Fording River
1986 Exploration Program
Confidential Petrographic
Analyses

CONFIDENTIAL

726

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH "2056 "K" Seam

SAMPLE IDENTIFICATION

Laboratory number M3516
Sample PG-86-71
Ash 8.10% Sulphur 0.51%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.92
Composition Balance Index.....	0.94
Calculated Strength Index.....	3.45
Calculated Stability Index.....	45
Estimated Coke Strength DI 30/15.....	91.9
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	31
V - 9.....%	62
V - 10.....%	7

REACTIVE COMPONENTS

Vitrinite.....%	59.8
Exinite.....%	5.0
Reactive Semifusinite.....%	9.0
Total Reactives.....%	73.8

INERT COMPONENTS

Macrinite.....%	5.0
Inert Semifusinite.....%	12.8
Fusinite.....%	2.4
Inertodetrinite.....%	1.5
Mineral Matter.....%	4.5
Total Inerts.....%	26.2

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2051 40·1-41·1

SAMPLE IDENTIFICATION

Laboratory number M3517
Sample PG-86-72
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.86
Composition Balance Index.....	0.26
Calculated Strength Index.....	2.82
Calculated Stability Index.....	6
Estimated Coke Strength DI 30/15.....	66.6
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	10
V - 8.....%	65
V - 9.....%	25

REACTIVE COMPONENTS

Vitrinite.....%	81.9
Exinite.....%	4.2
Reactive Semifusinite.....%	5.3
Total Reactives.....%	91.4

INERT COMPONENTS

Macrinite.....%	1.8
Inert Semifusinite.....%	0.6
Fusinite.....%	0.3
Inertodetrinite.....%	0.8
Oxidized Coal.....%	0.1
Mineral Matter.....%	5.0
Total Inerts.....%	8.6

Analysis completed: December 20, 1986 9:46 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2051 80·3 - 83·7

SAMPLE IDENTIFICATION

Laboratory number M3518
Sample PG-86-73
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.90
Composition Balance Index.....	0.63
Calculated Strength Index.....	3.22
Calculated Stability Index.....	37
Estimated Coke Strength DI 30/15.....	89.1
Predicted Free Swelling Index.....	7.5

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	2
V - 8.....%	47
V - 9.....%	50
V - 10.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	67.9
Exinite.....%	7.0
Reactive Semifusinite.....%	6.1
Total Reactives.....%	81.1

INERT COMPONENTS

Macrinite.....%	3.7
Inert Semifusinite.....%	6.7
Fusinite.....%	0.9
Inertodetrinite.....%	2.6
Mineral Matter.....%	5.0
Total Inerts.....%	18.9

Analysis completed: December 20, 1986 9:55 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH "2051 "K"

SAMPLE IDENTIFICATION

Laboratory number M3519
Sample PG-86-74
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.89
Composition Balance Index.....	0.61
Calculated Strength Index.....	3.17
Calculated Stability Index.....	36
Estimated Coke Strength DI 30/15.....	88.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	2
V - 8.....%	53
V - 9.....%	44
V - 10.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	68.7
Exinite.....%	5.3
Reactive Semifusinite.....%	7.6
Total Reactives.....%	81.5

INERT COMPONENTS

Macrinite.....%	3.4
Inert Semifusinite.....%	7.7
Fusinite.....%	0.9
Inertodetrinite.....%	1.5
Mineral Matter.....%	5.0
Total Inerts.....%	18.5

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH "2051 117 -119 m.

SAMPLE IDENTIFICATION

Laboratory number M3520
Sample PG-86-75
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.92
Composition Balance Index.....	0.71
Calculated Strength Index.....	3.42
Calculated Stability Index.....	43
Estimated Coke Strength DI 30/15.....	91.3
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	24
V - 9.....%	72
V - 10.....%	3

REACTIVE COMPONENTS

Vitrinite.....%	68.5
Exinite.....%	2.4
Reactive Semifusinite.....%	7.8
Total Reactives.....%	78.8

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	10.6
Fusinite.....%	2.1
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	21.2

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2052 34.2 · 366 m.

SAMPLE IDENTIFICATION

Laboratory number M3522
Sample PG-86-77
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.86
Composition Balance Index.....	0.51
Calculated Strength Index.....	2.97
Calculated Stability Index.....	28
Estimated Coke Strength DI 30/15.....	84.4
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	9
V - 8.....%	69
V - 9.....%	21
V - 10.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	70.7
Exinite.....%	8.3
Reactive Semifusinite.....%	5.7
Total Reactives.....%	84.6

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	3.6
Fusinite.....%	2.0
Inertodetrinite.....%	2.8
Mineral Matter.....%	5.0
Total Inerts.....%	15.4

Analysis completed: December 20, 1986 10:02 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2052 "K" Seam

SAMPLE IDENTIFICATION

Laboratory number M3523
Sample PG-86-78
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.92
Composition Balance Index.....	0.75
Calculated Strength Index.....	3.39
Calculated Stability Index.....	43
Estimated Coke Strength DI 30/15.....	91.3
Predicted Free Swelling Index.....	7.5

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	30
V - 9.....%	65
V - 10.....%	4

