ANALYSIS DIRECTORY OF CANADIAN COALS

SUPPLEMENT No. 2 - 1960.

T. E. TIBBETTS and W. J. MONTGOMERY

DEPARTMENT OF MINES
AND TECHNICAL SURVEYS
MINES BRANCH
FUELS AND MINING
PRACTICE DIVISION

MINES BRANCH MONOGRAPH No. 868

ANALYSIS DIRECTORY OF CANADIAN COALS

SUPPLEMENT No. 2 - 1960.

T. E. TIBBETTS and W. J. MONTGOMERY

DEPARTMENT OF MINES
AND TECHNICAL SURVEYS
MINES BRANCH
FUELS AND MINING
PRACTICE DIVISION

MINES BRANCH MONOGRAPH No. 868

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1961

Price 75 cents Cat. No. M32-868

TABLE OF CONTENTS

PAGE

FOREWORD 5

INTRODUCTION 7

Nova Scotia

High Volatile A Bituminous

1. Acadia Coal Co. Ltd. 11
2. Beaver Coal Co. Ltd. 12
3. Cumberland Fuel and Trading Co. Ltd. (River Hebert Coal Co. Ltd.). 12
4. Dominion Coal Co. Ltd. 12
5. Drummond Coal Co. Ltd. 15
6. Four Star Collieries Ltd. (Bras d'Or Coal Co. Ltd.) 16
7. Greenwood Coal Co. Ltd. 17
8. Indian Cove Coal Co. Ltd. 17
9. Joggins Coal Co. Ltd. (Bayview Coal Mines Ltd.) 17
10. Old Sydney Collieries Ltd. 18

High Volatile C Bituminous

1. S. J. Doucet and Sons Ltd. 19
2. Evans' Coal Mines Ltd. 19
3. Chesticо Coal Mines Corp. Ltd. 20

New Brunswick

High Volatile A Bituminous

1. Avon Coal Co. Ltd. 21
2. King Mining Co. Ltd. 22
3. Lafferty Bros. 22
4. McEwan Mining Co. 22
5. D.W. and R.A. Mills Ltd. 22
6. Miramichi Lumber Co. Ltd. 23
7. V.C. McMann Ltd. 23
8. Newcastle Coal Co. Ltd. 24
9. A. W. Wasson Ltd. 24
10. Mrs. W. M. Wasson 24

Saskatchewan

Lignite

1. Manitoba and Saskatchewan Coal Co. Ltd. 25
2. North West Coal Co. Ltd. 26
3. Western Dominion Coal Mines Ltd. 26
4. Old Mac Coal Ltd. 27
5. Dominion Briquettes and Chemicals Ltd. 27

Alberta

Semianthracite

Canmore Mines Ltd. 29

Medium Volatile Bituminous

1. Coleman Collieries Ltd. 30
2. West Canadian Collieries Ltd. 31

High Volatile Bituminous

1. Canadian Collieries Resources Ltd. 32
2. Hamilton Coal Co. 33
3. Ideal Coal Co. 33
4. Lethbridge Collieries Ltd. 33

Subbituminous

1. Alberta Coal Co. Ltd. 34
2. Alberta Coal Sales Ltd. 34

PAGE

3. Allyn Mann Construction Co. ... 35
4. Amalgamated Coals Ltd. ... 35
5. Battle River Coal Co. Ltd. ... 36
6. Black Gem Coal Co. Ltd. ... 36
7. Black Nugget Coal Co. Ltd. ... 37
8. Burnstad Coal Ltd. ... 37
9. Camrose Collieries Ltd. ... 38
10. Century Coals Ltd. ... 38
11. Champion Coal Co. Ltd. ... 39
12. Consumer's Mine ... 39
13. East Carbon Coal Co. Ltd. ... 39
14. East Trochu Coal Co. ... 39
15. Egg Lake Coal Co. Ltd. ... 40
16. Federated Co-Ops Ltd. ... 40
17. Fergstad, Chas. ... 41
18. Forestburg Collieries Ltd. ... 41
19. Jet Construction Ltd. ... 42
20. Joy Coal Co. ... 42
21. Lynass, John H. ... 42
22. McArthur, Mrs. Marjorie (Nottal Brothers) ... 43
23. McMillan, Alex (Harold Thorley) ... 43
24. Midland Coal Mining Co. Ltd. ... 43
25. Miller, Henry ... 43
26. Morinville Colliery Ltd. ... 44
27. Murray Collieries Ltd. ... 44
28. North Point Coal Co. Ltd. ... 45
29. Pickering, B. and Sons ... 45
30. Red Deer Valley Coal Co. Ltd. ... 45
31. Remillard, O.V. ... 45
32. Samis Collieries ... 46
33. Star-Key Mines Ltd. ... 46
34. Stettler Coal Co. Ltd. ... 47
35. Strawberry Creek Coal Co. Ltd. ... 47
36. Subway Coal Co. ... 47
37. Sundance Coal Ltd. ... 48
38. Warburg Coal Co. Ltd. ... 48
39. Wayne Coals Ltd. ... 49
40. Western Dominion Coal Mines Ltd. ... 49
41. Whitemud Creek Coal Co. Ltd. ... 50

British Columbia

Bituminous

1. Crow's Nest Pass Coal Co. Ltd. ... 51
2. Canadian Collieries Resources Ltd. ... 52

Index ... 53

FOREWORD

This publication is the second supplement to the second edition of the *Analysis Directory of Canadian Coals* dated 1953. A continuous sampling program by officers of the Fuels and Mining Practice Division, or their representatives, of Canadian commercially prepared coals at the mines and points of delivery was inaugurated in 1954. The analyses appearing in this supplement are those of samples obtained under this commercial coal survey project for the period of April 1955 to March 1960. All analyses were made in the Ottawa laboratory.

The object of this Directory is to provide general information on the characteristics of coals produced in various parts of Canada. Because the analyses reported in this and in past issues of the Directory represent the mine products at the time the samples were taken, it should be emphasized that the Directory cannot be expected to define the exact qualities of any particular shipment of coal in the future.

In this edition, all the samples taken during the period 1955–1960 are reported as a guide to indicate the variation in the quality of the mine production. For a fuller treatment of Canadian coals including ultimate and ash analyses, the second edition of the *Analysis Directory of Canadian Coals* (1953) (Mines Branch No. 836) and its supplement (1955) (Mines Branch No. 850) should be consulted.

It should be noted that for the high moisture coals (high volatile C bituminous, subbituminous and lignite) the analyses are presented on the "equilibrium moisture" or "capacity moisture" basis. Because coals in these classifications are subject to wide variations of moisture between that existing at the mines in the natural state, "in situ"*, and that in the commercial product at the delivery point the "equilibrium (or capacity) moisture" allows for a comparison of the analyses on a uniform basis, that is, where the moisture in the coal has been stabilized in an atmosphere at a relative humidity of 97 per cent.

