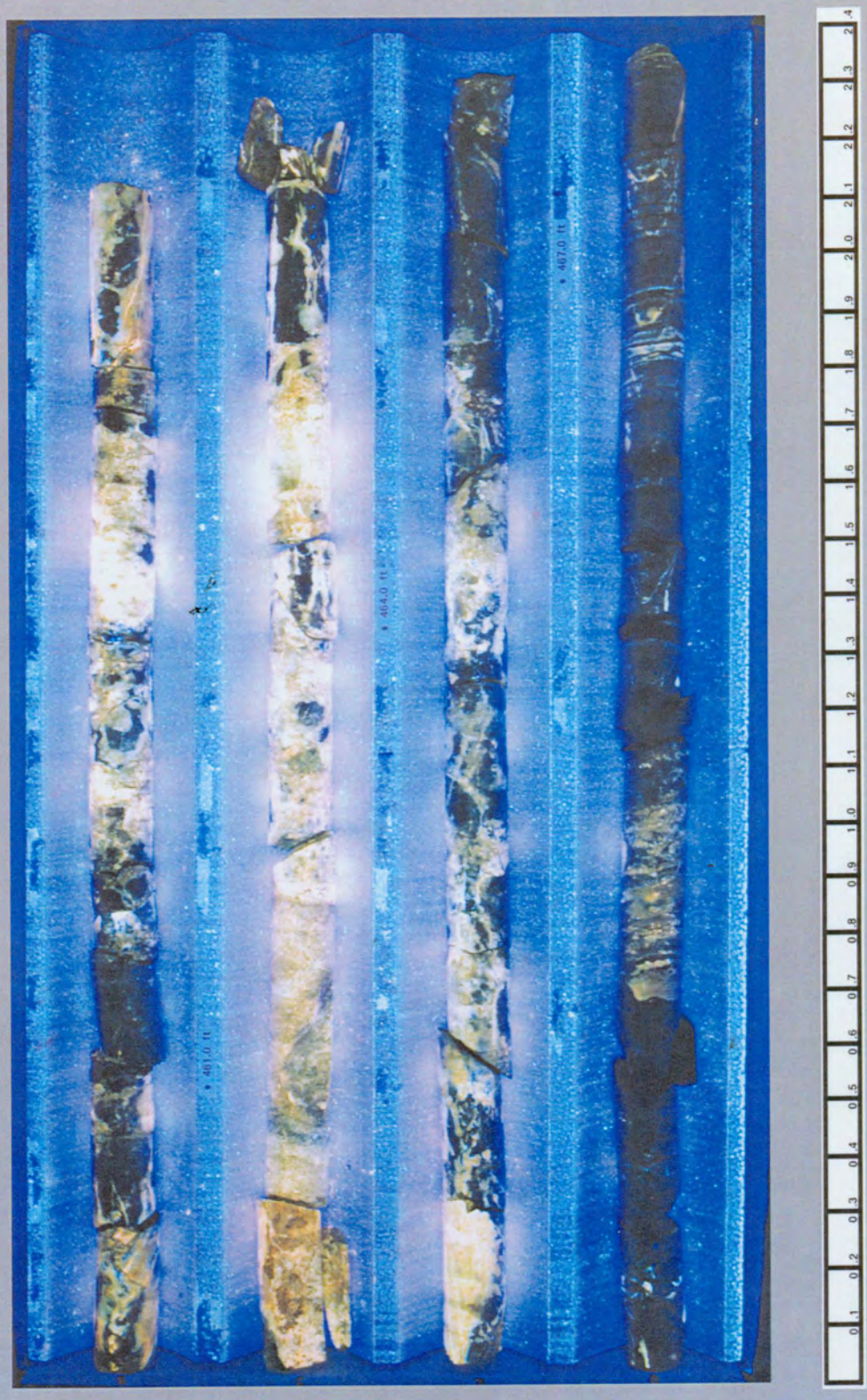
LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14



Top 460.5 ft

Bottom 469.8 ft

CORELAB

HUNT OIL COMPANY INC.
ANGUILLE FORMATION (HORTON GROUP)