REACTIVE COMPONENTS

Vitrinite.....%	64.6
Exinite.....%	5.6
Reactive Semifusinite.....%	7.8
Total Reactives.....%	78.0

INERT COMPONENTS

Macrinite.....%	2.8
Inert Semifusinite.....%	10.9
Fusinite.....%	2.0
Inertodetrinite.....%	1.3
Mineral Matter.....%	5.0
Total Inerts.....%	22.0

Analysis completed: December 20, 1986 10:09 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2052 J3 Seam

SAMPLE IDENTIFICATION

Laboratory number M3524
Sample PG-86-79
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.96
Composition Balance Index.....	0.66
Calculated Strength Index.....	3.55
Calculated Stability Index.....	45
Estimated Coke Strength DI 30/15.....	91.9
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	7
V - 9.....%	74
V - 10.....%	19

REACTIVE COMPONENTS

Vitrinite.....%	68.8
Exinite.....%	2.4
Reactive Semifusinite.....%	8.4
Total Reactives.....%	79.7

INERT COMPONENTS

Macrinite.....%	2.3
Inert Semifusinite.....%	8.4
Fusinite.....%	2.9
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	20.3

Analysis completed: December 20, 1986 10:16 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH 2052 "½" seam

SAMPLE IDENTIFICATION

Laboratory number M3525
Sample PG-86-80
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.93
Composition Balance Index.....	0.53
Calculated Strength Index.....	3.35
Calculated Stability Index.....	38
Estimated Coke Strength DI 30/15.....	89.5
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	3
V - 8.....%	22
V - 9.....%	59
V - 10.....%	16

REACTIVE COMPONENTS

Vitrinite.....%	72.0
Exinite.....%	3.3
Reactive Semifusinite.....%	8.0
Total Reactives.....%	83.3

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	7.5
Fusinite.....%	1.0
Inertodetrinite.....%	1.4
Mineral Matter.....%	5.0
Total Inerts.....%	16.7

Analysis completed: December 20, 1986 10:24 AM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #291 95.5 - 99m

SAMPLE IDENTIFICATION

Laboratory number M3536
Sample PG-86-87
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.94
Composition Balance Index.....	0.49
Calculated Strength Index.....	3.35
Calculated Stability Index.....	37
Estimated Coke Strength DI 30/15.....	89.1
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	18
V - 9.....%	68
V - 10.....%	13

REACTIVE COMPONENTS

Vitrinite.....%	71.8
Exinite.....%	6.8
Reactive Semifusinite.....%	5.6
Total Reactives.....%	84.2

INERT COMPONENTS

Macrinite.....%	1.6
Inert Semifusinite.....%	5.7
Fusinite.....%	2.2
Inertodetrinite.....%	1.3
Mineral Matter.....%	5.0
Total Inerts.....%	15.8

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #291 Seam 14L

SAMPLE IDENTIFICATION

Laboratory number M3537
Sample PG-86-88
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.98
Composition Balance Index.....	0.79
Calculated Strength Index.....	3.69
Calculated Stability Index.....	50
Estimated Coke Strength DI 30/15.....	93.1
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	1
V - 9.....%	60
V - 10.....%	39

REACTIVE COMPONENTS

Vitrinite.....%	62.2
Exinite.....%	4.4
Reactive Semifusinite.....%	9.7
Total Reactives.....%	76.2

INERT COMPONENTS

Macrinite.....%	2.7
Inert Semifusinite.....%	12.4
Fusinite.....%	2.1
Inertodetrinite.....%	1.5
Mineral Matter.....%	5.0
Total Inerts.....%	23.8

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #292 "15" Seam

SAMPLE IDENTIFICATION

Laboratory number M3538
Sample PG-86-89
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.99
Composition Balance Index.....	0.74
Calculated Strength Index.....	3.67
Calculated Stability Index.....	49
Estimated Coke Strength DI 30/15.....	92.9
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	3
V - 9.....%	51
V - 10.....%	46

REACTIVE COMPONENTS

Vitrinite.....%	67.8
Exinite.....%	2.9
Reactive Semifusinite.....%	6.5
Total Reactives.....%	77.3

INERT COMPONENTS

Macrinite.....%	2.7
Inert Semifusinite.....%	10.2
Fusinite.....%	3.0
Inertodetrinite.....%	1.8
Mineral Matter.....%	5.0
Total Inerts.....%	22.7

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #292 Seam 14L

SAMPLE IDENTIFICATION

Laboratory number M3539
Sample PG-86-90
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	1.00
Composition Balance Index		0.65
Calculated Strength Index		3.69
Calculated Stability Index		48
Estimated Coke Strength DI 30/15		92.7
Predicted Free Swelling Index		8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8	%	1
V - 9	%	42
V - 10	%	55
V - 11	%	2

REACTIVE COMPONENTS

Vitrinite	%	66.7
Exinite	%	3.0
Reactive Semifusinite	%	9.5
Total Reactives	%	79.2

INERT COMPONENTS

Macrinite	%	1.7
Inert Semifusinite	%	11.0
Fusinite	%	1.2
Inertodetrinite	%	1.9
Mineral Matter	%	5.0
Total Inerts	%	20.8