More complete current information regarding location of mines, mine management, production, etc., may be found in the Department's yearly Mineral Resources Division publication Operators List 4, *Coal Mines in Canada*, and the yearly publication of the Dominion Bureau of Statistics entitled *The Coal Mining Industry*, Catalogue No. 26-206.

The commercial samples were collected at Saskatchewan, Alberta, and British Columbia mines by Dr. J. Visman and the staff of the Western Regional Laboratory, and T. A. Lloyd aided in the data calculation and compilation involved in preparing this publication.

Acknowledgment is also due the mine operators and the Provincial Mines Departments who aided in the sample collection.

A. IGNATIEFF, *Chief*,
Fuels and Mining Practice Division.

* This is synonymous with "bed moisture".

INTRODUCTION

The analyses of Canadian coals as marketed have been published in recent years in two editions of the *Analysis Directory of Canadian Coals*, and in Supplement No. 1 to the second edition. This latter publication included analyses from the records of the Fuels and Mining Practice Division up to May 1955.

In 1954 the Fuels and Mining Practice Division initiated a project, the Commercial Coal Survey, under which regular sampling of the commercial products from all Canadian coal mines would be carried out by officers of the Division. It was the intention that the analyses of these samples would supplement those of samples obtained from other sources in periodically revising the analysis directory and thus allow publication of up-to-date information on coal quality for the benefit of government purchasing departments and the general public. It is recognized that an

CLASSIFICATION OF COALS BY RANK
(A.S.T.M. Designation—D 388-38)

Legend: F.C. = Fixed Carbon
V.M. = Volatile Matter
Btu = British Thermal Units

Class	Group	Limits of Fixed Carbon or Btu, Mineral-Matter-Free Basis	Requisite Physical Properties
I. Anthracite.....	1. Meta-anthracite	Dry F.C., 98% or more.	
	2. Anthracite	Dry F.C., 92% or more and less than 98%.	
	3. Semianthracite	Dry F.C., 86% or more and less than 92%.	Non-agglomerating. (1)
II. Bituminous.....	1. Low volatile bituminous coal	Dry F.C., 78% or more and less than 86%.(3)	
	2. Medium volatile bituminous coal	Dry F.C., 69% or more and less than 78%.(3)	
	3. High volatile A bituminous coal	Dry F.C., less than 69% and moist (2) Btu. 14,000(4) or more.(3)	
	4. High volatile B bituminous coal	Moist Btu 13,000 or more and less than 14,000(3)	
	5. High volatile C bituminous coal	Moist Btu 11,000 or more and less than 13,000(4)	Either agglomerating or non-weathering.(5)
III. Subbituminous....	1. Subbituminous A Coal	Moist Btu 11,000 or more and less than 13,000(4)	Both weathering and non-agglomerating.(5)
	2. Subbituminous B Coal	Moist Btu 9,500 or more and less than 11,000(4)	
	3. Subbituminous C Coal	Moist Btu 8,300 or more and less than 9,500(4)	
IV. Lignitic.....	1. Lignite	Moist Btu less than 8,300	Consolidated.
	2. Brown Coal	Moist Btu less than 8,300	Unconsolidated.

(1) If agglomerating, classify in low-volatile group of bituminous class.

(2) Moist Btu refers to coal containing its natural bed moisture but not including visible water on the surface of the coal.

(3) It is recognized that there may be non-caking varieties in each group of the bituminous class.

(4) Coals having 69% or more fixed carbon on the dry mineral-matter-free basis shall be classified according to fixed carbon, regardless of Btu.

(5) There are three varieties of coal in the high volatile C bituminous coal group, namely; Variety 1, agglomerating and non-weathering; Variety 2, agglomerating and weathering; Variety 3, non-agglomerating and non-weathering.

analysis of a coal, no matter how accurately determined, is only representative of the coal if the sample itself is truly representative of the bulk from which it is taken. In this *Analysis Directory of Canadian Coals—Supplement No. 2*, only the analyses of samples collected by Division officers under the Commercial Coal Survey project are included. These samples were collected following established sampling procedures up to March 31, 1960. Most of the samples represent mine production, being taken at the mine tipples; a few were taken at points of delivery, including thermal electric power stations.

The analyses are arranged according to province from east to west, and within each province according to rank as determined by the classification of the *American Society for Testing Materials* presented in the table preceding. Under the rank classification the coal mine operators are arranged alphabetically.

BITUMINOUS, SUBBITUMINOUS, AND LIGNITIC COALS

Customary Trade Designation	Size(1) Designation Round-hole Screen (inches)	Permissible Size(3) Limits, Round-hole Screen (inches)		Remarks
		Passing(2)	Retained on(2)	
Mine Run	As mined	Variable	$\frac{1}{8}$ ($\frac{1}{16}$)	Purchaser may specify maximum permissible size, in which case not more than 5% of the coal shall be retained on the screen defining the upper size limit, as stated by the vendor. The lower screen limit of $\frac{1}{16}$" shall apply only to the bituminous coals of Alberta and British Columbia in the following districts: Crowsnest, Mountain Park, Nordegg and Cascade.
Dock or Pile Run	As lifted from dock or storage pile	Variable	$\frac{1}{8}$ ($\frac{1}{16}$)	
Modified Mine, Dock, or Pile Run	As stated by vendor	Variable	$\frac{1}{8}$ ($\frac{1}{16}$)	
Large Lump	Plus 4	Variable	4	Upper size limit shall be stated by vendor.
Lump	Plus 1	Variable	1	The purchaser may specify a maximum permissible size, in which case not more than 5% of the coal shall be retained on the screen defining the upper size limit, as stated by the vendor.
Egg or Stove	4 x 2	4	2	
Nut	2 x $\frac{3}{4}$	2	$\frac{3}{4}$	
Prepared Stoker	As stated by vendor	Variable. As stated by vendor	Variable. As stated by vendor	Both upper and lower size limits and any special treatment applied to the coal shall be stated by the vendor.
Nut Slack	2 to 1$\frac{1}{4}$ x 0	2 to 1$\frac{1}{4}$	$\frac{1}{16}$ ($\frac{1}{32}$)	The lower screen limits of $\frac{1}{32}$" and $\frac{1}{64}$" for the sizes noted, shall apply only to the bituminous coals of Alberta and British Columbia in the following districts: Crowsnest, Mountain Park, Nordegg and Cascade.
Slack	1 or $\frac{3}{4}$ x 0	1 or $\frac{3}{4}$	$\frac{1}{32}$ ($\frac{1}{64}$)	
Fines	$\frac{1}{2}$ x 0	$\frac{1}{2}$	none	

(1) The specification for each size is based on the size as delivered to the consumer and does not necessarily indicate the size or types of the limiting screens used in the original preparation.