ROCK TYPE: LITHIC ARKOSE

52135-97-3128

PHOTO A

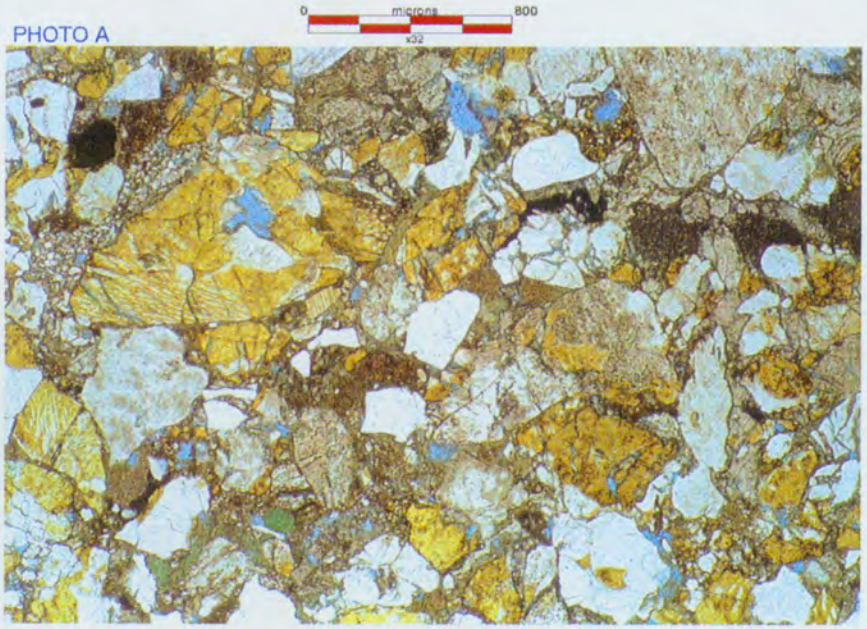


PHOTO B

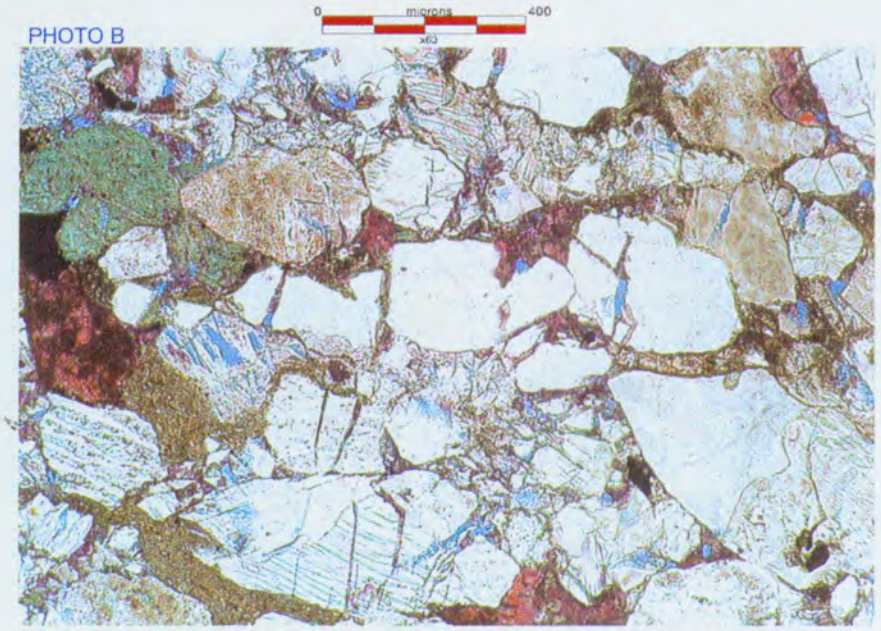
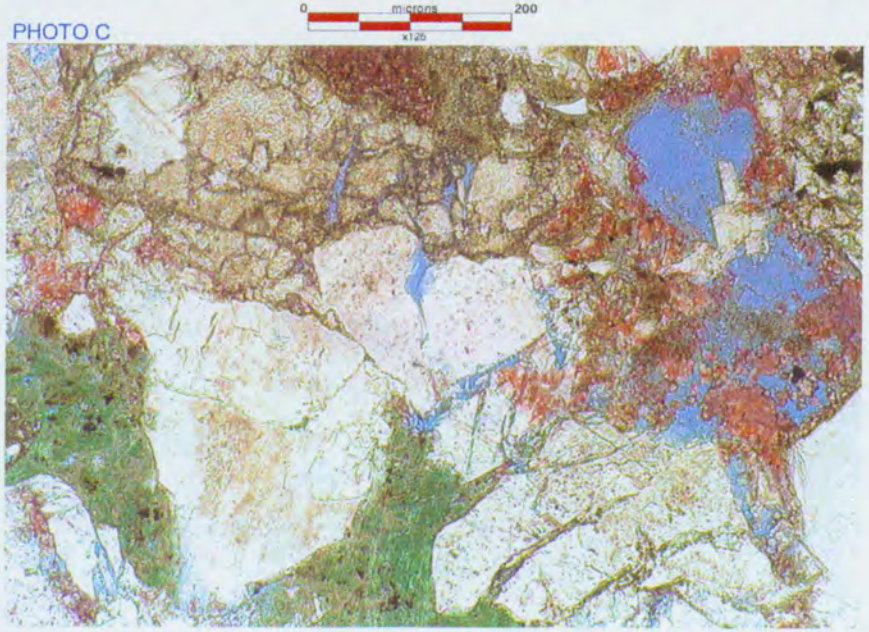


PHOTO C



Sample:	TS 2	*Depth (ft.):*	463.00
TS Porosity (%):	3	*Permeability (md):*	NA

PHOTO A Low magnification photomicrograph illustrates a moderately sorted, fine to coarse grained, lithic arkose. Thin section (effective) porosity is 3% and secondary porosity (likely after calcite and framework grain dissolution is the main pore type. Photo A shows the high amount of feldspars, igneous lithoclasts (upper left) and carbonate grains (upper right) in this sample. The provenace is likely a mixed source of igneous and sedimentary terrains. The high amount of feldspar suggests rapid deposition into an arid, continental fluvial system. (32x, magnification)