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #292 258.5 - 263.5

SAMPLE IDENTIFICATION

Laboratory number M3540
Sample PG-86-91
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.05
Composition Balance Index.....	0.56
Calculated Strength Index.....	3.80
Calculated Stability Index.....	49
Estimated Coke Strength DI 30/15.....	92.9
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	8
V - 10.....%	82
V - 11.....%	10

REACTIVE COMPONENTS

Vitrinite.....%	70.3
Exinite.....%	1.3
Reactive Semifusinite.....%	9.9
Total Reactives.....%	81.4

INERT COMPONENTS

Macrinite.....%	1.3
Inert Semifusinite.....%	7.8
Fusinite.....%	2.7
Inertodetrinite.....%	1.9
Mineral Matter.....%	5.0
Total Inerts.....%	18.6

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH 2127 50 - 53 m

SAMPLE IDENTIFICATION

Laboratory number M3590
Sample PG-86-103
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.87
Composition Balance Index.....	0.34
Calculated Strength Index.....	2.63
Calculated Stability Index.....	5
Estimated Coke Strength DI 30/15.....	65.6
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	5
V - 8.....%	66
V - 9.....%	28
V - 10.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	71.4
Exinite.....%	7.4
Reactive Semifusinite.....%	10.2
Total Reactives.....%	89.1

INERT COMPONENTS

Macrinite.....%	1.2
Inert Semifusinite.....%	2.3
Fusinite.....%	1.3
Inertodetrinite.....%	1.2
Mineral Matter.....%	5.0
Total Inerts.....%	10.9

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2127 65-67.5m

SAMPLE IDENTIFICATION

Laboratory number M3591
Sample PG-86-104
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.85
Composition Balance Index.....	0.40
Calculated Strength Index.....	2.91
Calculated Stability Index.....	22
Estimated Coke Strength DI 30/15.....	80.5
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 6.....%	2
V - 7.....%	14
V - 8.....%	62
V - 9.....%	20
V - 10.....%	2

REACTIVE COMPONENTS

Vitrinite.....%	68.6
Exinite.....%	8.6
Reactive Semifusinite.....%	10.1
Total Reactives.....%	87.4

INERT COMPONENTS

Macrinite.....%	1.3
Inert Semifusinite.....%	3.9
Fusinite.....%	0.9
Inertodetrinite.....%	1.6
Mineral Matter.....%	5.0
Total Inerts.....%	12.6

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2127 1775 - 1825

SAMPLE IDENTIFICATION

Laboratory number M3594
Sample PG-86-107
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.93
Composition Balance Index.....	0.87
Calculated Strength Index.....	3.46
Calculated Stability Index.....	45
Estimated Coke Strength DI 30/15.....	91.9
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	27
V - 9.....%	68
V - 10.....%	5

REACTIVE COMPONENTS

Vitrinite.....%	54.7
Exinite.....%	6.7
Reactive Semifusinite.....%	13.8
Total Reactives.....%	75.2

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	13.2
Fusinite.....%	3.1
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	24.8

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH# 2127 1995 - 2025

SAMPLE IDENTIFICATION

Laboratory number M3595
Sample PG-86-108
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	0.95
Composition Balance Index		0.81
Calculated Strength Index		3.58
Calculated Stability Index		47
Estimated Coke Strength DI 30/15		92.4
Predicted Free Swelling Index		7.5

DISTRIBUTION OF VITRINITE TYPES

V - 8	%	13
V - 9	%	66
V - 10	%	20
V - 11	%	1

REACTIVE COMPONENTS

Vitrinite	%	60.5
Exinite	%	4.4
Reactive Semifusinite	%	11.3
Total Reactives	%	76.1

INERT COMPONENTS

Macrinite	%	3.2
Inert Semifusinite	%	11.3
Fusinite	%	2.4
Inertodetrinite	%	2.0
Mineral Matter	%	5.0
Total Inerts	%	23.9

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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2127 295.5-299.5

SAMPLE IDENTIFICATION

Laboratory number M3599
Sample PG-86-112
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.00
Composition Balance Index.....	0.65
Calculated Strength Index.....	3.67
Calculated Stability Index.....	47
Estimated Coke Strength DI 30/15.....	92.4
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	2
V - 9.....%	44
V - 10.....%	53
V - 11.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	65.5
Exinite.....%	3.6
Reactive Semifusinite.....%	10.2
Total Reactives.....%	79.3

INERT COMPONENTS

Macrinite.....%	1.1
Inert Semifusinite.....%	10.9
Fusinite.....%	2.1
Inertodetrinite.....%	1.6
Mineral Matter.....%	5.0
Total Inerts.....%	20.7

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 1471 "18" Seam

SAMPLE IDENTIFICATION

Laboratory number M3602
Sample PG-86-115
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.97
Composition Balance Index.....	0.48
Calculated Strength Index.....	3.47
Calculated Stability Index.....	40
Estimated Coke Strength DI 30/15.....	90.3
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	3
V - 9.....%	69
V - 10.....%	28

REACTIVE COMPONENTS

Vitrinite.....%	70.3
Exinite.....%	10.1
Reactive Semifusinite.....%	3.8
Total Reactives.....%	84.2

