Operation Identifier [redacted]

Report on Geological Field Operation
July 14-23, 2000
Prairie Creek and Nahanni Butte
Northwest Territories

Nahanni, Headless, and Funeral Ranges, Northwest Territories

Confidential

Canadian Forest Oil Ltd.

Report by: Todd Burlingame (Consultant Kee Scarp Ltd)
Edited by: James R. Taylor (Canadian Forest Oil Ltd.)

Date: May 4, 2001

Report submitted as hard copy and on IBM compatible disk as a fixed format ASCII coded file.
Field photographs are submitted on two compact discs.

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1. Locality map

List of Appendices

1. Geochemical Study
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Field Photographs (see the compact discs in the pocket in the back of this report)

Introduction

A Canadian Forest Oil Ltd. Geological field party was based at the Prairie Creek Mine site and at the hamlet of Nahanni Butte, Northwest Territories (NWT) from July 14th to 23rd, 2000. The field party members were Todd Burlingame (Kee Scarp Ltd, Yellowknife, Party Chief), Tim Seeley (Canadian Forest Oil Ltd), and Angus Koniaonte (Nahanni Butte). A 50% partner in the field party was Anschutz Exploration Corporation of Denver, Colorado.

The closest effected community was Nahanni Butte located at the confluence of the South Nahanni and Liard Rivers. The community was kept informed about the status of the project through the Chief and Band Manager. The local outfitter was contacted prior to initiating the program and was notified at the completion of the program. The Mackenzie Valley Land and Water Board were informed about the project and correspondence was received from the Board waiving any additional permitting requirements.

The geology crew was lodged at the Prairie Creek mine site camp of Canadian Zinc Ltd. and at the Nahanni Butte Motel. Great Slave Helicopters, Fort Simpson base, supplied helicopter services. Air Tindi provided fixed wing services from Yellowknife to the Prairie Creek Mine site and from Nahanni Butte to Yellowknife.

Locality Map

Enclosure 1 shows the outcrop localities visited in 2000. These locations are grouped into five areas and a general reconnaissance category. Sample numbers are keyed to these location numbers. Area and sample locations are grouped as follows:

Area 1: Prairie Creek Mine site	61° 32' N 124° 45' W (Approximate)
Area 2: Whittaker	62° 30' N 124° 52' W (Approximate)
Area 3: Delorme	62° 50' N 125° 20' W (Approximate)
Area 4: Nahanni	61° 50' N 123° 20' W (Approximate)
Area 5: Battlement	62° 07' N 123° 50' W (Approximate)
Reconnaissance:	Root River Map GSC 1376A (95K) Camsell Bend Map GSC 1375A (95J); Virginia Falls Map GSC 1378A (95F); Sibbeston Lake Map GSC 1377A (95G).

Statistical Summary

Mobilization Date:
Thursday, July 13, 2000

Demobilization Date:
Sunday, July 23, 2000

Significant Dates:
Fixed wing into Nahanni Butte and Prairie Creek Mine site: July 14, 2000
Helicopter operations: July 14th to July 22nd (inclusive)
21.9 hours of helicopter time were billed
Poor weather day: July 15th, 2000
Closed operations: July 23rd, 2000
Shipped Samples: July 24th, 2000

Technical and non-technical personnel

2 Canadian citizens (one a First Nations member) and one American citizen

Productivity Data

Total samples taken:
61 samples
Lost time:
One day (July 13th , 2000)
Daily Production:
Sampled on an average of six locations per day
Weather conditions:
Sunny, Clear warm, light winds
Down Time factors:
Low ceiling on first day of program (July 13th ,2000)

Description of Field procedures

Two members of the field party departed Yellowknife via fixed wing (Twin Otter) on July 14th 2000 after a one-day delay due to weather. The aircraft made one stop in Nahanni Butte to pick up the third member of the field party before continuing on to the Prairie Creek Mine site.

Sample sites in Area 1: Prairie Creek Mine site, were accessed on foot or by four wheel drive vehicle. Sample site in Area 2: Whittaker Anticline, Area 3: Delorme Fault, Area 4: Nahanni Thrust, Area 5: Battlement Anticline, and Reconnaissance sites were accessed by helicopter. Great Slave Helicopters provided the helicopter support. A machine was kept with the field party through out the program. Fuel was cached at the Prairie Mine site airstrip and at the Nahanni Butte airport. No fuel was cached at any remote sites.

Rock samples and structural measurements were taken at each location. Sample site locations and rock descriptions and other data were recorded in field notebooks. Samples were collected in gunnysacks and shipped to Calgary via Yellowknife. The samples were inspected in the Canadian Forest Oil offices in Calgary and stored at a warehouse facility.

Shales and darker carbonate rocks were sampled for total organic carbon (TOC), maximum burial temperature (TMAX) analysis and graptolite reflectance (R_o).

Dolomites and some shales were sampled for age determination using faunal identification of conodonts. Where present, macrofossils were also sampled for examination. Samples were collected in lined bags and labeled for identification.

Summary operational objectives and ties to regional geology

The field objectives were to identify and sample potential source rocks, collect samples for age dating (conodont analysis) and collect macrofossils for examination. The 2000 field party was a continuation of the 1999 field party (Taylor, J. R., 2000, Report on Geological Field Operation August 3-13, 1999 Fort Simpson, Northwest Territories, Canyon, Nahanni and Tundra Ranges, unpublished report for Canadian Forest Oil Ltd., Calgary, Operation identifier No. 9237-C131-001E) which examined mainly Silurian carbonate bank facies. The 2000 field party concentrated on more westerly Silurian basinal facies.

Locations for field examination were selected to coincide with previous work done by the Geological Survey of Canada (GSC) Calgary (Morrow, D.W. and Cook, D.G., 1987: GSC Memoir

Sample Site 6 (Morrow Transverse 24) 61° 36' 28.7", 124° 42' 57"

F00-S-1-7 Road River shale
F00-S-1-8 Road River shale
F00-F-1-8 Road River shale
F00-C-1-1 From F00-S-1-7 area
F00-C-1-2 From F00-S-1-7 area
F00-F-1-7 From F00-S-1-7 area

Sample Site 7, 61° 36' 58.3", 124° 43' 10.3"

F00-S-1-9 Road River shale
F00-F-1-9 Road River shale

Underground, Level 930

F00-S-1-10

Sample site 8 (Morrow Section 11)

F-00-S-1-11
F-00-F-1-10

CORE SAMPLES

Well 94-PC-56
Road River shale

F00-SC-1-1; Boxes 18, 19, 20, 21; 95.3-116.6m
F00-SC-1-2; Boxes 22, 23, 24, 25; 116.6-138.4m
F00-SC-1-3; Boxes 26, 27, 28, 29; 138.4-159.3m
F00-SC-1-4; Boxes 30, 31, 32, 33; 159.3-164.4m
F00-SC-1-5; Boxes 34, 35, 36; 164.4-199.3m