(2) Not more than 15 per cent by weight of the coal shall pass the screen defining the lower size limit, and not more than 5 per cent shall be retained on the screen defining the upper size limit.

(3) To take care of the off-size coals, and mixtures of sizes, either the purchaser or vendor may specify other upper and lower size limits than those shown here.

The size designation of the coals are according to the terminology used at the production point by the producer, thus there are variations in names of sizes for coals of the same screen limits. The table preceding presents the size specifications for bituminous, subbituminous and lignitic coals as set up by the *Canadian Government Specifications Board** as a guide for government purchasing departments.

The proximate analyses, sulphur and calorific values of coals of high volatile A bituminous and higher ranks are presented on the basis of the moisture from specially prepared moisture samples where such data are available and on the "as received" (at the laboratory) basis where special moisture samples were not prepared. Coals of lower rank are presented on the "equilibrium moisture" basis. Equilibrium moisture is considered to be the natural bed moisture excluding any visible water on the surface of the coal, and has been defined as the moisture remaining in the coals when brought to a condition of moisture equilibrium at a relative humidity of 97 per cent at 30°C.

The methods used for determining the analyses presented in this publication are as outlined in the *ASTM Standards on Coal and Coke.*† The analyses presented are those with which users of coal for fuel are mainly concerned. The proximate analyses and sulphur are given to the nearest 0.1 per cent and calorific values to the nearest 5 Btu, although the laboratory determinations are recorded to the nearest 0.01 per cent and the nearest Btu. Grindability indices are given to the nearest unit and ash fusion temperatures to the nearest 10°F.

Use is often made of coal analyses to compare the monetary values for any particular heating requirement. If all other characteristics are suitable the coals may be best compared on the basis of their cost per million Btu. In the case of coals of high inherent moisture, the comparison should be made on the "equilibrium moisture" basis, while in the other coals, the comparative calculations may be on either a "dry basis", or on the analyses of the relative coals reduced to the same moisture basis.

The calculation is as follows:

$$\frac{\text{Price of coal (in cents per 2000 lb) x 1,000,000}}{\text{Btu/lb x 2000}} = \begin{matrix}\text{cost per}\\ \text{million}\\ \text{Btu in cents.}\end{matrix}$$

These comparative values do not take into account thermal efficiency and such factors as difference in cost of ash removal, variations in cost due to freight charges accountable to differences in ash and moisture contents, etc.

The "softening" temperature of ash is generally indicative of behaviour of coal ash in a fuel bed, but the initial deformation temperature and temperature at which the ash becomes fluid are also given here.

The grindability index indicates the relative grindability or ease of pulverizing coals in comparison with a coal chosen as standard having a grindability of 100. Such data are of more value in connection with the smaller coal sizes and in general were not determined on sizes larger than "nut".

The free swelling index which indicates the caking characteristics of bituminous coal when burned in fuel beds was only determined on selected samples.

* Specifications for Coal, 18-GP-1A, 18 August 1950—Canadian Government Specifications Board, National Research Council, Ottawa, Canada. (Price 15 cents).

† ASTM Standards on Coal and Coke, September, 1959. ASTM Committee D-5. Published by the American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa.

For a better understanding of the test results as presented in this publication reference can be made to the *Symposium on Significance of Tests on Coal*, from the Proceedings of the American Society for Testing Materials, 40th Annual Meeting, Volume 37, Part II, 1937.

Change in Mine Name and Operator

Since original tabulation of the analytical data for this publication several changes have been made in mine name and/or operator. These are as follows:

Nova Scotia

(1) Four Star Collieries Ltd.—*Now* Bras d'Or Coal Co. Ltd.

(2) Cumberland Fuel and Trading Co. Ltd.—Cochrane Mine—*Now* River Hebert Coal Co. Ltd., River Hebert Mine.

(3) Joggins Coal Co. Ltd.—Bayview Mines—*Now* Bayview Coal Mines Ltd.

Alberta

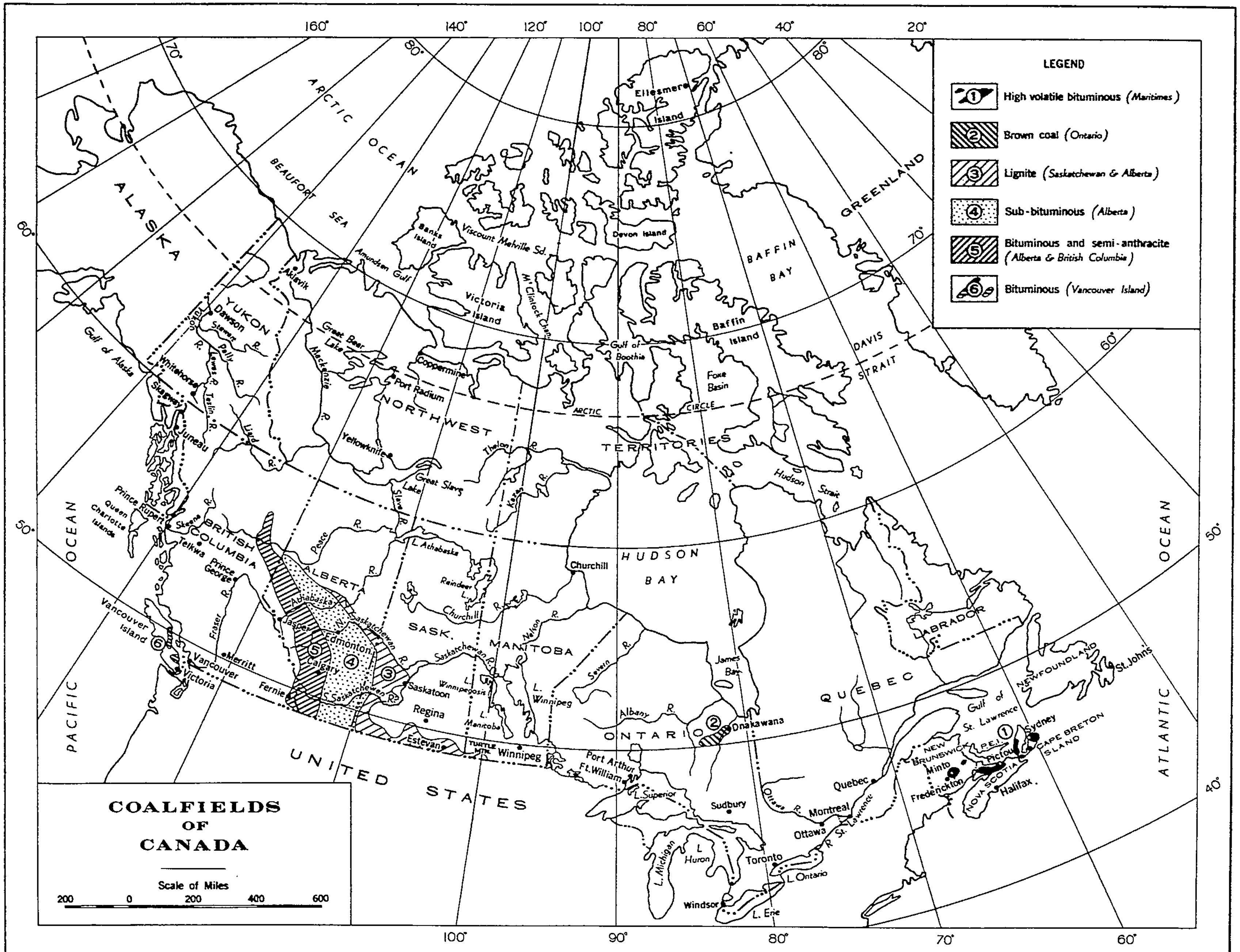
(4) McArthur, Mrs. Marjorie, Mine No. 194—*Now* operated by Nottal Brothers, Trade Name: New Ghost Pine.