INERT COMPONENTS

Macrinite.....%	1.3
Inert Semifusinite.....%	5.3
Fusinite.....%	1.8
Inertodetrinite.....%	2.3
Mineral Matter.....%	5.0
Total Inerts.....%	15.8

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 1469 "18" Seam

SAMPLE IDENTIFICATION

Laboratory number M3603
Sample PG-86-116
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.01
Composition Balance Index.....	0.75
Calculated Strength Index.....	3.74
Calculated Stability Index.....	50
Estimated Coke Strength DI 30/15.....	93.1
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	1
V - 9.....%	40
V - 10.....%	56
V - 11.....%	3

REACTIVE COMPONENTS

Vitrinite.....%	60.7
Exinite.....%	5.4
Reactive Semifusinite.....%	10.6
Total Reactives.....%	76.7

INERT COMPONENTS

Macrinite.....%	1.0
Inert Semifusinite.....%	12.8
Fusinite.....%	2.2
Inertodetrinite.....%	2.3
Mineral Matter.....%	5.0
Total Inerts.....%	23.3

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #1468 "18" Seam

SAMPLE IDENTIFICATION

Laboratory number M3605
Sample PG-86-118
Ash 9.30% Sulphur 0.50%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.05
Composition Balance Index.....	0.84
Calculated Strength Index.....	3.93
Calculated Stability Index.....	54
Estimated Coke Strength DI 30/15.....	93.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	14
V - 10.....%	70
V - 11.....%	16

REACTIVE COMPONENTS

Vitrinite.....%	61.5
Exinite.....%	3.5
Reactive Semifusinite.....%	9.6
Total Reactives.....%	74.6

INERT COMPONENTS

Macrinite.....%	4.2
Inert Semifusinite.....%	11.1
Fusinite.....%	2.2
Inertodetrinite.....%	2.7
Mineral Matter.....%	5.2
Total Inerts.....%	25.4

DAVID E. PEARSON & ASSOCIATES LTD.,
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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH 2119 14-17 m

SAMPLE IDENTIFICATION

Laboratory number M3606
Sample PG-86-119
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.93
Composition Balance Index.....	1.01
Calculated Strength Index.....	3.51
Calculated Stability Index.....	46
Estimated Coke Strength DI 30/15.....	92.2
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	24
V - 9.....%	67
V - 10.....%	9

REACTIVE COMPONENTS

Vitrinite.....%	55.5
Exinite.....%	5.8
Reactive Semifusinite.....%	10.9
Total Reactives.....%	72.2

INERT COMPONENTS

Macrinite.....%	2.5
Inert Semifusinite.....%	15.1
Fusinite.....%	2.5
Inertodetrinite.....%	2.6
Mineral Matter.....%	5.0
Total Inerts.....%	27.8

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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2119 40 - 43.5

SAMPLE IDENTIFICATION

Laboratory number M3607
Sample PG-86-120
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.97
Composition Balance Index.....	0.70
Calculated Strength Index.....	3.60
Calculated Stability Index.....	47
Estimated Coke Strength DI 30/15.....	92.4
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	11
V - 9.....%	50
V - 10.....%	38
V - 11.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	63.8
Exinite.....%	5.2
Reactive Semifusinite.....%	9.4
Total Reactives.....%	78.4

INERT COMPONENTS

Macrinite.....%	2.8
Inert Semifusinite.....%	9.6
Fusinite.....%	2.0
Inertodetrinite.....%	2.2
Mineral Matter.....%	5.0
Total Inerts.....%	21.6

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2119 76.5 - 81m

SAMPLE IDENTIFICATION

Laboratory number M3608
Sample PG-86-121
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.98
Composition Balance Index.....	0.63
Calculated Strength Index.....	3.58
Calculated Stability Index.....	45
Estimated Coke Strength DI 30/15.....	91.9
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	10
V - 9.....%	46
V - 10.....%	41
V - 11.....%	2

REACTIVE COMPONENTS

Vitrinite.....%	66.2
Exinite.....%	5.2
Reactive Semifusinite.....%	8.6
Total Reactives.....%	80.1

INERT COMPONENTS

Macrinite.....%	1.1
Inert Semifusinite.....%	9.0
Fusinite.....%	3.3
Inertodetrinite.....%	1.5
Mineral Matter.....%	5.0
Total Inerts.....%	19.9

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2119 148.5 to 153

SAMPLE IDENTIFICATION

Laboratory number M3610
Sample PG-86-123
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	1.03
Composition Balance Index		0.52
Calculated Strength Index		3.73
Calculated Stability Index		47
Estimated Coke Strength DI 30/15		92.4
Predicted Free Swelling Index		8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8	%	2
V - 9	%	17
V - 10	%	70
V - 11	%	11

REACTIVE COMPONENTS

Vitrinite	%	71.5
Exinite	%	1.6
Reactive Semifusinite	%	9.5
Total Reactives	%	82.5

INERT COMPONENTS

Macrinite	%	1.7
Inert Semifusinite	%	7.9
Fusinite	%	1.9
Inertodetrinite	%	1.0
Mineral Matter	%	5.0
Total Inerts	%	17.5

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2121 163.5 - 165.5 m

SAMPLE IDENTIFICATION

Laboratory number M3616
Sample PG-86-129
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	0.92
Composition Balance Index		0.72
Calculated Strength Index		3.41
Calculated Stability Index		43
Estimated Coke Strength DI 30/15		91.3
Predicted Free Swelling Index		8