Well 94-PC-64
F00-SC-1-6; Boxes 1, 2, 3, 4; 2.4-24.6m
F00-SC-1-7; Boxes 5, 6, 7, 8; 24.6-43.7m
F00-SC-1-8; Boxes 8, 10, 11, 12; 43.7-71.3m
F00-SC-1-9; Boxes 13, 14, 15, 16; 71-94.1m
F00-SC-1-10; Boxes 17, 18, 19, 20; 94.1-117.4m
F00-SC-1-11; Boxes 21, 22, 23, 24; 117.4-138.7m
F00-SC-1-12; Boxes 25, 26, 27, 28; 138.7-163m
F00-SC-1-13; Boxes 29, 30, 31, 32; 163-186m
F00-SC-1-14; Boxes 33, 34; 186-197.7m

Area 2, Whittaker

Sample Site 1 (Morrow Transverse 2A) 62° 30' 15.7", 124° 46' 08.6"

F00-C-2-1
F00-C-2-2
F00-C-2-3
F00-C-2-4
F00-C-2-5

Sample Site 2, 62° 29' 59.2", 124° 49' 37.6"

F00-S-2-1
F00-S-2-2

Area 3: Delorme

Sample Site 1 (Morrow section 47), 62° 48' 01.6", 125° 14' 34.8"

F00-S-3-1
F00-R-3-1, Pastel Creek, Road River, 100' from contact with Whittaker.
F00-R-3-2, Pastel Creek, Road River, 300' from contact with Whittaker.
F00-R-3-3
F00-R-3-4
F00-R-3-5
F00-C-3-1
F00-C-3-2
F00-F-3-1

Area 4: Nahanni

Sample Site 1 61° 55' 12.7", 123° 20' 55"

F00-R-4-1 Arnica
F00-R-4-2 Silurian Sandstone (?)
F00-R-4-3 Silurian Sandstone (?)
F00-R-4-4 Silurian Sandstone (?)

Area 5, Battlement 62° 06' 33.8", 123° 46' 45.9"

Aerial Reconnaissance, No Samples taken.

Reconnaissance

61° 49' 47.4", 125° 37' 35"

F00-S-R-1 Funeral Formation
F00-S-R-2 Funeral Formation

62° 14' 53.4", 125° 06' 33.3"

F00-S-R-3 Horn River shales

Results of geochemical analysis and other analysis

See Appendix 1

Results of micro-paleontology as it relates to biostratigraphic correlations

See Appendix 2

Photographs

See Appendix 3 for an index and photograph captions. The field photographs are on two compact discs in the pocket found at the back of this report.

Appendix 1.

Geochemistry Study

October 18, 2000
Confidential

Daniel M. Jarvie, Humble Geochemical Services
P.O. Box 789, Humble, Texas TX 77347, 218 Higgins Street, Humble, Texas TX 77338, USA

Dear Daniel:

I have enclosed rock samples for source rock analyses. There are 30 surface and diamond drill core samples from a 10 day field party to Northern Canada concluded on July 26, 2000. These are contained in fabric sample bags and are serial numbered 1 through 30. I have retained duplicates of all samples. If some sample has inadvertently been supplied in too small a quantity or additional sample is required for a subsequent test, I can supply these via overnight delivery.

A completed copy of your *Special Analysis Request Form* is enclosed. The sample serial numbers, location numbers, and interval or sample numbers are tabulated on an attachment. The various sampling locations are in the McKenzie Mountains and supplemental geological notes are shown on the attachment. Regional geology leads me to anticipate that all the samples have passed through the maturity levels for gas by burial and/or overthrusting.

The Road River is Silurian in age. The formations sampled have not previously been tested for source rock potential in the outcrops visited. The exception is the Mine Airport Road River Shale sample, which was sampled in 1999 and gave a TOC % of 0.80. This was judged to be significant because of the high maturity of the sample as a result of burial and thrusting. The nearest reference to source rock studies done on the important Silurian-age Road River Shale interval is Christine Link's University of British Columbia thesis on the Peel Plateau north of the current area of interest. A copy of this report was sent to you in 1999. Note that in the Silurian-age troughs or basins filled with Road River shales show 5-9% TOC according to Link. In the present study similar black shale samples occur in the Silurian Root Basin. A thesis appendix correlates graptilite reflectance to a vitrinite reflectance scale. Graptilites were found in the current sampling. They are well described just west of the area by Etherington in 1966.

As previously discussed, there are some limitations on the amount of source rock data obtainable from over mature shales and from Pre-Devonian rocks. Certain follow up tests involving vitrinite reflectance, pyrolysis and thermal extraction may be discretionary depending on initial testing. Please advise me on this as testing proceeds. I would appreciate being informed of costs in $US as the project progresses. Results are expected according to the timing shown in your listing of *Standard Delivery Times*. Surcharges for rush jobs are not anticipated at this time.

Also be aware that all test results will be forwarded to venture partners and to the National Energy Board (Canada) [NEB] and that the NEB places the information in the public domain in 5 years. The NEB reference is 9237-C131-001E. Please show this number on reports to simplify data distribution.

For the information of your accounting department, Canadian Forest Oil Ltd. is a wholly owned subsidiary of Forest Oil Corporation of Denver, Colorado (symbol FST on the New York stock exchange). Credit references can be supplied if requested. Invoices should refer to file 003012.

In 1999 I had some delays in releasing the rock shipment from US Customs at Houston. I will send the shipment by Federal Express and describe them as "Rocks for Analysis" and hope that the shipment is not seized.

Yours sincerely,

Canadian Forest Oil Ltd.

James R. (Jim) Taylor, P. Geol.
Telephone (403) 292-8049, Fax (403) 292-8060, e-mail: jrtaylor@cfol.ab.ca

Attachment: Sample Analysis Request Form

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SOURCE ROCK GEOCHEMISTRY SAMPLES

Area 1, Prairie Creek Mine site

Site 1 (Landing strip) 61° 33' 38.8", 124° 48' 46.2:

#H1 F00-S-1-1 Road River shale
#H2 F00-S-1-2 Road River shale
#H3 F00-S-1-3 Road River shale

Site 2 (outcrop adjacent to the level 1 adit) 61° 33' 19.6", 124° 47' 50.2"

#H4 F00-S-1-4 Road River shale

Site 4 (Next to river north of mine) 61° 38' 10.9", 124° 52' 06.6"

#H5 F00-S-1-5 Road River Shale

Site 6 (Morrow Transverse 24) 61° 38' 28.7", 124° 42' 57"

#H6 F00-S-1-6 Road River shale
#H7 F00-S-1-7 Road River shale
#H8 F00-S-1-8 Road River shale