(5) McMillan, Alex., Mine No. 1521—Lucky Strike Mine—*Now* operated by Harold Thorley.

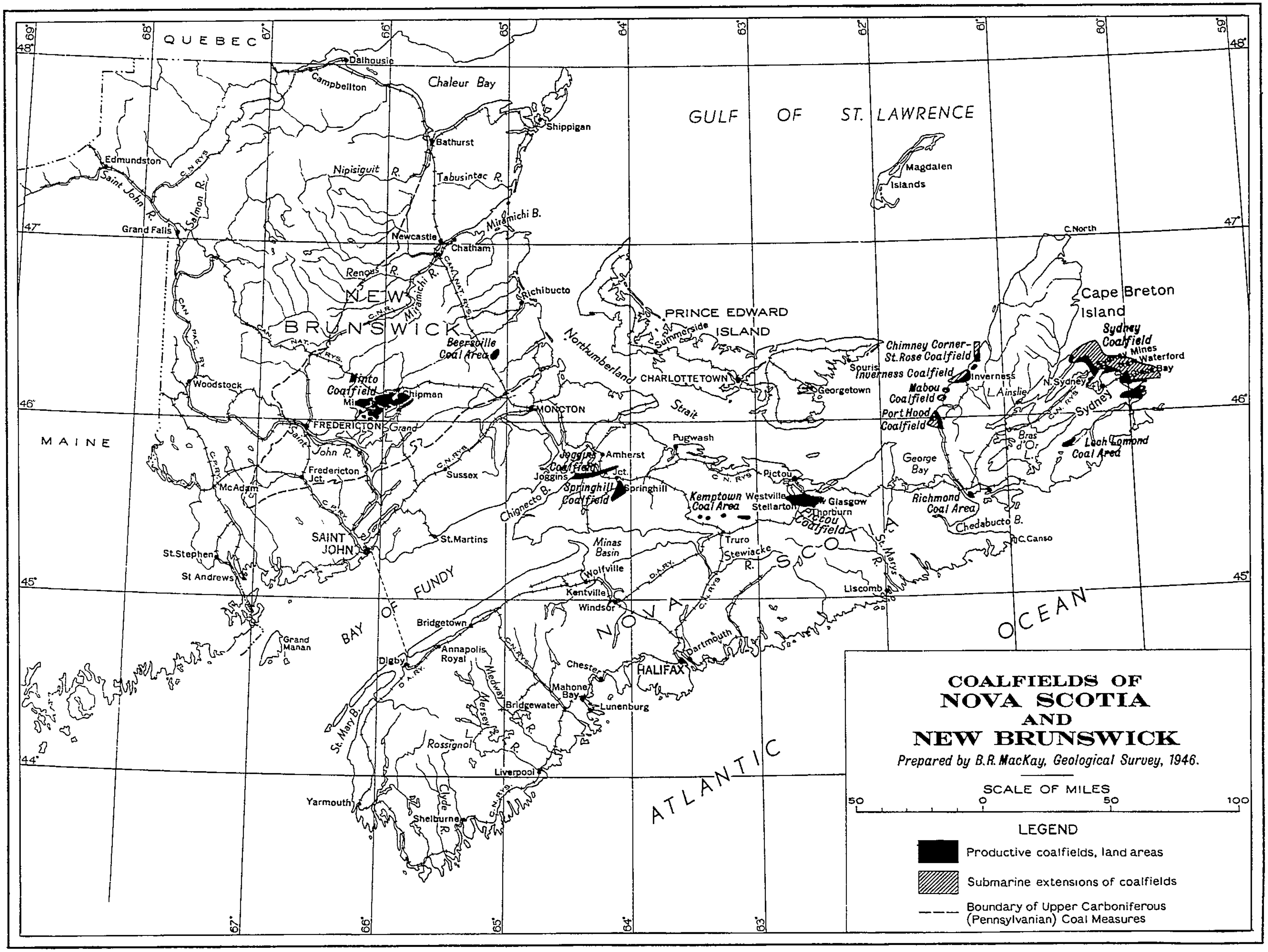
Explanation of Abbreviations Used

Screen Sizes

Rd. = Round-hole screen
Sq. = Square-hole screen
Ty. = Tyrod-type screen
Sl. = Slot-type screen



COALFIELDS OF CANADA


COALFIELDS OF
NOVA SCOTIA
AND
NEW BRUNSWICK
Prepared by B.R. MacKay, Geological Survey, 1946.
SCALE OF MILES
50 0 50 100
LEGEND
Productive coalfields, land areas
Submarine extensions of coalfields
Boundary of Upper Carboniferous (Pennsylvanian) Coal Measures
QUEBEC
GULF OF ST. LAWRENCE
Chaleur Bay
Dalhousie
Campbellton
Shippigan
Bathurst
Edmundston
Nipisiguit R.
Tabusintac R.
Magdalen Islands
Grand Falls
Miramichi B.
Newcastle
Chatham
Renous R.
NEW BRUNSWICK
Richibucto
Beersville Coal Area
Minto Coalfield
Chipman
Woodstock
MONCTON
FREDERICTON
Saint John R.
MAINE
Fredericton Jct.
McAdam
Sussex
SAINT JOHN
St. Martins
St. Stephen
St Andrews
Grand Manan
BAY OF FUNDY
Chignecto B.
Joggins Coalfield
Joggins
Amherst
Springhill Coalfield
Springhill
Northumberland Strait
PRINCE EDWARD ISLAND
Summerside
CHARLOTTETOWN
Georgetown
Souris
Pugwash
Pictou
Kemptown Coal Area
Westville
New Glasgow
Stellarton
Thorburn
Pictou Coalfield
Truro
Minas Basin
Stewiacke R.
Wolfville
Kentville
Windsor
NOVA SCOTIA
Bridgetown
Annapolis Royal
Digby
St. Mary B.
Chester
Mahone Bay
Lunenburg
Bridgewater
HALIFAX
Dartmouth
Liscomb
St. Marys R.
Rossignol L.
Medway R.
Mersey R.
Liverpool
Yarmouth
Shelburne
Clyde R.
ATLANTIC OCEAN
Cape Breton Island
C. North
Sydney Coalfield
Mines
Waterford
N. Sydney
Sydney
Chimney Corner-St. Rose Coalfield
Inverness Coalfield
Inverness
Mabou Coalfield
Port Hood Coalfield
L. Ainslie
Bras d'Or L.
Loch Lomond Coal Area
George Bay
Richmond Coal Area
Chedabucto B.
C. Canso