DISTRIBUTION OF VITRINITE TYPES

V - 7	%	1
V - 8	%	28
V - 9	%	64
V - 10	%	7

REACTIVE COMPONENTS

Vitrinite	%	63.9
Exinite	%	7.4
Reactive Semifusinite	%	7.2
Total Reactives	%	78.5

INERT COMPONENTS

Macrinite	%	2.1
Inert Semifusinite	%	10.5
Fusinite	%	2.3
Inertodetrinite	%	1.7
Mineral Matter	%	5.0
Total Inerts	%	21.5

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2121 198 - 201.5m

SAMPLE IDENTIFICATION

Laboratory number M3617
Sample PG-86-130
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.94
Composition Balance Index.....	1.05
Calculated Strength Index.....	3.59
Calculated Stability Index.....	48
Estimated Coke Strength DI 30/15.....	92.7
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	14
V - 9.....%	70
V - 10.....%	16

REACTIVE COMPONENTS

Vitrinite.....%	50.2
Exinite.....%	6.2
Reactive Semifusinite.....%	14.7
Total Reactives.....%	71.1

INERT COMPONENTS

Macrinite.....%	0.9
Inert Semifusinite.....%	16.8
Fusinite.....%	2.8
Inertodetrinite.....%	3.4
Mineral Matter.....%	5.0
Total Inerts.....%	28.9

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #221 240 - 242m

SAMPLE IDENTIFICATION

Laboratory number M3618
Sample PG-86-131
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.98
Composition Balance Index.....	1.16
Calculated Strength Index.....	3.71
Calculated Stability Index.....	50
Estimated Coke Strength DI 30/15.....	93.1
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	5
V - 9.....%	56
V - 10.....%	35
V - 11.....%	4

REACTIVE COMPONENTS

Vitrinite.....%	53.3
Exinite.....%	2.3
Reactive Semifusinite.....%	12.9
Total Reactives.....%	68.6

INERT COMPONENTS

Macrinite.....%	2.5
Inert Semifusinite.....%	19.0
Fusinite.....%	2.5
Inertodetrinite.....%	2.3
Mineral Matter.....%	5.0
Total Inerts.....%	31.4

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #291 #13 seam

SAMPLE IDENTIFICATION

Laboratory number M3624
Sample PG-86-137
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.05
Composition Balance Index.....	0.77
Calculated Strength Index.....	3.94
Calculated Stability Index.....	54
Estimated Coke Strength DI 30/15.....	93.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	12
V - 10.....%	69
V - 11.....%	19

REACTIVE COMPONENTS

Vitrinite.....%	63.2
Exinite.....%	3.6
Reactive Semifusinite.....%	9.4
Total Reactives.....%	76.2

INERT COMPONENTS

Macrinite.....%	1.6
Inert Semifusinite.....%	13.1
Fusinite.....%	2.6
Inertodetrinite.....%	1.5
Mineral Matter.....%	5.0
Total Inerts.....%	23.8

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2123 169-171.5

SAMPLE IDENTIFICATION

Laboratory number M3631
Sample PG-86-144
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.94
Composition Balance Index.....	0.63
Calculated Strength Index.....	3.42
Calculated Stability Index.....	41
Estimated Coke Strength DI 30/15.....	90.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	21
V - 9.....%	67
V - 10.....%	12

REACTIVE COMPONENTS

Vitrinite.....%	69.5
Exinite.....%	5.7
Reactive Semifusinite.....%	5.4
Total Reactives.....%	80.6

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	8.7
Fusinite.....%	2.0
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	19.4

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2053 "K"

SAMPLE IDENTIFICATION

Laboratory number M3635
Sample PG-86-148
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.91
Composition Balance Index.....	0.89
Calculated Strength Index.....	3.40
Calculated Stability Index.....	44
Estimated Coke Strength DI 30/15.....	91.6
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	34
V - 9.....%	63
V - 10.....%	2

REACTIVE COMPONENTS

Vitrinite.....%	62.6
Exinite.....%	5.5
Reactive Semifusinite.....%	7.0
Total Reactives.....%	75.0

INERT COMPONENTS

Macrinite.....%	3.0
Inert Semifusinite.....%	12.5
Fusinite.....%	2.9
Inertodetrinite.....%	1.6
Mineral Matter.....%	5.0
Total Inerts.....%	25.0

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2053 2245 - 2265

SAMPLE IDENTIFICATION

Laboratory number M3636
Sample PG-86-149
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.97
Composition Balance Index.....	0.58
Calculated Strength Index.....	3.51
Calculated Stability Index.....	42
Estimated Coke Strength DI 30/15.....	91.0
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	10
V - 9.....%	60
V - 10.....%	29
V - 11.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	69.0
Exinite.....%	4.7
Reactive Semifusinite.....%	8.0
Total Reactives.....%	81.6

INERT COMPONENTS

Macrinite.....%	0.7
Inert Semifusinite.....%	8.5
Fusinite.....%	2.0
Inertodetrinite.....%	2.1
Mineral Matter.....%	5.0
Total Inerts.....%	18.4