PHOTO B Higher magnification photo shows highly altered plagioclase feldspars containing some highly irregular and isolated secondary porosity (blue epoxy). Chlorite (greenish color) is a grain rimming clay (centre) and alteration product of plagioclase (upper left). Note compacted sedimentary grains forming a pseudomatrix. (63x, magnification)

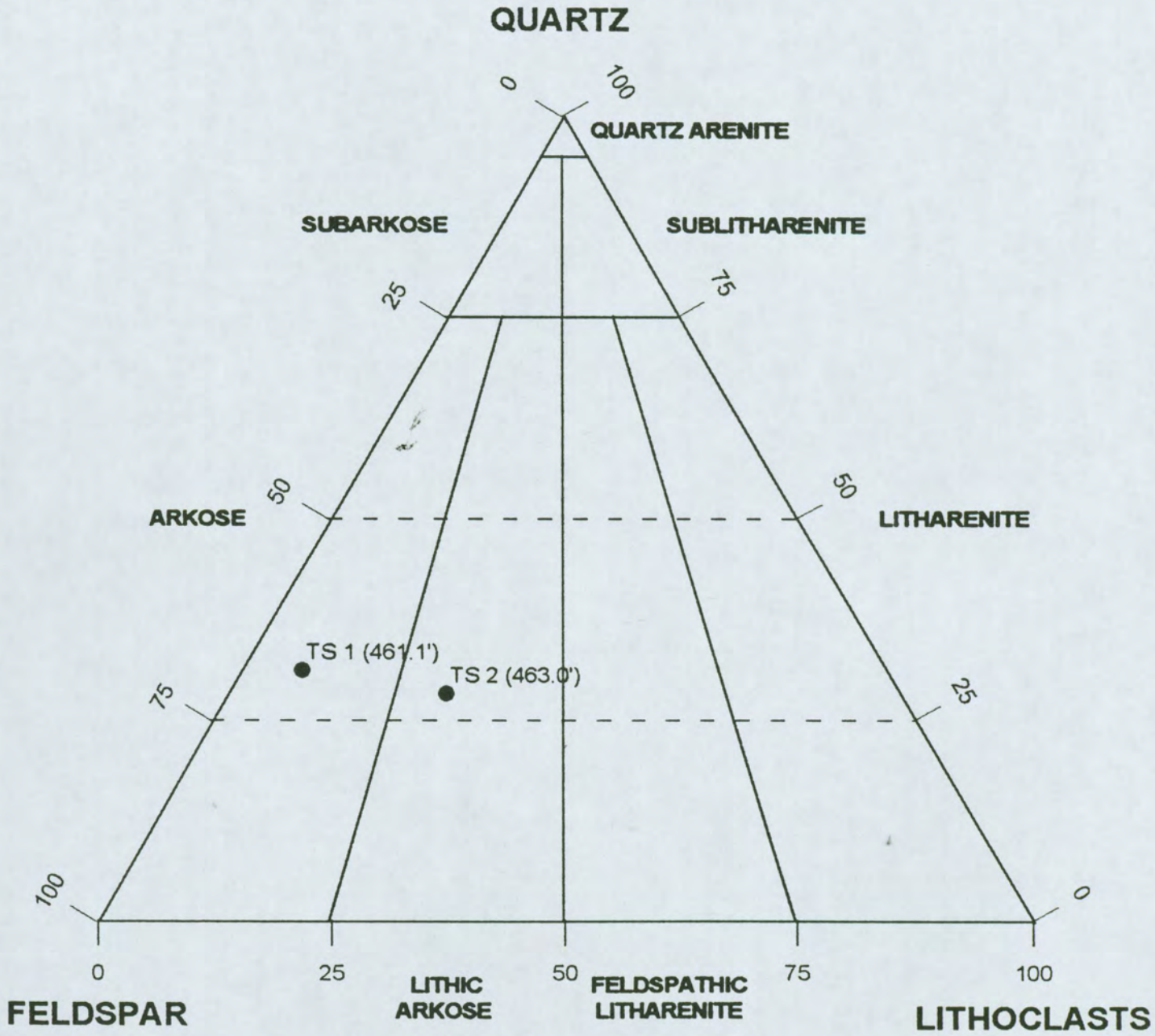
PHOTO C High magnification photo shows secondary porosity after calcite dissolution (upper right). Other areas show glauconite (green) and plagioclase (lower centre). Note non-stained dolomite (upper left) with a rhombic crystal morphology. (125x, magnification)

CORELAB

Hunt

TERNARY COMPOSITION PLOT
OF THE ANGUILLE FORMATION (HORTON GROUP)
HUNT OIL COMPANY INC.