NOVA SCOTIA

A. High Volatile A Bituminous[1]

(All underground mines)

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated: Proximate Analysis: Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
	1. ACADIA COAL CO. LTD.—McBEAN MINE, McBean Seam. Thorburn, Pictou County.												Trade Name: **ACADIA**
1956	Washed Egg	6 x 1¾ Sq.	1.5*	12.2	28.6	57.7	0.4	13,005	2390	2500	2700	3.5	—
1957	Washed Egg	6 x 1¾ Sq.	3.4	14.3	27.8	54.5	0.5	12,300	2340	2430	2500	—	—
1959	Washed Egg	6 x 1¾ Sq.	3.0	11.0	29.1	56.9	0.4	13,020	2390	2500	2590	—	—
1956	Washed Nut	1¾ x ¾ Sq.	1.9*	10.9	28.9	58.3	0.3	13,220	2320	2510	2650	4.0	—
1957	Washed Nut	1¾ x ¾ Sq.	3.0	14.4	27.6	55.0	0.4	12,540	2340	2440	2510	—	60
1959	Washed Nut	1¾ x ¾ Sq.	2.9	11.2	28.3	57.6	0.4	12,920	2370	2440	2590	—	—
1956	Washed Stoker	¾ Sq. x 3/16 Ty.	1.8*	12.4	29.2	56.6	0.5	12,970	2300	2470	2580	4.0	58
1957	Washed Stoker	¾ Sq. x 3/16 Ty.	4.7	14.5	27.0	53.8	0.5	12,205	2340	2450	2520	—	59
1959	Washed Stoker	¾ Sq. x 3/16 Ty.	4.6	12.5	26.6	56.2	0.5	12,470	2370	2480	2700	—	63
1956	Fines	3/16 Ty. x 0	2.5*	12.4	28.3	56.8	0.5	12,750	2320	2450	2500	3.5	62
1957	Fines	3/16 Ty. x 0	6.0	13.8	25.7	54.5	0.6	11,825	2340	2430	2500	—	63
1959	Fines	3/16 Ty. x 0	4.6	17.4	26.2	51.8	0.5	11,740	2380	2520	2660	—	62
1959	Fines	3/16 Ty. x 0	5.6	13.6	25.7	53.1	0.5	11,660	2140	2270	2370	—	63
1959	Fines	3/16 Ty. x 0	5.6	14.0	26.4	54.0	0.6	12,140	2160	2200	2320	—	71
1959	W. Splint	.....	3.4	40.3	22.2	34.1	0.5	7,830	2180	2290	2440	—	63
1959	W. Splint	.....	5.7	22.2	24.0	48.1	0.5	10,870	2120	2270	2350	—	58

A. High Volatile A Bituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated: Proximate Analysis: Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
2. BEAVER COAL CO. LTD.—Beaver Mine, Tracey Seam. Broughton, Cape Breton County.													**Trade Name: BEAVER**
1956	Lump	+ 1½ Sq.	2.5	10.0	35.2	52.3	5.4	12,775	1800	1920	2030	3.5	—
1957	Lump	+ 1¾ Sq.	1.7*	10.9	35.8	51.6	6.3	12,600	1920	2110	2350	6.5	—
1959	Lump	+ 2 Sq.	4.1	11.0	34.8	50.1	6.4	12,420	1950	2300	2360	—	—
1959	Nut	2 x ¾ Sq.	5.2	14.4	32.5	47.9	6.1	11,710	1930	2100	2190	—	59
1959	Stoker	¾ x ⅜ Sq.	6.6	15.4	31.7	46.3	6.4	11,310	1860	1990	2080	—	62
1956	Slack	1½ Sq. x 0	5.1	15.2	32.4	47.3	5.9	11,415	1910	1980	2020	2.0	61
1957	Slack	1¾ Sq. x 0	6.1	17.5	31.2	45.2	6.7	10,820	1900	2090	2120	4.0	54
1959	Fine Slack	⅜ Sq. x 0	10.4	15.6	29.4	44.6	5.9	10,600	2030	2260	2550	—	56
3. CUMBERLAND FUEL AND TRADING CO. LTD.—Cochrane Mine, Kimberley Seam. River Hebert, Cumberland County.													**Trade Name: COCHRANE**
1956	Lump	+ 1 Sq.	1.6*	15.0	33.6	49.8	6.3	12,130	1810	1900	1970	3.5	—
1959	Lump	+ 1 Sq.	1.5*	13.4	35.3	49.8	5.9	12,350	1890	2120	2280	—	—
1956	Nut	1 x ⅜ Sq.	3.0	19.7	32.6	44.7	5.4	11,250	1920	2030	2050	4.0	—
1959	Nut	1 x ⅜ Sq.	1.5*	19.3	32.5	46.7	5.4	11,510	1940	2070	2240	—	61
1956	Fine Slack	⅜ Sq. x 0	3.6	22.3	32.0	42.1	4.6	10,615	1860	2020	2050	4.0	65
1959	Fine Slack	⅜ Sq. x 0	1.5*	19.1	33.7	45.7	4.7	11,620	1910	2080	2220	—	65
4. DOMINION COAL CO. LTD., Cape Breton County.													**Trade Name: DOMINION**
(i) Dominion No. 4 Mine, Phalen Seam													
1956	Lump	+ 1½ Rd.	0.6*	11.6	32.5	55.3	5.9	13,315	1920	2040	2280	9.0	—
1957	Lump	+ 1¼ Rd.	0.6*	10.9	32.5	56.0	4.7	13,460	1960	2040	2070	8.0	—
1959	Lump	+ 1¼ Sq.	0.6*	9.9	32.4	57.1	4.3	13,790	2000	2100	2220	—	—