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2053 1891.5 - 1915

SAMPLE IDENTIFICATION

Laboratory number M4124
Sample PG-86-152
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.98
Composition Balance Index.....	0.30
Calculated Strength Index.....	2.74
Calculated Stability Index.....	7
Estimated Coke Strength DI 30/15.....	67.7
Predicted Free Swelling Index.....	9

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	2
V - 9.....%	60
V - 10.....%	38

REACTIVE COMPONENTS

Vitrinite.....%	81.9
Exinite.....%	3.5
Reactive Semifusinite.....%	3.9
Total Reactives.....%	89.3

INERT COMPONENTS

Macrinite.....%	1.1
Inert Semifusinite.....%	2.7
Fusinite.....%	0.7
Inertodetrinite.....%	1.2
Mineral Matter.....%	5.0
Total Inerts.....%	10.7

Analysis completed: December 19, 1986 9:09 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2053 263-265.5

SAMPLE IDENTIFICATION

Laboratory number M4126
Sample PG-86-154
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.09
Composition Balance Index.....	0.80
Calculated Strength Index.....	4.18
Calculated Stability Index.....	57
Estimated Coke Strength DI 30/15.....	93.9
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	2
V - 10.....%	49
V - 11.....%	46
V - 12.....%	3

REACTIVE COMPONENTS

Vitrinite.....%	60.1
Exinite.....%	3.5
Reactive Semifusinite.....%	12.5
Total Reactives.....%	76.1

INERT COMPONENTS

Macrinite.....%	3.4
Inert Semifusinite.....%	13.0
Fusinite.....%	1.3
Inertodetrinite.....%	1.2
Mineral Matter.....%	5.0
Total Inerts.....%	23.9

Analysis completed: December 19, 1986 8:58 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

BH # 2055 'K'

SAMPLE IDENTIFICATION

Laboratory number M4127
Sample PG-86-155
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance..... %	0.95
Composition Balance Index.....	0.77
Calculated Strength Index.....	3.55
Calculated Stability Index.....	47
Estimated Coke Strength DI 30/15.....	92.4
Predicted Free Swelling Index.....	8+

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	17
V - 9.....%	57
V - 10.....%	24
V - 11.....%	2

REACTIVE COMPONENTS

Vitrinite.....%	60.6
Exinite.....%	5.5
Reactive Semifusinite.....%	11.0
Total Reactives.....%	77.1

INERT COMPONENTS

Macrinite.....%	1.9
Inert Semifusinite.....%	11.2
Fusinite.....%	2.6
Inertodetrinite.....%	2.2
Mineral Matter.....%	5.0
Total Inerts.....%	22.9

Analysis completed: November 20, 1986 8:03 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2055 266 - 269

SAMPLE IDENTIFICATION

Laboratory number M4129
Sample PG-86-157
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	0.99
Composition Balance Index		0.57
Calculated Strength Index		3.60
Calculated Stability Index		44
Estimated Coke Strength DI 30/15		91.6
Predicted Free Swelling Index		8

DISTRIBUTION OF VITRINITE TYPES

V - 8	%	2
V - 9	%	51
V - 10	%	46
V - 11	%	1

REACTIVE COMPONENTS

Vitrinite	%	73.4
Exinite	%	1.3
Reactive Semifusinite	%	6.8
Total Reactives	%	81.6

INERT COMPONENTS

Macrinite	%	1.3
Inert Semifusinite	%	9.1
Fusinite	%	1.5
Inertodetrinite	%	1.6
Mineral Matter	%	5.0
Total Inerts	%	18.4

Analysis completed: December 20, 1986 9:34 AM

DAVID E. PEARSON & ASSOCIATES LTD.,
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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2055 219.5 - 226.5 m

SAMPLE IDENTIFICATION

Laboratory number M4134
Sample PG-86-162
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.01
Composition Balance Index.....	0.75
Calculated Strength Index.....	3.76
Calculated Stability Index.....	51
Estimated Coke Strength DI 30/15.....	93.2
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	4
V - 9.....%	32
V - 10.....%	58
V - 11.....%	6

REACTIVE COMPONENTS

Vitrinite.....%	65.9
Exinite.....%	3.5
Reactive Semifusinite.....%	7.5
Total Reactives.....%	76.8

INERT COMPONENTS

Macrinite.....%	1.6
Inert Semifusinite.....%	11.4
Fusinite.....%	2.5
Inertodetrinite.....%	2.7
Mineral Matter.....%	5.0
Total Inerts.....%	23.2

Analysis completed: December 19, 1986 9:14 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #1470 #18" Seam

SAMPLE IDENTIFICATION

Laboratory number M4136
Sample PG-86-164
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.00
Composition Balance Index.....	0.36
Calculated Strength Index.....	3.47
Calculated Stability Index.....	36
Estimated Coke Strength DI 30/15.....	88.6
Predicted Free Swelling Index.....	8.5

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	1
V - 9.....%	45
V - 10.....%	52
V - 11.....%	2

REACTIVE COMPONENTS

Vitrinite.....%	77.3
Exinite.....%	6.3
Reactive Semifusinite.....%	3.6
Total Reactives.....%	87.3