Site 7, 61° 38' 58.3", 124° 43' 10.3"

#H9 F00-S-1-9 Road River shale

Underground, Level 930

#H10 F00-S-1-10

Site 8 (Morrow Section 11)

#H11 F-00-S-1-11

CORE SAMPLES

Hole 94-PC-56

Road River shale

#H12 F00-SC-1-1; Boxes 18, 19, 20, 21; 95.3-116.6m
#H13 F00-SC-1-2; Boxes 22, 23, 24, 25;116.6-138.4m
#H14 F00-SC-1-3; Boxes 26, 27, 28, 29;138.4-159.3m
#H15 F00-SC-1-4; Boxes 30, 31, 32, 33;159.3-164.4m
#H16 F00-SC-1-5; Boxes 34, 35, 36; 164.4-199.3m

Hole 94-PC-64

#H17 F00-SC-1-6; Boxes 1, 2, 3, 4; 2.4-24.6m
#H18 F00-SC-1-7; Boxes 5, 6, 7, 8; 24.6-43.7m
#H19 F00-SC-1-8; Boxes 8, 10, 11, 12; 43.7-71.3m
#H20 F00-SC-1-9; Boxes 13, 14, 15, 16; 71-94.1m
#H21 F00-SC-1-10; Boxes 17, 18, 19, 20;94.1-117.4m
#H22 F00-SC-1-11; Boxes 21, 22, 23, 24;117.4-138.7m
#H23 F00-SC-1-12; Boxes 25, 26, 27, 28; 138.7-163m
#H24 F00-SC-1-13; Boxes 29, 30, 31, 32; 163-186m
#H25 F00-SC-1-14; Boxes 33, 34; 186-197.7m

Area 2, Whittaker

Site 2, 62° 29' 59.2", 124° 49' 37.8"

#H26 F00-S-2-1
#H27 F00-S-2-2
#H28 F00-S-2-3

Area 3: Delorme

Site 1 (Morrow section 47), 62° 48' 01.8", 125° 14' 34.8"

#H29 F00-S-3-1

CANADIAN FOREST OIL LTD.

Basin: Western Canada
ATTN: James Taylor

HGS NO.	SAMPLE ID (1)	SAMPLE ID (2)	TOC AND ROCK-EVAL DATA TOC	S1	S2	S3	TMAX	HI	INTERPRETIVE RATIOS OI	S2/S3	PI	S1/TOC	NOTES Check	Pyrogram
26814	H1	F00-S-1-1	0.70	0.01	0.02	0.67	—	3	82	0.04		0.31	1	c	f
26815	H2	F00-S-1-2	0.67	0.03	0.01	0.12	—	2	18	0.08		0.75	4		f
26816	H3	F00-S-1-3	0.35	0.00	0.00	0.33	—	0	97	0.00	—		0		f
26817	H4	F00-S-1-4	0.21	0.00	0.00	0.14	—	0	64	0.00	—		0		f
26818	H5	F00-S-1-5	0.31	0.00	0.00	0.07	—	0	22	0.00	—		0		f
26819	H6	F00-S-1-6	1.46	0.00	0.02	0.75	—	1	51	0.03		0.00	0		f
26820	H7	F00-S-1-7	0.25	0.02	0.17	0.17	—	68	68	1.00		0.11	8		f
26821	H8	F00-S-1-8	0.16	0.04	0.06	0.07	—	38	44	0.86		0.40	25		f
26822	H9	F00-S-1-9	0.16	0.02	0.01	0.07	—	6	44	0.14		0.67	13	c	f
26823	H10	F00-S-1-10	1.66	0.03	0.09	1.79	—	0	115	0.05		1.00	2		f
26824	H11	F00-S-1-11	0.22	0.00	0.03	0.11	—	15	49	0.30		0.00	0		f
26825	H12	F00-SC-1-1	0.27	0.00	0.00	0.00	—	0	0	—	—		0		f
26826	H13	F00-SC-1-2	0.39	0.02	0.01	0.05	—	3	14	0.20		0.86	5		f
26827	H14	F00-SC-1-3	0.40	0.03	0.00	0.00	—	19	0	—		0.25	8		f
26828	H15	F00-SC-1-4	0.40	0.02	0.01	0.03	—	3	7	0.40		0.85	5		f
26829	H16	F00-SC-1-5	0.93	0.05	0.04	0.04	—	5	4	1.00		0.83	5		f
26830	H17	F00-SC-1-6	0.18	0.01	0.00	0.07	—	18	38	0.48		0.23	6	c	f
26831	H18	F00-SC-1-7	0.10	0.01	0.00	1.27	—	0	1270	0.00		1.00	10		f
26832	H19	F00-SC-1-8	0.72	0.02	0.06	0.16	386 *	8	22	0.36		0.25	3	c	f
26833	H20	F00-SC-1-9	0.37	0.00	0.00	0.05	—	0	14	0.00	—		0		f
26834	H21	F00-SC-1-10	0.86	0.01	0.00	0.00	—	0	0	—		1.00	2		f
26836	H22	F00-SC-1-11	0.12	0.01	0.00	0.00	—	0	0	—		1.00	8		f
26836	H23	F00-SC-1-12	0.22	0.00	0.00	0.00	—	0	0	—	—		0		f
26837	H24	F00-SC-1-13	0.17	0.00	0.00	0.00	—	0	0	—	—		0		f
26838	H25	F00-SC-1-14	0.25	0.00	0.00	0.00	—	0	0	—	—		0		f
26839	H26	F00-S-2-1	0.14	0.04	0.25	0.79	393 *	179	564	0.32		0.14	29	c	ltS2p
26840	H27	F00-S-2-2	0.46	0.01	0.05	0.70	434 *	11	152	0.07		0.17	2		f
26841	H28	F00-S-2-3	0.16	0.02	0.00	0.00	—	0	50	0.00		1.00	13		f
26842	H29	F00-S-3-1	0.13	0.01	0.00	0.00	—	0	69	0.00		1.00	8		f

* Tmax data not reliable due to low kerogen S2 value

TOC = weight percent organic carbon
S1,S2 = mg hydrocarbons/g rock
S3 = mg carbon dioxide/g rock
Tmax = oC

HI = S2*100/TOC
OI = S3*100/TOC
PI = S1/(S1+S2)
S1/TOC = S1*100/TOC

NOTES:

Check
c = sample analysis confirmed
Pyrogram
n = normal
ltS2sh = low temperature S2 shoulder
f = flat

Humble Geochemical Services

P.O. Box 789 • Humble, Texas 77347
218 Higgins Street • Humble, Texas 77338

Telephone: (281) 540-6850 Fax: (281) 540-6854 Fax
E-mail: humble@humble-inc.com Web Site: http://www.humble-inc.com

Geochemical Services for Exploration, Development and Production

FAX

TO: James Taylor
Canadian Forest Oil Ltd.