1956	Nut	1¼ Rd. x ¾ Sq.	1.3	12.9	32.3	53.5	5.8	13,000	1940	2040	2290	9.0	—
1957	Nut	1¼ Rd. x ¾ Sq.	0.7*	12.7	31.8	54.8	5.2	13,140	1920	2010	2050	8.0	74
1959	Nut	1¼ x ¾ Sq.	1.7	14.4	29.3	54.6	5.5	12,750	1970	2180	2360	—	84
1956	Stoker	¾ Sq. x ¼ Sl.	0.8*	10.4	33.5	55.3	4.9	13,540	1880	2000	2240	9.0	80
1956	Stoker	¾ Sq. x ¼ Sl.	0.9	11.3	33.1	54.7	5.5	13,265	1940	2040	2240	9.0	—
1957	Stoker	¾ Sq. x ¼ Sl.	0.6*	12.2	31.6	55.6	5.2	13,295	1920	2020	2200	8.0	76
1959	Stoker	¾ Sq. x ⅜ Sq.	2.2	14.8	30.4	52.6	4.9	12,680	1910	2200	2360	—	85
1959	Slack	1¼ Sq. x 0	3.1	12.3	30.4	54.2	4.4	12,970	1900	2110	2450	—	81
1956	Fines	¼ Sl. x 0	1.3	10.7	32.4	55.6	4.8	13,370	1900	2020	2240	9.0	81
1957	Fines	¼ Sl. x 0	2.2	10.7	31.5	55.6	4.3	13,220	1910	1960	2020	8.5	76
1959	Fines	⅜ Sq. x 0	3.5	20.9	26.9	48.7	4.6	11,300	1940	2090	2480	—	78

(ii) Dominion No. 12 Mine, Harbour Seam

1956	Lump	+ 3 Rd.	1.0*	4.8	37.9	56.3	2.6	14,595	1960	2050	2310	6.5	—
1957	Lump	+ 3 Rd.	0.6*	4.1	38.0	57.3	1.6	14,615	1940	2060	2270	8.0	—
1959	Lump	+ 2 Rd.	1.2*	5.4	37.6	55.8	2.0	14,360	1840	2170	2420	—	—
1956	Nut	3 Rd. x 1¼ Sq.	1.8	8.7	35.5	54.0	2.5	13,810	1960	2080	2330	7.5	65
1957	Nut	3 Rd. x 1 Sq.	0.7*	10.7	34.8	53.8	1.8	13,430	1960	2140	2280	8.0	61
1959	Nut	2 x 1½ Rd.	1.2	9.3	36.3	53.2	2.4	13,800	1920	2480	2590	—	70
1956	Slack	1¼ Sq. x 0	2.3	11.4	33.3	53.0	2.5	13,630	1960	2070	2360	8.0	69
1957	Slack	1 Sq. x 0	0.7*	10.7	34.3	54.3	2.0	13,390	1880	2070	2170	8.5	62
1959	Slack	1½ Rd. x 0	1.6	9.0	34.0	55.4	2.8	13,710	1900	2110	2390	—	67

(iii) Dominion No. 16 Mine, Phalen Seam

1956	Lump	+ 3 Rd.	1.1*	5.3	33.8	59.8	2.1	14,430	1800	1870	1920	9.0	—
1957	Lump	+ 3 Rd.	0.7*	6.9	33.9	58.5	3.0	14,225	1900	1970	2070	9.0	—
1959	Lump	+ 3 Rd.	1.4*	7.6	34.4	56.6	2.0	13,930	1900	2100	2460	—	—
1956	Special Lump	7 x 3 Rd.	0.9*	8.8	32.8	57.5	2.6	13,930	1820	1900	1970	9.0	—
1957	Special Lump	7 x 3 Rd.	0.8*	7.0	34.0	58.2	2.9	14,060	1900	2000	2070	9.0	—
1959	Nut	3 x 2 Rd.	2.1	9.0	31.3	57.6	2.7	13,580	1840	2170	2330	—	76
1956	Slack	1¼ Sq. x 0	1.7	10.3	31.9	56.1	3.5	13,390	1830	1940	1970	9.0	75
1957	Slack	1¼ Rd. x 0	2.0	7.5	32.5	58.0	3.3	13,790	1900	2020	2120	9.0	72
1959	Slack	2 Rd. x 0	2.9	7.8	31.7	57.6	2.8	13,810	2060	2090	2380	—	75

A. High Volatile A Bituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated						Ash Fusion Temperature (in Reducing Atmosphere)			Free Swelling Index	Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid		
			Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F		
(iii) Dominion No. 16 Mine, Phalen Seam—*Concluded*													
1956	Washed Egg	+ 1¾ Rd.	1.4*	8.0	32.2	58.4	2.8	13,950	1830	1950	2000	9.0	—
1956	Washed Nut	1¾ x ¾ Rd.	1.2*	6.2	34.5	58.1	2.6	14,195	1840	1960	2000	9.0	78
1956	Washed Stoker	¾ Rd. x ¼ Sl.	1.1*	4.9	33.5	60.5	2.5	14,370	1840	1950	1990	9.0	73
1956	Dry Fines	¼ Sl. x 0	3.7	7.0	32.4	56.9	2.5	14,125	1850	1950	1990	9.0	74
(iv) Dominion No. 18 Mine, Harbour Seam													
1956	Lump	+ 2 Rd.	2.2*	6.3	37.5	54.0	2.5	13,790	1950	2050	2310	7.5	—
1957	Lump	+ 2 Rd.	1.9*	8.9	36.8	52.4	3.0	13,310	1930	2050	2270	7.5	—
1959	Lump	+ 1½ Rd.	3.6*	6.5	36.7	53.2	2.9	13,340	1860	2090	2430	—	—
1956	Slack	2 Rd. x 0	3.0	13.9	33.9	49.2	2.5	12,310	1950	2060	2300	5.5	59
1957	Slack	2 Rd. x 0	3.5	10.6	35.4	50.5	2.7	12,700	1900	2100	2180	7.5	54
1959	Slack	1½ Rd. x 0	5.4	11.4	32.1	51.1	2.6	12,260	2040	2310	2560	—	62
(v) Dominion No. 20 Mine, Harbour Seam													
1956	Lump	+ 2 Sq.	1.1*	10.7	35.7	52.5	5.1	13,180	1850	1900	1970	8.5	—
1957	Lump	+ 2 Sq.	0.9*	10.3	36.7	52.1	4.3	13,250	1970	2050	2140	7.5	—
1959	Lump	+ 2 Sq.	1.2*	7.1	37.7	54.0	4.3	14,100	1880	2060	2270	—	—
1956	Nut	2 x ¾ Sq.	1.2	9.7	36.2	52.9	4.3	13,310	1860	1960	1990	9.0	72
1957	Nut	2 x ¾ Sq.	0.6	10.1	37.0	52.3	3.7	13,510	1970	2050	2150	7.5	65
1959	Nut	2 x ¾ Sq.	1.1	7.6	37.1	54.2	3.7	13,940	1990	2100	2450	—	74
1957	Stoker	¾ Sq. x ¼ Sl.	0.7	6.6	38.2	54.5	3.2	13,995	1930	2040	2150	8.0	67
1959	Stoker Pea	¾ Sq. x ⅜ Sl.	1.2	6.4	37.8	54.6	3.7	14,250	1840	2150	2340	—	74