INERT COMPONENTS

Macrinite.....%	1.5
Inert Semifusinite.....%	5.1
Fusinite.....%	0.8
Inertodetrinite.....%	0.3
Mineral Matter.....%	5.0
Total Inerts.....%	12.7

Analysis completed: December 19, 1986 9:15 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #216 125.5 - 127

SAMPLE IDENTIFICATION

Laboratory number M4137
Sample PG-86-165
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.91
Composition Balance Index.....	0.48
Calculated Strength Index.....	3.16
Calculated Stability Index.....	33
Estimated Coke Strength DI 30/15.....	87.2
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	1
V - 8.....%	45
V - 9.....%	51
V - 10.....%	3

REACTIVE COMPONENTS

Vitrinite.....%	69.7
Exinite.....%	5.9
Reactive Semifusinite.....%	9.3
Total Reactives.....%	84.9

INERT COMPONENTS

Macrinite.....%	1.8
Inert Semifusinite.....%	6.5
Fusinite.....%	1.2
Inertodetrinite.....%	0.6
Mineral Matter.....%	5.0
Total Inerts.....%	15.1

Analysis completed: December 19, 1986 9:17 PM

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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2116 203.5 - 206.5

SAMPLE IDENTIFICATION

Laboratory number M4139
Sample PG-86-167
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.97
Composition Balance Index.....	0.76
Calculated Strength Index.....	3.64
Calculated Stability Index.....	48
Estimated Coke Strength DI 30/15.....	92.7
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	6
V - 9.....%	63
V - 10.....%	30
V - 11.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	66.7
Exinite.....%	2.2
Reactive Semifusinite.....%	8.0
Total Reactives.....%	76.9

INERT COMPONENTS

Macrinite.....%	2.2
Inert Semifusinite.....%	11.6
Fusinite.....%	2.5
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	23.1

Analysis completed: December 19, 1986 9:19 PM

DAVID E. PEARSON & ASSOCIATES LTD.,
CONSULTING COAL GEOLOGISTS & PETROGRAPHERS
804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2116 "H"

SAMPLE IDENTIFICATION

Laboratory number M4141
Sample PG-86-169
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance	%	1.02
Composition Balance Index		0.89
Calculated Strength Index		3.83
Calculated Stability Index		52
Estimated Coke Strength DI 30/15		93.4
Predicted Free Swelling Index		8

DISTRIBUTION OF VITRINITE TYPES

V - 8	%	1
V - 9	%	28
V - 10	%	65
V - 11	%	6

REACTIVE COMPONENTS

Vitrinite	%	63.1
Exinite	%	2.3
Reactive Semifusinite	%	8.1
Total Reactives	%	73.5

INERT COMPONENTS

Macrinite	%	3.9
Inert Semifusinite	%	13.0
Fusinite	%	3.0
Inertodetrinite	%	1.6
Mineral Matter	%	5.0
Total Inerts	%	26.5

Analysis completed: December 19, 1986 9:01 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2116 280.5 - 283.5

SAMPLE IDENTIFICATION

Laboratory number M4142
Sample PG-86-170
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.04
Composition Balance Index.....	0.81
Calculated Strength Index.....	3.95
Calculated Stability Index.....	54
Estimated Coke Strength DI 30/15.....	93.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	10
V - 10.....%	72
V - 11.....%	18

REACTIVE COMPONENTS

Vitrinite.....%	67.0
Exinite.....%	1.8
Reactive Semifusinite.....%	6.4
Total Reactives.....%	75.2

INERT COMPONENTS

Macrinite.....%	2.1
Inert Semifusinite.....%	12.5
Fusinite.....%	2.8
Inertodetrinite.....%	2.4
Mineral Matter.....%	5.0
Total Inerts.....%	24.8

Analysis completed: November 21, 1986 8:34 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2116 301·5 to 307

SAMPLE IDENTIFICATION

Laboratory number M4143
Sample PG-86-171
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.02
Composition Balance Index.....	0.98
Calculated Strength Index.....	3.85
Calculated Stability Index.....	53
Estimated Coke Strength DI 30/15.....	93.5
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	28
V - 10.....%	67
V - 11.....%	5

REACTIVE COMPONENTS

Vitrinite.....%	62.2
Exinite.....%	2.7
Reactive Semifusinite.....%	6.6
Total Reactives.....%	71.6

INERT COMPONENTS

Macrinite.....%	3.1
Inert Semifusinite.....%	15.6
Fusinite.....%	2.7
Inertodetrinite.....%	2.0
Mineral Matter.....%	5.0
Total Inerts.....%	28.4

Analysis completed: November 21, 1986 9:24 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2125 278 to 283

SAMPLE IDENTIFICATION

Laboratory number M4150
Sample PG-86-178
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.91
Composition Balance Index.....	0.93
Calculated Strength Index.....	3.37
Calculated Stability Index.....	43
Estimated Coke Strength DI 30/15.....	91.3
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	40
V - 9.....%	57
V - 10.....%	3

REACTIVE COMPONENTS

Vitrinite.....%	57.7
Exinite.....%	6.1
Reactive Semifusinite.....%	10.4
Total Reactives.....%	74.3