52135-97-3128



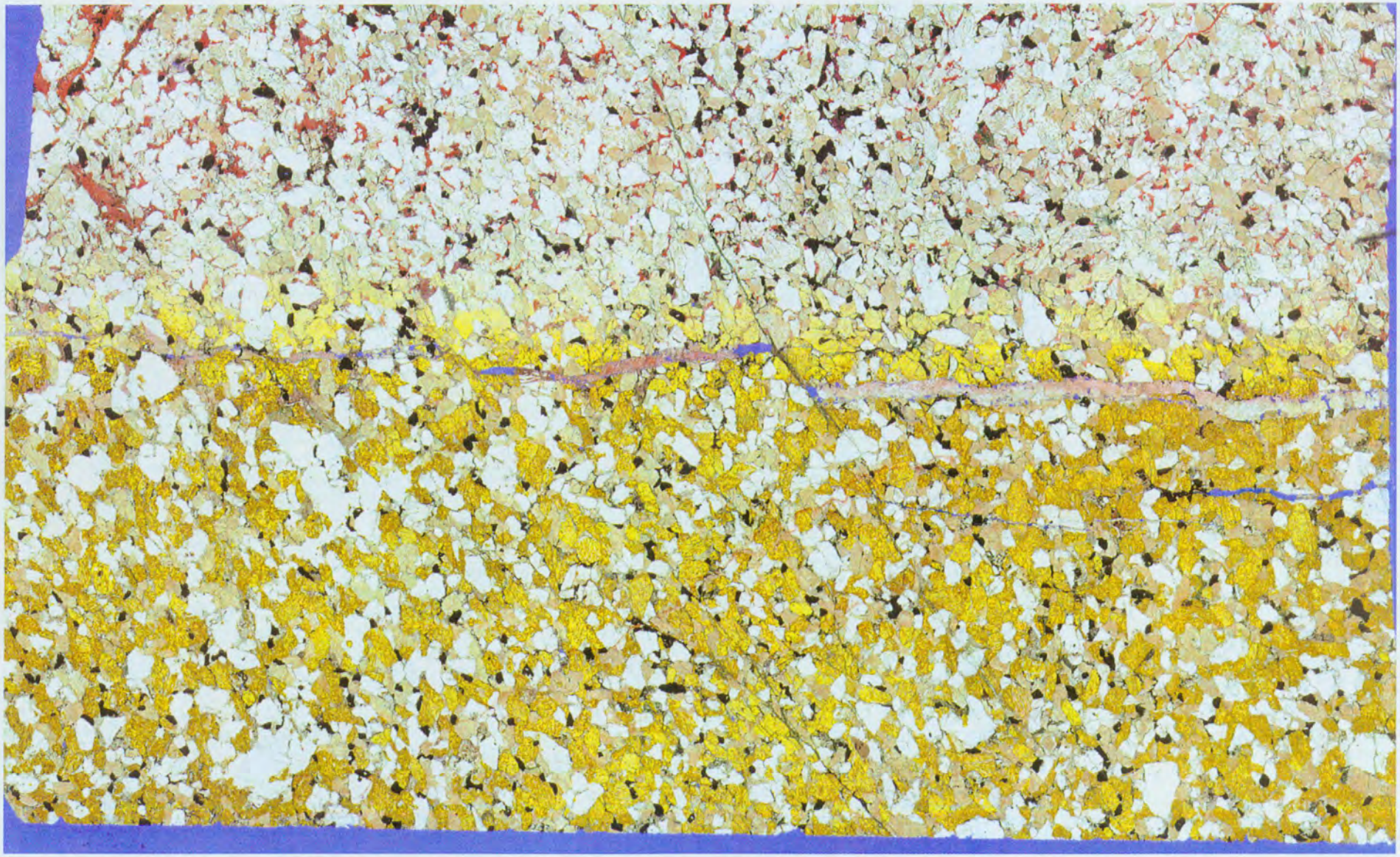
CORELAB

Hunt

Figure 1 (Folk, 1968)

HUNT OIL COMPANY INC.
ANGUILLE FORMATION (HORTON GROUP)
ROCK TYPE: ARKOSE

52135-97-3128



4 mm

CORELAB

SAMPLE # TS 1 (461.1') TS POROSITY 1.0%

HUNT

HUNT OIL COMPANY INC.
ANGUILLE FORMATION (HORTON GROUP)