DATE: March 8, 2001

FAX NO: (403) 292-8060

FROM: Jack D. Burgess

Total number of pages (including this sheet): 7

Please call (281) 540-6850 if this fax was not received in good quality

Message

The following pages detail the graptolite reflectance for 4 samples.

Please let me know if you have any questions. Originals will be mailed to you.

Sincerely,

Jack D. Burgess (OB)

Jack D. Burgess

JDB/ob

Humble Geochemical Services

Division of Humble Instruments & Services, Inc.

P.O. Box 789 • Humble, Texas 77347
218 Higgins Street • Humble, Texas 77338

Telephone: (281) 540-6060 Fax: (281) 540-6064 :Fax
E-mail: humble@humble-inc.com Web Site: http://www.humble-inc.com

Geochemical Services for Exploration, Development and Production

March 8, 2001

Company: Canadian Forest Oil
Calgary, Alberta CANADA

Attn: James R. Taylor

Enclosed are four graptolite reflectance histograms from outcrop samples H-1 F00-S-1-1 Road River shale, and H-6 F00-S-1-6, Site 6; H-10 F00-S-1-10 underground level 930; and H-16 F00-SC-1-5 Hole 94-PC-56. The reflectance values were obtained on particles freed from the rock matrix by acidization, and mounted, ground and polished following ASTM standards for coal. All R_o values are from randomly oriented particles. Interpretation of hydrocarbon generation and preservation zones are found using Figure 10 from Gentzis, de Freitas, Goodarzi, Melchin, and Lenz, 1996, copy attached.

Conclusions

1	Mean random reflectance values for:	H1 = 1.37 Ro	Oil window
		H6 = 2.03 Ro	Wet gas condensate
	Note histogram scale change	H10 = 2.45 Ro	Dry gas
		H16 = 2.30 Ro	Wet gas condensate

2. The variation in reflectance values is a result of the random orientation not accounting for anisotropy, small particle sizes of the graptolites, and the granular, non-granular texture of the graptolites.

The plugs, kerogen slides and unused rocks will be returned to you under separate cover.

Jack Burgess

Reference:

Gentzis, Thomas, T. deFreitas, F. Goodarzi, M. Melchin, and A. Lenz, 1996, Thermal Maturity of Lower Paleozoic Sedimentary Successions in Arctic Canada: AAPG Bulletin, v. 80, no. 7, p. 1065-1083.

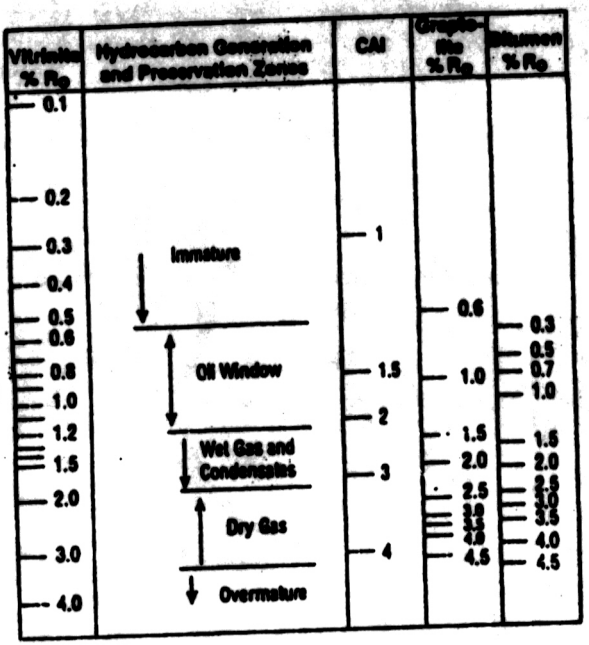
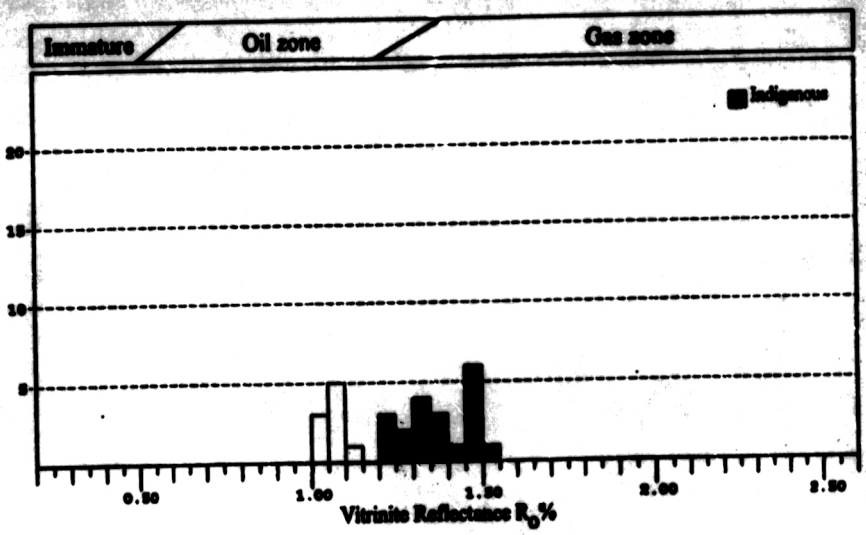


Figure 10—Chart showing the correlation between VR_o, CAI, GR_o, BR_o, and hydrocarbon generation and preservation zones (modified from Cole, 1994).

Reference:

Gentzis, Thomas, T. deFreitas, F. Goodarzi, M. Melchin, and A. Lenz, 1996, Thermal Maturity of Lower Paleozoic Sedimentary Successions in Arctic Canada: AAPG Bulletin, v. 80, no. 7, p. 1065-1083.

Customer: *CANADIAN FOREST OIL LTD.*
Sample ID: *H 1*
Mean depth: *100*
Sample type: *OUTCROP*