1956	Slack	¾ Sq. x 0	2.6	9.4	35.2	52.8	3.5	13,190	1880	1970	2020	9.0	73
1957	Fines	¼ Sl. x 0	4.1	9.8	34.4	51.7	3.7	12,895	1910	2000	2070	8.0	67
1959	Fines	⅜ Sl. x 0	3.6	8.4	34.8	53.2	3.8	13,330	2050	2240	2320	—	68

(vi) DOMINION No. 25 MINE, Gardiner Seam

1956	Lump	+ 1¼ Rd.	1.7*	11.1	34.8	52.4	3.1	13,045	1950	2060	2290	7.5	—
1957	Lump	+ 1¼ Rd.	2.0	11.3	34.2	52.5	3.7	12,910	1940	2100	2160	7.5	—
1959	Lump	+ 1¼ Rd.	2.4*	10.1	33.6	53.9	3.4	12,960	1870	2180	2470	—	—
1956	Slack	1¼ Rd. x 0	3.8	11.2	32.4	52.6	3.5	12,665	1950	2060	2290	7.5	67
1957	Slack	1¼ Rd. x 0	5.5	11.3	31.6	51.6	3.6	12,280	1970	2010	2040	7.5	58
1959	Slack	1¼ Rd. x 0	5.8	10.0	31.4	52.8	3.3	12,430	2000	2170	2490	—	63

(vii) DOMINION No. 26 MINE, Harbour Seam

1956	Lump	+ 1¼ Rd.	0.8*	4.7	36.9	57.6	1.5	14,430	1900	1990	2200	8.5	—
1957	Lump	+ 1¼ Rd.	0.8*	5.2	36.4	57.6	2.0	14,215	1970	2060	2280	8.0	—
1959	Lump	+ 1¼ Rd.	1.7*	5.3	36.5	56.5	1.8	14,190	1860	2090	2400	—	—
1956	Slack	1¼ Rd. x 0	2.5	4.5	34.4	58.6	1.3	14,190	1960	2090	2200	8.5	71
1957	Slack	1¼ Rd. x 0	3.1	6.1	34.2	56.6	1.8	13,640	2040	2070	2100	8.5	64
1957	Slack	1¼ Rd. x 0	2.0	5.6	34.7	57.7	1.3	13,870	2040	2120	2200	8.5	66
1959	Slack	1¼ Rd. x 0	2.1	5.0	35.0	57.9	1.5	14,230	2000	2150	2470	—	65

5. DRUMMOND COAL CO. LTD.—Westville, Pictou County. Trade Name: **DRUMMOND**

(i) DRUMMOND No. 1 MINE, Main Seam

1956	Lump	+ ¾ Sq.	1.5*	11.9	27.8	58.8	0.7	13,030	2150	2250	2350	5.0	—
1957	Lump	+ 1½ Sq.	2.2*	13.6	27.2	57.0	0.9	12,595	2220	2320	2400	5.5	—
1959	Lump	+ 1½ Sq.	2.8*	13.3	27.2	56.7	0.5	12,620	2250	2260	2590	—	—
1956	Nut	1½ x ¾ Sq.	2.2*	13.6	27.5	56.7	1.0	12,640	2180	2400	2570	5.0	—
1957	Nut	1½ x ¾ Sq.	2.9	15.4	26.9	54.8	1.1	12,065	2200	2290	2390	4.0	63
1959	Nut	1½ x ¾ Sq.	2.8*	15.4	26.9	54.9	0.7	12,290	2240	2240	2510	—	64
1956	Slack	¾ Sq. x 0	2.5*	12.7	27.5	57.3	0.9	12,565	2200	2400	2550	2.5	68
1957	Slack	¾ Sq. x 0	2.7	15.4	27.0	54.9	1.2	11,960	2220	2320	2400	1.0	66
1959	Slack	¾ Sq. x 0	3.6*	16.2	26.2	54.0	1.2	11,760	2290	2460	2500	—	70

A. High Volatile A Bituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated: Proximate Analysis: Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
			(ii) DRUMMOND No. 2 MINE, Second, or Scott Seam										
1956	Lump	Plus ¾ Sq.	1.4*	22.0	23.8	52.8	1.1	11,375	2500	2700	2750+	2.5	—
1957	Lump	Plus 2½ Sq.	1.1*	25.9	22.8	50.2	0.9	10,895	2250	2340	2410	2.0	—
1956	Nut	1½ x ¾ Sq.	1.4*	23.9	22.8	51.9	1.0	11,115	2630	2730	2750+	2.0	—
1957	Nut	1½ x ¾ Sq.	4.1	26.1	21.9	47.9	1.2	10,280	2230	2350	2430	1.0	65
1959	Nut	1½ x ¾ Sq.	2.5	26.6	22.3	48.6	1.2	10,600	2500	2610	2700	—	64
1956	Slack	¾ Sq. x 0	1.3*	24.8	23.0	50.9	1.0	10,975	2500	2750+	2750+	2.0	67
1957	Slack	¾ Sq. x 0	5.9	24.0	21.7	48.4	0.7	10,425	2240	2320	2430	1.5	68
1959	Slack	¾ Sq. x 0	3.8	21.9	21.1	53.2	1.0	11,070	2500	2750+	2750+	—	67
	6. FOUR STAR COLLIERIES LTD.—FOUR STAR MINE, Tracey Seam. Broughton, Cape Breton County. Trade Name: **FOUR STAR**												
1955	Lump	+ 2¼ Sq.	1.4*	9.2	36.7	52.7	6.4	12,980	1940	2120	2140	4.5	58
1956	Lump	+ 2½ Sq.	1.6*	10.0	35.3	53.1	8.1	12,695	1880	2050	2110	4.5	—
1957	Lump	+ 2½ Sq.	0.4*	9.7	36.7	53.2	6.5	12,990	1920	2080	2290	7.0	—
1959	Lump	+ 2 Sq.	2.8*	12.5	33.5	51.2	7.4	12,360	1850	2310	2370	—	—
1955	Nut	2¼ x 1 Sq.	1.6*	9.6	35.9	52.9	6.4	12,830	1980	2100	2150	4.5	55
1956	Nut	2½ x 1¼ Sq.	1.7*	12.1	35.2	51.0	7.5	12,485	1810	2030	2070	4.0	60
1957	Nut	2½ x 1 Sq.	1.2*	12.3	34.9	51.6	7.2	12,400	1900	2040	2130	7.0	58
1959	Nut	2 x 1 Sq.	2.9	12.1	34.1	50.9	7.2	12,180	1920	2180	2300	—	65
1955	Stoker	1 Sq. x 3/16 Sl.	1.3*	9.5	36.3	52.9	5.6	12,950	2020	2120	2250	5.0	57
1957	Stoker	1 Sq. x 3/16 Sl.	1.1*	9.9	35.9	53.1	6.4	12,910	1910	2070	2160	6.5	54
1959	Stoker	1 Sq. x 3/8 Sl.	2.5	9.8	35.3	52.4	6.1	12,880	1910	2090	2300	—	63
1956	Slack	1¼ Sq. x 0	3.4	12.5	32.9	51.2	5.7	12,105	1840	2060	2150	3.5	60
1957	Slack	1 Sq. x 0	6.2	10.0	33.9	49.9	5.5	12,130	1910	2050	2150	7.0	57
1959	Slack	1 Sq. x 0	4.8	10.4	33.7	51.1	5.5	12,460	1910	2350	2560	—	—
1955	Fines	3/16 Sl. x 0	2.0*	18.0	34.2	45.8	5.3	11,290	2050	2150	2240	4.0	64
1957	Fines	3/16 Sl. x 0	7.6	10.3	33.2	48.9	5.6	11,770	1910	2040	2140	6.5	61