INERT COMPONENTS

Macrinite.....%	2.2
Inert Semifusinite.....%	11.8
Fusinite.....%	5.0
Inertodetrinite.....%	1.7
Mineral Matter.....%	5.0
Total Inerts.....%	25.7

Analysis completed: November 23, 1986 8:42 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH #2125 285 - 288.5

SAMPLE IDENTIFICATION

Laboratory number M4151
Sample PG-86-179
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.92
Composition Balance Index.....	1.29
Calculated Strength Index.....	3.35
Calculated Stability Index.....	40
Estimated Coke Strength DI 30/15.....	90.3
Predicted Free Swelling Index.....	6

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	35
V - 9.....%	58
V - 10.....%	7

REACTIVE COMPONENTS

Vitrinite.....%	53.1
Exinite.....%	3.9
Reactive Semifusinite.....%	10.3
Total Reactives.....%	67.2

INERT COMPONENTS

Macrinite.....%	3.8
Inert Semifusinite.....%	18.9
Fusinite.....%	3.2
Inertodetrinite.....%	1.9
Mineral Matter.....%	5.0
Total Inerts.....%	32.8

Analysis completed: November 23, 1986 8:56 PM

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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2126 248.5 — 251

SAMPLE IDENTIFICATION

Laboratory number M4155
Sample PG-86-183
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	1.06
Composition Balance Index.....	1.23
Calculated Strength Index.....	3.95
Calculated Stability Index.....	52
Estimated Coke Strength DI 30/15.....	93.4
Predicted Free Swelling Index.....	6

DISTRIBUTION OF VITRINITE TYPES

V - 9.....%	10
V - 10.....%	64
V - 11.....%	26

REACTIVE COMPONENTS

Vitrinite.....%	56.2
Exinite.....%	4.8
Reactive Semifusinite.....%	6.1
Total Reactives.....%	67.0

INERT COMPONENTS

Macrinite.....%	4.2
Inert Semifusinite.....%	18.2
Fusinite.....%	3.6
Inertodetrinite.....%	2.1
Mineral Matter.....%	5.0
Total Inerts.....%	33.0

Analysis completed: December 19, 1986 9:04 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH 2126 23 – 26m

SAMPLE IDENTIFICATION

Laboratory number M4156
Sample PG-86-184
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.91
Composition Balance Index.....	1.01
Calculated Strength Index.....	3.39
Calculated Stability Index.....	43
Estimated Coke Strength DI 30/15.....	91.3
Predicted Free Swelling Index.....	7

DISTRIBUTION OF VITRINITE TYPES

V - 7.....%	2
V - 8.....%	37
V - 9.....%	57
V - 10.....%	4

REACTIVE COMPONENTS

Vitrinite.....%	60.5
Exinite.....%	3.2
Reactive Semifusinite.....%	8.9
Total Reactives.....%	72.5

INERT COMPONENTS

Macrinite.....%	4.2
Inert Semifusinite.....%	14.3
Fusinite.....%	1.8
Inertodetrinite.....%	2.2
Mineral Matter.....%	5.0
Total Inerts.....%	27.5

Analysis completed: December 19, 1986 9:42 PM

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804 LEOTA PLACE, VICTORIA, B.C. V8Y 1H2

PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2126 50·5-53

SAMPLE IDENTIFICATION

Laboratory number M4157
Sample PG-86-185
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.94
Composition Balance Index.....	0.50
Calculated Strength Index.....	3.39
Calculated Stability Index.....	38
Estimated Coke Strength DI 30/15.....	89.5
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	15
V - 9.....%	72
V - 10.....%	12
V - 11.....%	1

REACTIVE COMPONENTS

Vitrinite.....%	76.4
Exinite.....%	2.1
Reactive Semifusinite.....%	5.5
Total Reactives.....%	84.0

INERT COMPONENTS

Macrinite.....%	2.4
Inert Semifusinite.....%	4.6
Fusinite.....%	2.7
Inertodetrinite.....%	1.3
Mineral Matter.....%	5.0
Total Inerts.....%	16.0

Analysis completed: November 23, 1986 6:00 PM

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PETROGRAPHIC ANALYSIS

Petrographic Analysis

for

FORDING COAL LIMITED

RH # 2126 149-155

SAMPLE IDENTIFICATION

Laboratory number M4160
Sample PG-86-188
Ash 9.0% Sulphur 0.5%

PETROGRAPHIC INDICES

Mean Maximum Reflectance.....%	0.95
Composition Balance Index.....	0.56
Calculated Strength Index.....	3.48
Calculated Stability Index.....	41
Estimated Coke Strength DI 30/15.....	90.6
Predicted Free Swelling Index.....	8

DISTRIBUTION OF VITRINITE TYPES

V - 8.....%	7
V - 9.....%	79
V - 10.....%	14

REACTIVE COMPONENTS

Vitrinite.....%	76.4
Exinite.....%	2.5
Reactive Semifusinite.....%	3.4
Total Reactives.....%	82.3

INERT COMPONENTS

Macrinite.....%	1.2
Inert Semifusinite.....%	6.6
Fusinite.....%	2.5
Inertodetrinite.....%	2.4
Mineral Matter.....%	5.0
Total Inerts.....%	17.7

Analysis completed: November 23, 1986 5:44 PM

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