Indigenous population statistics

Min: 1.20 Max: 1.50 Std. Dev.: 0.10 Count: 20

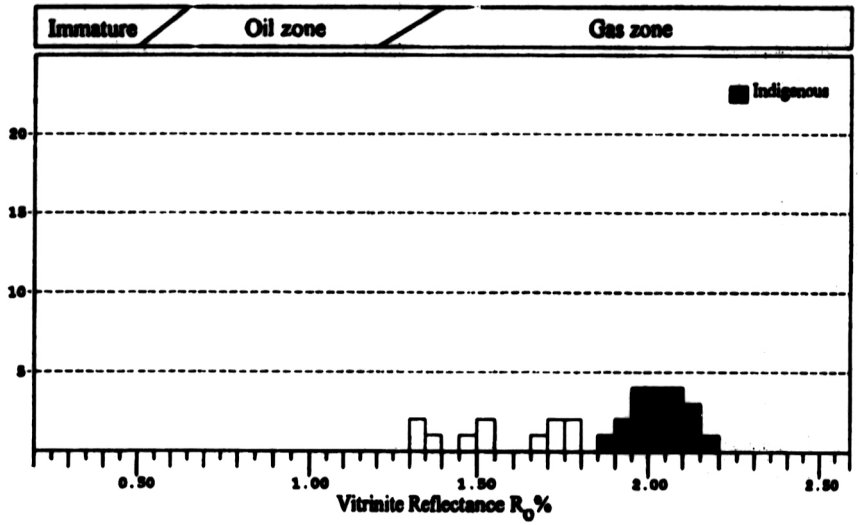
Total population statistics

Mean: 1.27 Min: 1.03 Max: 1.50 Std. Dev.: 0.16 Count: 29

01 - 1.03
02 - 1.04
03 - 1.04
04 - 1.06
05 - 1.06
06 - 1.08
07 - 1.08
08 - 1.09
09 - 1.12
10 - 1.20 <
11 - 1.21 <
12 - 1.22 <
13 - 1.28 <
14 - 1.28 <
15 - 1.30 <
16 - 1.30 <
17 - 1.31 <
18 - 1.34 <
19 - 1.38 <
20 - 1.38 <
21 - 1.38 <
22 - 1.43 <
23 - 1.45 <
24 - 1.45 <
25 - 1.48 <
26 - 1.48 <
27 - 1.48 <
28 - 1.49 <
29 - 1.50 <

Note: Reflectance values rounded to nearest hundredth. [<] indicates indigenous reflectance value

Customer: ***CANADIAN FOREST OIL LTD.***
Sample ID: ***H 6***
Mean depth: ***100***
Sample type: ***CORE***



Indigenous population statistics

Min: 1.87 Max: 2.19 Std. Dev.: 0.08 Count: 19

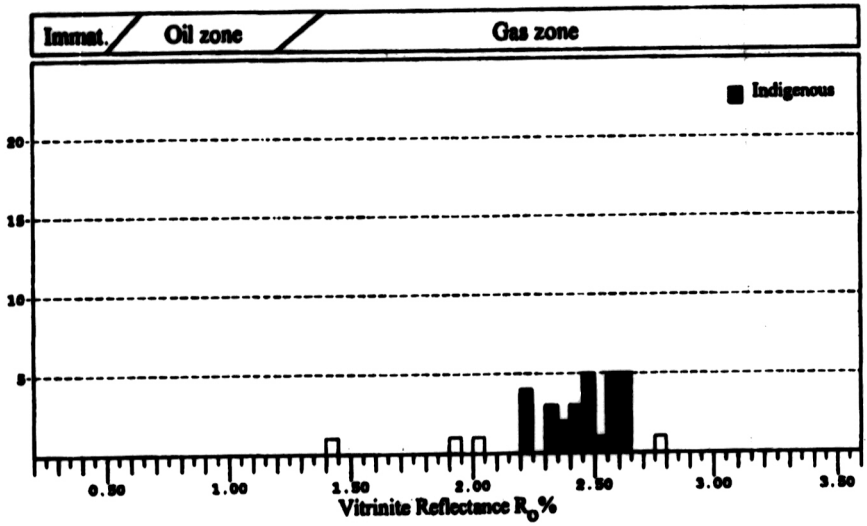
Total population statistics

Mean: 1.86 Min: 1.31 Max: 2.19 Std. Dev.: 0.26 Count: 30

01 - 1.31
02 - 1.32
03 - 1.36
04 - 1.48
05 - 1.52
06 - 1.53
07 - 1.68
08 - 1.70
09 - 1.71
10 - 1.76
11 - 1.77
12 - 1.87 <
13 - 1.90 <
14 - 1.93 <
15 - 1.96 <
16 - 1.98 <
17 - 1.98 <
18 - 1.98 <
19 - 2.01 <
20 - 2.01 <
21 - 2.02 <
22 - 2.03 <
23 - 2.08 <
24 - 2.08 <
25 - 2.08 <
26 - 2.09 <
27 - 2.10 <
28 - 2.10 <
29 - 2.13 <
30 - 2.19 <

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

Customer: ***CANADIAN FOREST OIL LTD.***
Sample ID: ***H 10***
Mean depth: ***100***
Sample type: ***CORE***



Indigenous population statistics

Min: 2.21 Max: 2.63 Std. Dev.: 0.13 Count: 28

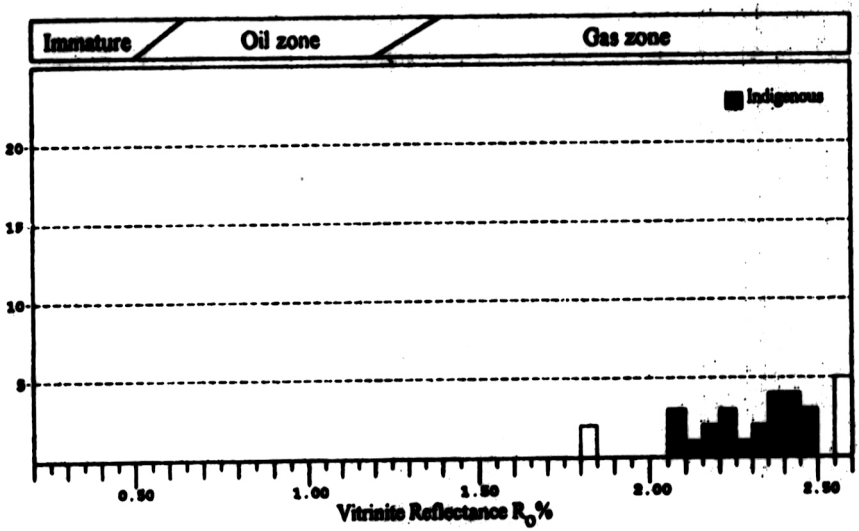
Total population statistics

Mean: 2.40 Min: 1.41 Max: 2.76 Std. Dev.: 0.26 Count: 32

01 - 1.41	21 - 2.54 <
02 - 1.94	22 - 2.55 <
03 - 2.03	23 - 2.56 <
04 - 2.21 <	24 - 2.58 <
05 - 2.22 <	25 - 2.58 <
06 - 2.23 <	26 - 2.59 <
07 - 2.24 <	27 - 2.60 <
08 - 2.33 <	28 - 2.60 <
09 - 2.33 <	29 - 2.61 <
10 - 2.34 <	30 - 2.61 <
11 - 2.36 <	31 - 2.63 <
12 - 2.36 <	32 - 2.76
13 - 2.41 <	
14 - 2.42 <	
15 - 2.43 <	
16 - 2.45 <	
17 - 2.46 <	
18 - 2.47 <	
19 - 2.48 <	
20 - 2.49 <	