ROCK TYPE: ARKOSE

52135-97-3128

PHOTO A

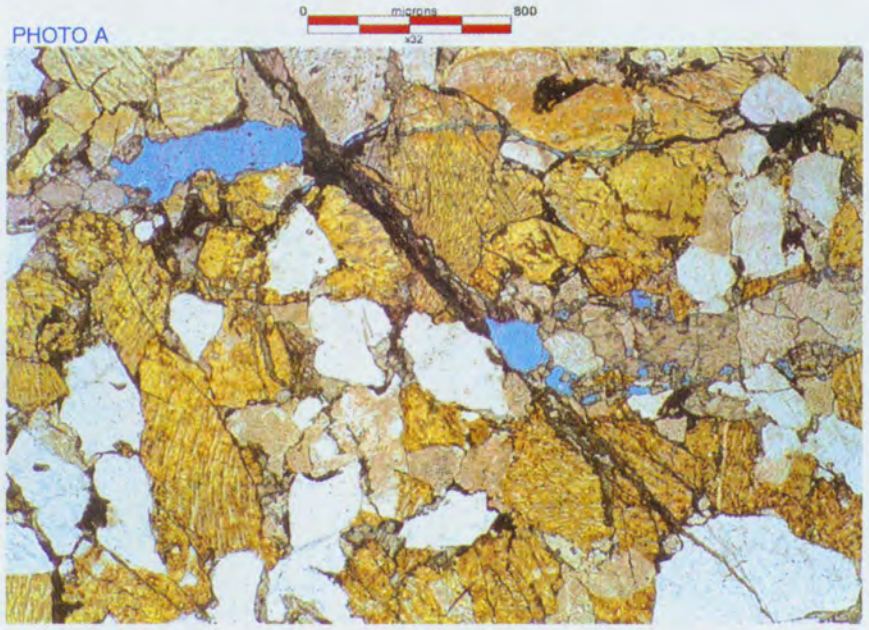


PHOTO B

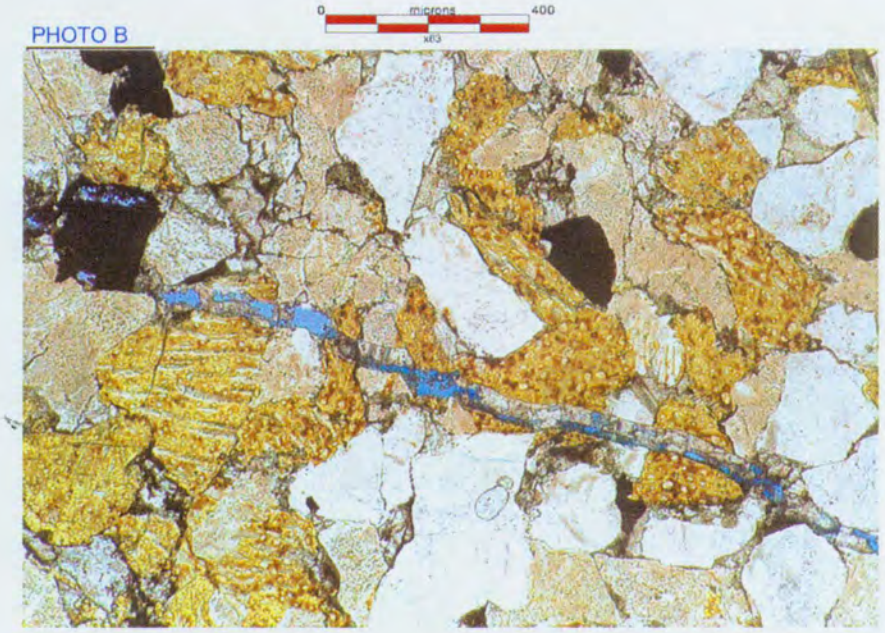
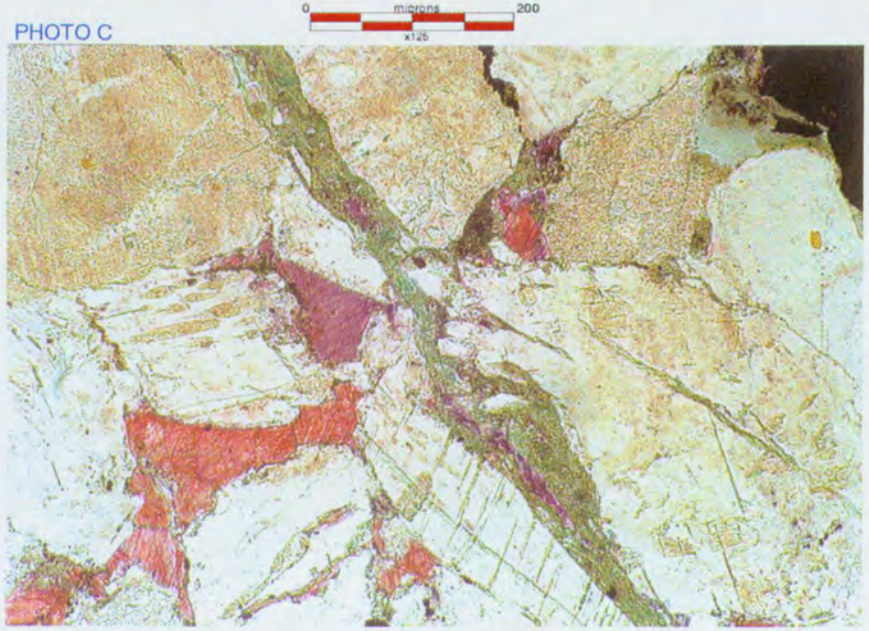


PHOTO C



Sample:	TS 1	*Depth (ft.):*	461.10
TS Porosity (%):	1	*Permeability (md):*	NA

PHOTO A Low magnification photomicrograph illustrates a moderately sorted, medium to coarse grained arkose. Thin section (effective) porosity is 1% and fracture porosity is the main pore type. Photo A shows an open fracture (90% calcite mineralization) in the upper left and right centre portions of the photo which is truncated by a younger, clay filled fracture (oblique feature). Other areas show the high amount of alkali feldspar (yellow) and plagioclase (clay inclusions). (32x, magnification)