Note: Reflectance values rounded to nearest hundredth, [<] indicates indigenous reflectance value

Customer: *CANADIAN FOREST OIL LTD.*
Sample ID: *H 16*
Mean depth: *100*
Sample type: *CORE*



Indigenous population statistics

Min: 2.05 Max: 2.48 Std. Dev.: 0.14 Count: 23

Total population statistics

Mean: 2.31 Min: 1.83 Max: 2.58 Std. Dev.: 0.20 Count: 30

01 - 1.83	21 - 2.43 <
02 - 1.84	22 - 2.43 <
03 - 2.05 <	23 - 2.45 <
04 - 2.08 <	24 - 2.45 <
05 - 2.08 <	25 - 2.48 <
06 - 2.10 <	26 - 2.55
07 - 2.16 <	27 - 2.55
08 - 2.19 <	28 - 2.55
09 - 2.21 <	29 - 2.58
10 - 2.22 <	30 - 2.58
11 - 2.24 <	
12 - 2.27 <	
13 - 2.31 <	
14 - 2.32 <	
15 - 2.37 <	
16 - 2.39 <	
17 - 2.39 <	
18 - 2.39 <	
19 - 2.41 <	
20 - 2.42 <	

Note: Reflectance values rounded to nearest hundredth. [<] indicates indigenous reflectance value

Appendix 2.

Conodont Study

October 6, 2000

2000 Conodont Study: University of Victoria -Canadian Forest Oil

CONFIDENTIAL

Centre for Earth and Ocean Research (CEOR)
University of Victoria
Petch Building, Room 169
P.O. Box 3055
Victoria, BC, Canada
V8W 3P6

Attention: Dr. Chris Barnes

Dear Chris:

Subject: 2000 Information package

The paperwork for the 'Conodont Study: University of Victoria -Canadian Forest Oil' from last year is probably applicable to the 2000 study. The only change is to extend the confidentiality period on the 2000 study to July 30, 2006 to coincide with the expiry of confidentiality for the National Energy Board Report on the 2000 Field Party. Enclosed, for your information, and guidance in completing the report, is a sample list with notes on locations. All ages and correlations shown are tentative pending results of the conodont analysis.

As you know I was prevented, by medical reasons, from being in the field in the 2000 season. Todd Burlingame of Yellowknife, Tim Seeley a Canadian Forest newly hired geologist, and a First Nations representative from Nahanni Butte were in the field. Outcrop sampling in 2000 was done on the basis of and correlated to already described Geologic Survey of Canada sections (recorded in Morrow and Cook Memoir 412) rather than the new fresh section measurements of last year. Also a number of diamond drill core samples from the Prairie Creek lead-zinc mine were collected courtesy of the Canadian Zinc Corporation. The compacted black shales of the Road River from the cores are not calcareous. I have includes two representative samples of these (sample serial numbers C11 and C12) to see if extraction is practical. Some of the outcrop shales may also pose problems.

Please call or e-mail if further information is needed.

Regards,

Canadian Forest Oil Ltd.

James R. (Jim) Taylor, P. Geol.

Attachment

Confidential

Conodont Study

Area 1, Prairie Creek Mine site
Road River Shale

#C1 F00-S-1-1
#C2 F00-S-1-2
#C3 F00-S-1-4
#C4 F00-S-1-5
#C5 F00-S-1-6
#C6 F00-S-1-7
#C7 F00-S-1-8
#C8 F00-S-1-9
#C9 F00-S-1-10
#C10 F00-S-1-11

CORE SAMPLES
Road River shale

Hole 94-PC-56

#C11 F00-SC-1-3; Boxes 26, 27, 28, 29; 138.4-159.3m

Hole 94-PC-64

#C12 F00-SC-1-9; Boxes 13, 14, 15, 16; 71-94.1m

Area 2, Whittaker

Sample Site 1 (Morrow Transverse 2A) 62° 30' 15.7", 124° 46' 08.6"
Lower Devonian Delorme

#C13 F00-C-2-1
#C14 F00-C-2-2
#C15 F00-C-2-3
#C16 F00-C-2-4
#C17 F00-C-2-5

Area 3: Delorme

Sample Site 1 (Morrow section 47), 62° 48' 01.8", 125° 14' 34.8"

#C18 F00-C-3-1
#C19 F00-C-3-2

REPORT ON CONODONTS RECOVERED FROM 19 SAMPLES COLLECTED BY THE 2000 NWT FIELD PARTY FROM NAHANNI AREA, NWT

Prepared by: Christopher R. Barnes CM, FRSC, Ph.D., P. Geol., Centre for Earth and Ocean Research, University of Victoria, P.O. Box 3055, Victoria, B. C. V8W 3P6

Prepared for: James R. (Jim) Taylor, P. Geol., Canadian Forest Oil Ltd.
Suite 600, 800 - 6th Avenue S.W., Calgary, Alberta, Canada T2P 3G3

Introduction.

In correspondence, Jim Taylor wrote (email, 4 October, 2000) that "I have 23 samples (at least) from the 2000 NWT field party that could use conodont work. A number of these are from Road River (Silurian?) core taken from diamond drill core at the Prairie Creek Mine (located just north of the Nahanni National Park). This is compacted very black shale in most cases. " The batch of samples were shipped from Calgary and arrived on 27 October, 2000.

Laboratory preparation.

The 19 samples received were each weighed, and the weight of the later undissolved fraction also recorded. They were dissolved slowly in weak (10%) acetic acid with several acid changes over the period of several weeks. The undissolved fraction was wet sieved, material coarser than an 16 mesh sieve was retained; the material for further study was retained on a 200 mesh sieve; finer material was washed away. The residue on the 200-mesh sieve was dried and carefully separated with heavy liquid (sodium polytungstate). Light and heavy fractions were dried and packaged separately. The heavy fraction would include any conodonts present and this was picked for conodonts under a binocular microscope using special trays and brushes. Any conodonts were retained in micropaleontology microslides, sorted taxonomically and glued, and then identified using the current research literature and using the results, reference collections, and expertise from recent and ongoing studies of Lower Paleozoic conodonts from the Canadian Cordillera, Arctic, and eastern Canada. Following the identifications, an age assignment was established using the known stratigraphic ranges of the species present. This report summarizes all the available conodont data and the age interpretation for conodont faunas in each sample.

Conodont faunas recovered and interpreted age assignment for samples.

C1 F00-S-1-1 (2000gm; 796 undissolved)
No conodonts.

C2 FOO-S-1-2 (800 gm; 446 undissolved)
No conodonts.

C3 FOO-S-1-4 (2000gm; 0 undissolved)
Pterospathodus amorphognathoides (4)
Aspidognathus tubercalatus (1)
Carniodus carnulus (12)
Aspelundia fluegeli (65)
Panderodus unicostatus (278)
Walliserodus bicostatus (46)
Decoriconus fragilis (3)
Ozarkodina sp. (7)
Coniform (n. gen.?) (36)

Total number of conodonts: 452.

Age assignment: Pterospathodus amorphognathoides Zone, upper Telychian-lower Sheinwoodian stages (=uppermost Llandovery-lowest Wenlock; =mid Lower Silurian).

C4 FOO-S-1-5 (500gm; 5 undissolved)
Aspelundia fluegeli (1)
Panderodus unicostatus (11)
Walliserodus bicostatus (2)
Coniform (n. gen.?) (2)

Total number of conodonts: 16

Age assignment: Llandovery, possibly ranging into lower Wenlock (Lower Silurian).

C5 FOO-S-1-6 (1500gm; 357 undissolved)
Pterospathodus celloni (3)
Panderodus unicostatus (18)
Walliserodus costatus (8)

Total number of conodonts: 29

Age assignment: Pterospathodus celloni Zone, middle Telychian (=upper Llandovery).

C6 FOO-S-1-7 (1100gm; 169 undissolved)
Dapsilodus obliquicostatus (1)
Fragment indeterminate (1)

Number of conodonts: 2

Age assignment: Silurian

C7 FOO-S-1-8 (1100gm; 7 undissolved)
Oulodus sp. (4)
Ozarkodina sp. (1)

Panderodus unicostatus (20)
Walliserodus curvatus (1)

Total number of conodonts: 26

Age assignment: Silurian

C8 FOO-S-1-9 (1400gm; 20 undissolved)
Pterospathodus amorphognathoides (3)
Pterospathodus celloni (2)
Carniodus carnulus (17)
Aspelundia fluegeli (42)
Panderodus unicostatus (71)
Panderodus recurvatus (15)
Walliserodus bicostatus (66)
Ozarkodina sp. (2)
Coniform (n. gen.) (12)

Total number of conodonts: 230

Age assignment: Pterospathodus amorphognathoides Zone, late Telychian-early Sheinwoodian (latest Llandovery-earliest Wenlock) (=mid Lower Silurian).

C9 FOO-S-1-10 (1300gm; 402 undissolved)
Panderodus unicostatus (1)
Aspelundia sp. (3)

Total number of conodonts: 4

Age assignment: Lower Silurian.

C10 FOO-S-1-11 (1100gm; 2 undissolved)
Pterospathodus amorphognathoides (13)
Carniodus carnulus (3)
Aspelundia fluegeli (73)
Panderodus unicostatus (138)
Walliserodus bicostatus (30)
Drepanodontiform element (1)
Coniform (n. gen.) (29)

Total number of conodonts: 287

Age assignment: Pterospathodus amorphognathoides Zone, late Telychian-early Sheinwoodian (latest Llandovery-earliest Wenlock) (=mid Lower Silurian).

C11 FOO-SC-1-3 (1800gm; 851 undissolved)

Panderodus unicostatus (1)

Total number of conodonts: 1

Age assignment: Silurian-Lower Devonian.

C12 FOO-SC-1-9 (1800gm; 526 undissolved)
Pterospathodus pennatus (1)
Pterospathodus sp. (3)
Aulocognathus bullatus (1)
Aspelundia fluegeli (24)
Carniodus carnulus (3)
Panderodus unicostatus (37)
Walliserodus bicostatus (15)

Total number of conodonts: 84

Age assignment: Pterospathodus celloni Zone, middle Telychian (=upper Llandovery).

C13 FOO-C-2-1 (2000gm; 100 undissolved)
No conodonts

C14 FOO-C-2-2 (1500gm; 2gm undissolved)
No conodonts

C15 FOO-C-2-3 (2000gm; 105 undissolved)
Aspelundia cf. A. fluegeli (1)
Ramiform fragment (1)

Total number of conodonts: 2

Age assigned: Lower Silurian

C16 FOO-C-2-4 (2500gm; 355 undissolved)
Ozarkodina cf. O. remscheidensis (2)
Coniform indeterminate (2)

Total number of conodonts: 2

Age assigned: Upper Silurian (Pridolian)-Lower Devonian (mid-Lochovian)

C17 FOO-C-2-5 (2500gm; 462 undissolved)
No conodonts

C18 FOO-C-3-1 (2000gm ; 391 undissolved)
No conodonts

C19 FOO-C-3-2 (2079gm; 579 undissolved)
Ozarkodina? sp. (1)
Panderodus unicostatus (2)

Total number of conodonts: 3

Age assignment: Silurian-Lower Devonian.

Summary comments:
Nineteen (19) conodont samples were processed and most contained conodonts. A total of 1138 conodonts was recovered and identified. This was a considerable improvement from the first batch of samples in 1999. In your letter of 6 October, 2000, you indicated that the samples came from three different areas; I will comment on each.

Area 1, Prairie Creek Mine site, Road River Shale (C1 to C10):
Several of these samples contain excellent conodont zonal species and seem to be of a similar age: Pterospathodus amorphognathoides Zone, late Telychian-early Sheinwoodian (latest Llandovery-earliest Wenlock) (=mid Lower Silurian). Some of the samples contain less diagnostic fauna but are not inconsistent with this age.

Area 1, Prairie Creek Mine site, Core samples, Road River Shale (C11 and C12):
You indicated that these two samples were from compacted black shale, non-calcareous, which were included to see if conodont extraction was practical. In fact, they must have been partially calcareous, since at least half the sample was dissolved. Both contained conodonts, with one (C12) providing a precise conodont zonal age: Pterospathodus celloni Zone, middle Telychian (=upper Llandovery).

Area 2, Whittaker Anticline (C13-C17):
These samples were either barren or yielded small faunas that indicated Lower and Upper Silurian-Lower Devonian ages, likely being Pridoli (C15) and younger than the samples from Area 1.

Area 3, Delorme Fault (C18-C19): One sample was barren and one had a small relatively undiagnostic fauna, likely of Upper Silurian-Lower Devonian age.