PHOTO B Higher magnification photo shows fracture porosity associated with open fractures. Calcite mineralization is abundant (90-100%) in the fractures. Framework grains are well cemented with calcite. Opaque heavy minerals (leucoxene?) account for 5% of the rock volume. (63x, magnification)

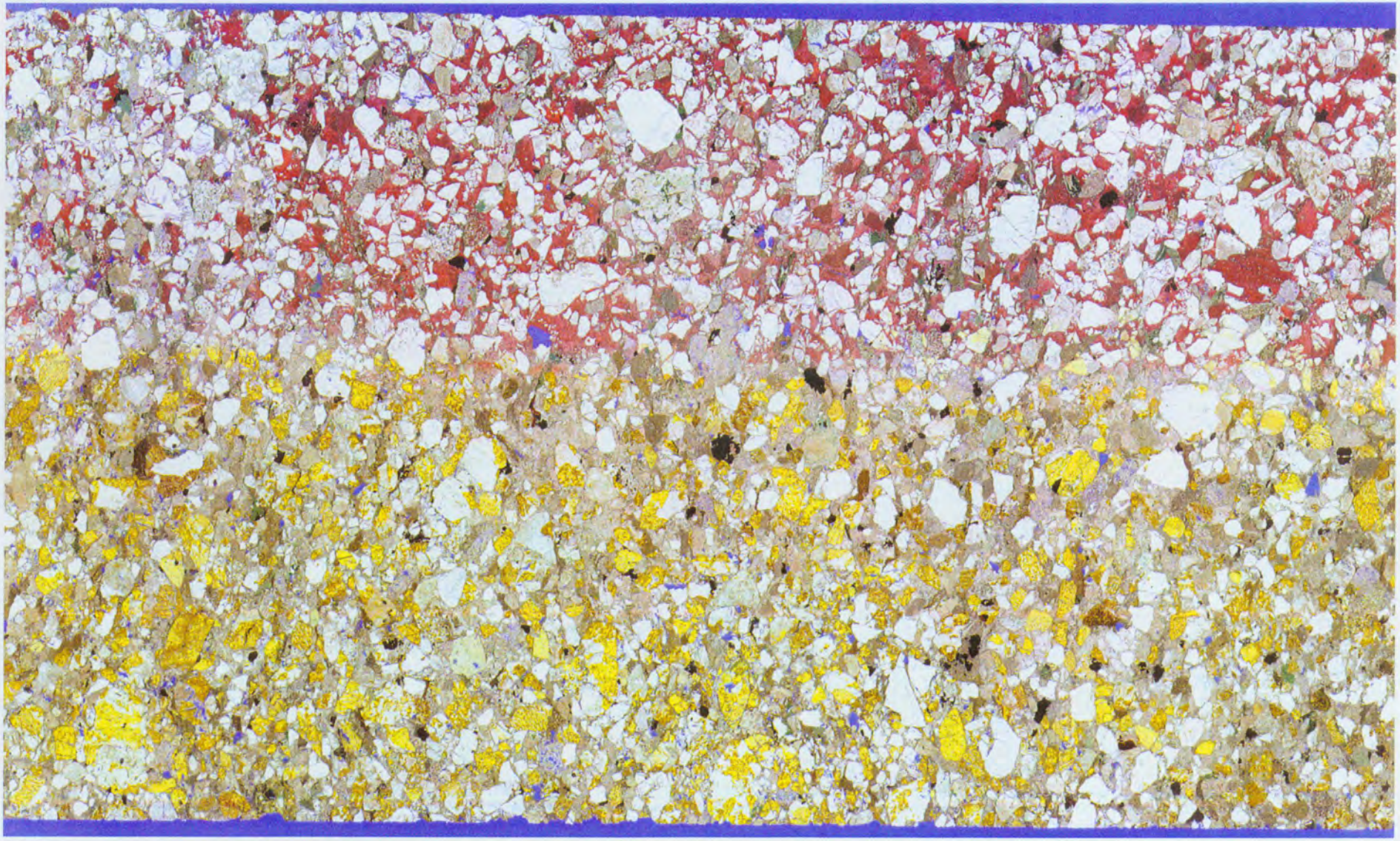
PHOTO C High magnification photo shows clay (chlorite) filled fractures which contain minor ferroan calcite (mauve staine). At least two phases of calcite cement is evident (i.e. non-ferroan, pink stained calcite and ferroan, mauve stained calcite). Low reservoir quality reflects a high amount of calcite cement. (125x, magnification)