C.R. Barnes

9 March 2001

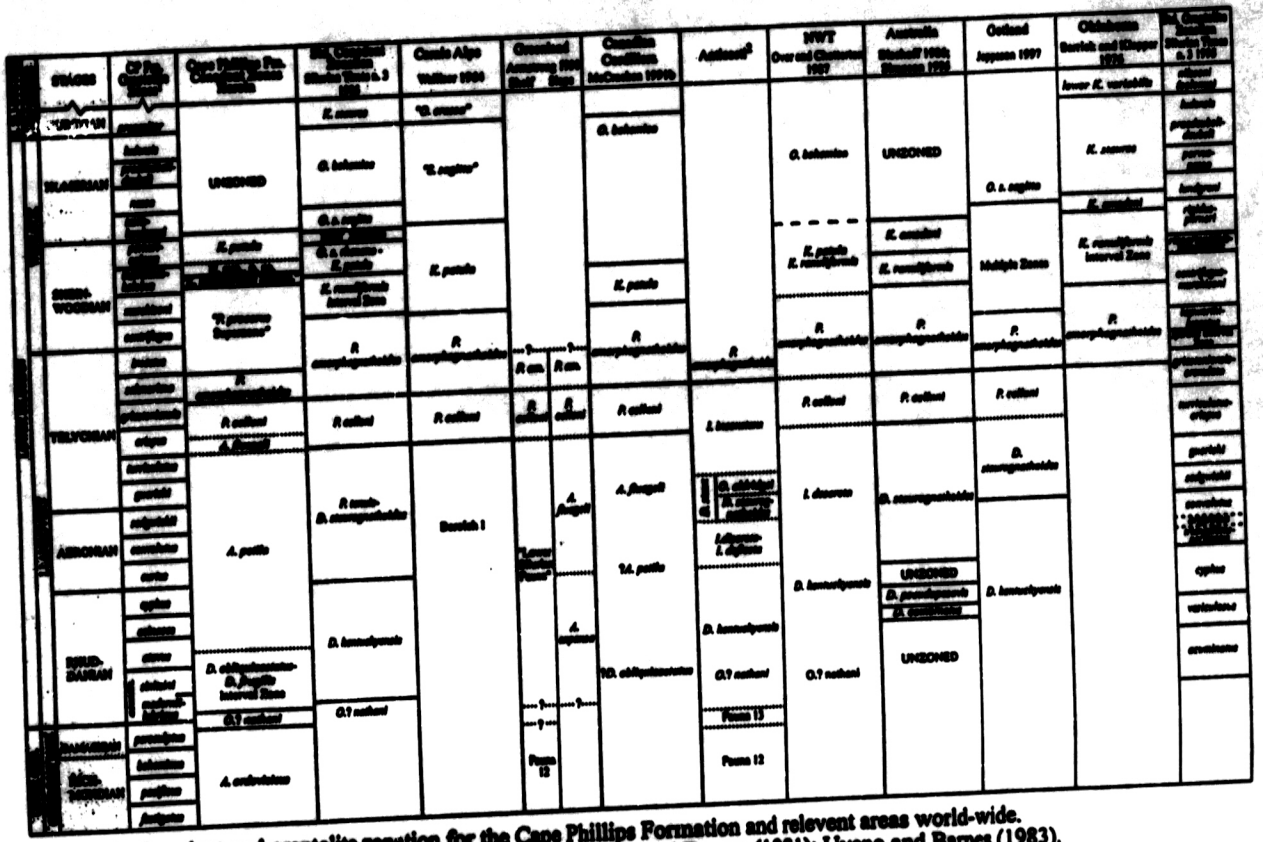


Figure 5. Conodont and graptolite zonation for the Cape Phillips Formation and relevent areas world-wide. [1]M. Melchin, A. Lenz (pers. comm. 2000); [2]McCracken and Barnes (1981); Uyeno and Barnes (1983).

Appendix 3.

Field Photograph Index and Captions

Field Photographs
(see the compact disc in the pocket in the back of this report)

PHOTO INDEX WITH CAPTIONS
Canadian Forest Oil Ltd. NAHANNI BUTTE FIELD PROGRAM
2000

Roll 1:

[CD-A Img00001.jpg – Img00025.jpg]

Index card number: 0-4- Arrival to Prairie Creek Mine Site

5- Cadillac formation (Mine site)

6-8- Twisted Mountain

9- Prairie Creek Airport

10-11- Road River Shales (Mine site)

12- Mine site (looking north)

13- Personnel (Angus Konisenta)

14-15- Twisted Mountain

16-17- Root River shales (Morrow Section 25)

18- Personnel (Tim Seeley)

19- Morrow Section 23 (looking north from Morrow Sec. 24)

20-21- Tundra Thrust

22-24- Cadillac Formation (buff weathering)

25- Sunblood formation (Whittaker Anticline)

Roll 2:

[CD-A Img00027.jpg – Img00050.jpg]

Index card Number: 00- Personnel (Alan Taylor (Canadian Zinc)

0- Personnel (Todd Burlingame)

1- Sunblood formation (Whittaker Anticline)

2- View to Northeast

3- View to Southwest

4- Pastel Creek section (view to south)

5- Pastel Creek section (view to east)

6- Whittaker/Road River contact (view to southwest)

7- Whittaker/Road River contact (view to north)

8- Area 3 (view north)

9- Area 3 (view northeast)

10- Area 3 (view to south)

11- Area 3 (view to east)

12- Area 3 (view to west)

13- Area 3- (view to south)

14- Area 3- (view to north)

15- Area 3 (view to west)

16- Area 2 (62^0 29' 124^0 55', looking west)

17- Area 2 (62^0 29' 124^0 55', looking north)

18- Area 2 (62^0 29' 124^0 55', looking south)

19-23- Sheep shots

Roll 3:

[CD-B Img00052.jpg – Img00073.jpg]

Index card number: 0-11- Sheep shots

12-13- Ram Plateau

14-15- Battlement Thrust

16-17- Ram Plateau

18-19- Scenery shots

20- Mine adit

Roll 4:

[CD-A Img00051.jpg – Img00075.jpg]

Index card number: 0-1- Mine site (view to south)

2-3- Personnel (Todd Burlingame)

4-5- Road River shales (Morrow section 11)

6-8- Mine site

9-11- Personnel (Tim Seeley, Angus Konisenta)

12-14- Battlement Thrust (view to north)

15-19- Battlement Thrust (view to west)

20- Ram Plateau

21-23- Funeral Shales (61^0 49' 125^0 37')

24 Personnel (Tim Seely, Angus Konisenta)

Roll 5:

[CD-B Img00026.jpg – Img00051.jpg]

Index card number: 0- Funeral Formation

1-2- North of Grainger River along Nahanni Thrust)

3-4- Little Doctor Lake

5- Contact between Mt. Kindle/Silurian Sandstone (view north, 61^0 55' 123^0 20')

6-7- Mt. Kindle Formation

8- Personnel (Tim Seeley, Angus Konisenta)

9-10- Contact between Arrica and Silurian sandstone (61^0 55' 123^0 20')

11-12- Contact between Silurian sandstone and Mt. Kindle formation (61^0 55' 123^0 20')

13-25- Prairie Creek Mine winter road (see map)

Roll 6:

[CD-B Img00001.jpg – Img00025.jpg]

Index card number- 0-13- Prairie Creek Mine winter road (see map)

14-18- Scenery shots

19- Nahanni Thrust

20-21- Little Doctor Lake

22-23- Lone Mountain

24- Nahanni Thrust