CORE LAB

Hunt

HUNT OIL COMPANY INC.
ANGUILLE FORMATION (HORTON GROUP)
ROCK TYPE: LITHIC ARKOSE

52135-97-3128



4 mm

SAMPLE # TS 2 (463.0') TS POROSITY 3.0%

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

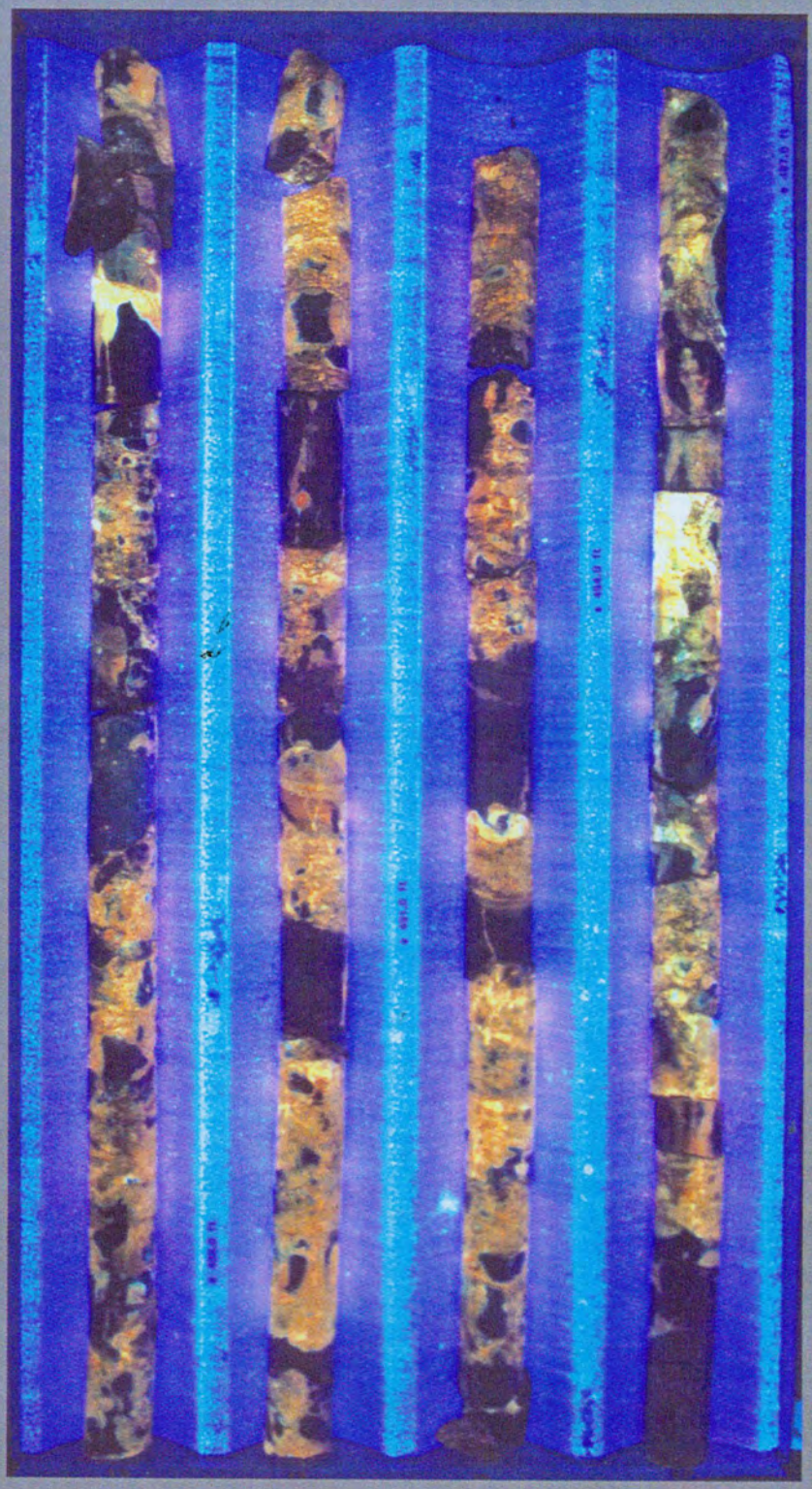
Top 487.7 ft

Bottom 497.2 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14



Top 487.7 ft

Bottom 497.2 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14

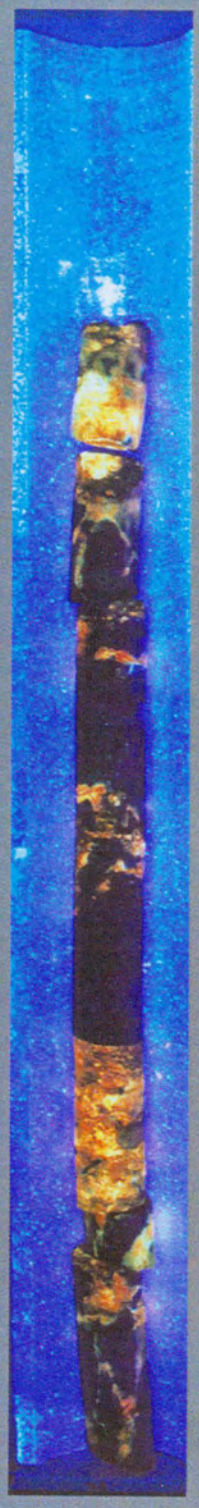
Top 497.2 ft

Bottom 499.2 ft

CORELAB

LONDON RESOURCES
LONDON RESOURCES FLATBAY #1
CORE #1

52139-96-4748
96-12-14



Top 497.2 ft

Bottom 499.2 ft

CORELAB

APPENDIX D

Well Log

WELL LOG

Well Name: Flat Bay #1

Driller: Colin Crane
East Coast Drilling

Core Size: BQ

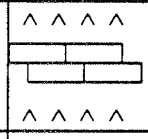
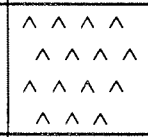
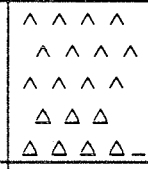
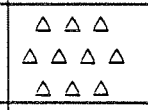
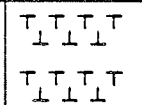
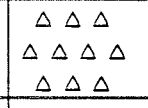
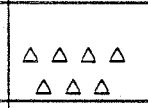
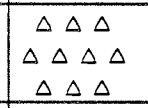
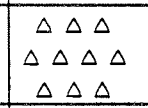
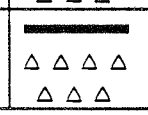
Depth (feet)	Lithology	Formation	Description	Comments
0	o . o . o . o . o . o . o . o . o . o . o	Codroy Road		
52	o . o . o . o . o . o . o . o . o . o . o		silt - gypsum; pebble gravels	
52 to 60	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^		gypsum - white to gray - calcite filling in fractures - micro crystalline	
70	⊤⊥⊤⊥⊤		74 to 75 feet - calcareous bed - shale - limestone	
80	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^			
90	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^		gypsum as above	
100	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^			
110	^ ^^ ^ ^ ^ ^ ⊤⊥⊤⊥⊤		108 to 111 feet - calcareous bed - dark gray	
120	^ ^ ^		limestone - interbedded	
130	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^		gypsum - darker, marly	
140	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^^			
150	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^			
160	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^			

WELL LOG

Well Name: Flat Bay #1

Driller: Colin Crane
East Coast Drilling

Core Size: BQ

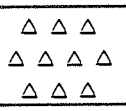
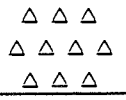
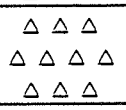
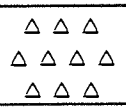
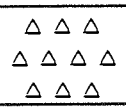
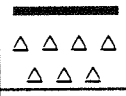
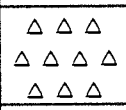
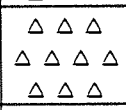
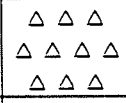
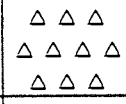
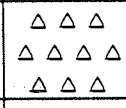
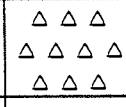
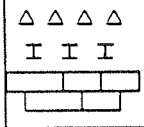
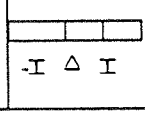
Depth (feet)	Lithology	Formation	Description	Comments
170			176 to 177 - limestone bed gypsum - gray-black, micro crystalline	
180			some minor calcareous laminations and/or fracture fillings	
190				
200				
210			207 to 252 feet - gypsum? - anhydrite interlaminated micro crystalline - limy matrix in places	
220			"	
230			fine laminated calcareous beds - 1 mm to 5 mm thick	
240			"	
250			anhydrite?	
260			calcareous laminates - 252 to 253.5 feet	
270			anhydrite - massive	
280				
290			mud seam - 290 to 290.5 feet	

WELL LOG

Well Name: Flat Bay #1

Driller: Colin Crane
East Coast Drilling

Core Size: BQ

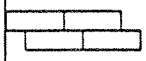
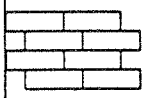
Depth (feet)	Lithology	Formation	Description	Comments
300			anhydrite - massive	
310			massive anhydrite	
320				
330				
340				
350			mud seam - 341 to 342 feet	
360			massive anhydrite	
370				
380			massive anhydrite	
390				
400			massive anhydrite	
410				
420			413 feet - contact calcareous beds 423 to 424 feet - limestone	
430			424 to 432 feet - limey anhydrite interbeds	

WELL LOG

Well Name: Flat Bay #1

Driller: Colin Crane
East Coast Drilling

Core Size: BQ

Depth (feet)	Lithology	Formation	Description	Comments
440		Ship Cove (434 ft.)	432 to 434 ft - limey anhydrite interbeds 434 to 452 ft - limestone mm-cm laminations	
450			449 to 450 ft - oil ooze in core - light golden brown oil staining - shows above and below - porous section - 2 ft - petroliferous smell throughout	
460	o . o . o . o . o . o . o . o . o . o . o . o . o . o . o . o . o . o	Anquelle Group - Fischells	452 to 472 ft - conglomerate polymitic - poorly sorted - subrounded to rounded - interbedded sandstone lenses	
470	o . o . o . o . o . o . o . o . o . o . o . o . o . o .	Conglomerate Member	bleeding oil - light brown to gold brown, where porous	
480	o . o . o . o . o . o . o . o . o . o . o . o . o . o .		"	oil sample taken - 477 to 478 ft
490	o . o . o . o . o . o . o . o . o . o . o		"	
500	o . o . o . o . o . o . o . o . o . o . o		"	
510	o . o . o . o . o . o . o . o . o . o . o		" hole suspended at 504 ft	504.5 to 505 core sent to ISPG