7. GREENWOOD COAL CO. LTD.—Greenwood No. 2 Mine, MacKay Seam. MacLellan's Brook, Pictou County. Trade Name: **GREENWOOD**

1956	Mine Run	.....	3.3	21.0	27.7	48.0	1.7	10,955	2180	2560	2650	1.0	57
1957	Mine Run	.....	7.5	21.2	25.2	46.1	1.5	10,280	1980	2040	2150	1.0	54
1959	Mine Run	.....	6.4	23.7	25.6	44.3	1.7	10,060	2100	2300	2420	—	57
1959	Mine Run	.....	5.6	24.6	25.9	43.9	1.7	9,920	2310	2490	2750+	—	56
1959	Mine Run	.....	5.9	24.9	25.2	44.0	1.7	9,870	2270	2490	2750+	—	57

8. INDIAN COVE COAL CO. LTD., Sydney Mines, Cape Breton County.

(i) Greener Mine, Upper Jubilee Seam. Trade Names: **GREENER, INDIAN COVE**

1960	Lump	+ 1¼ Sq.	5.2*	9.9	36.8	48.1	5.9	12,600	1910	2120	2300	5.5	—
1960	Nut	1¼ x ¾ Sq.	3.9*	11.8	37.0	47.3	6.3	12,500	1900	2100	2210	4.5	—
1960	Slack	1¼ Sq. x 0	3.8*	10.2	36.7	49.3	5.5	12,610	1940	2130	2220	5.5	63

(ii) Tomson Mine, Upper Jubilee Seam. Trade Names: **TOMSON, INDIAN COVE**

1960	Mine Run	.....	7.5*	12.6	34.3	45.6	6.6	11,600	1940	2180	2260	5.5	64

9. JOGGINS COAL CO. LTD.—Bayview No. 8 Mine, Forty Brine Seam. Joggins, Cumberland County. Trade Name: **JOGGINS**

1956	Lump	+ 1½ Sq.	1.8*	9.6	37.2	51.4	4.4	13,015	1810	1910	2000	4.0	—
1956	Lump	6 x 1½ Sq.	1.7*	8.8	37.5	52.0	4.3	13,060	1800	1910	1980	3.5	—
1957	Lump	6 x 1½ Sq.	1.1*	13.8	36.8	48.3	5.6	12,185	1950	2060	2110	5.6	—
1959	Lump	6 x 1½ Sq.	2.3*	11.7	35.9	50.1	5.1	12,540	1780	2010	2100	5.1	—
1956	Stoker	1½ x ½ Sq.	1.6	23.3	32.5	42.6	6.1	10,770	1950	2050	2070	3.0	65
1957	Stoker	1⅔ x ½ Sq.	2.0	29.5	30.3	38.2	6.2	9,510	1970	2140	2220	4.5	61
1959	Stoker	1½ x ½ Sq.	2.9	23.6	31.6	41.9	5.6	10,520	1820	2050	2210	—	59
1956	"Evangeline"† Slack	1½ Sq. x 0	1.7*	12.1	37.0	49.2	4.7	12,505	1800	1910	1970	3.5	63
1957	"Evangeline" Slack	1⅔ Sq. x 0	2.2	16.4	34.8	46.6	5.5	11,610	1960	2110	2140	6.0	61
1959	"Evangeline" Slack	1½ Sq. x 0	3.7	15.8	34.1	46.4	5.1	11,640	1970	2140	2310	—	60
1956	Slack	½ Sq. x 0	1.7	36.0	27.9	34.4	5.0	8,565	1960	2080	2120	2.0	68
1957	Slack	½ Sq. x 0	2.6	34.5	28.9	34.0	5.0	8,690	1980	2220	2230	3.0	—
1959	Slack	½ Sq. x 0	3.1	34.5	27.8	34.6	5.1	8,680	1830	2050	2230	—	64

† Trade name.

A. High Volatile A Bituminous—Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated: Proximate Analysis: Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb.	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
10. OLD SYDNEY COLLIERIES LTD.—Princess and Florence Mines, Harbour Seam. Sydney Mines, Cape Breton County. Trade Names: **OLD SYDNEY, SCOTIA**													
1956	Washed Egg	+ 1¾ Rd.	1.3*	7.6	38.2	52.9	2.9	13,755	1910	2000	2130	5.5	—
1957	Washed Egg	+ 1¾ Rd.	0.9	6.3	37.7	55.1	3.1	13,850	1940	2080	2130	8.0	—
1959	Washed Egg	+ 1¾ Rd.	2.9*	3.5	38.9	54.7	1.6	14,340	2000	2300	2400	—	—
1959	Washed Egg	+ 1¾ Rd.	1.6*	4.4	36.4	57.6	1.6	14,450	1840	2170	2340	—	—
1959	Washed Egg	+ 1¾ Rd.	1.5*	3.6	39.5	55.4	1.9	14,630	1980	2300	2540	—	—
1956	Washed Nut	1¾ x ¾ Rd.	3.1*	4.2	38.5	54.2	2.5	14,115	1850	1960	2120	6.5	62
1957	Washed Nut	1¾ x ¾ Rd.	0.9	3.8	39.2	56.1	1.8	14,210	1940	2130	2400	7.5	53
1959	Washed Nut	1¾ x ¾ Rd.	2.2	3.5	38.5	55.8	1.6	14,610	1920	2190	2370	—	62
1959	Washed Nut	1¾ x ¾ Rd.	2.9	4.4	35.5	57.2	1.7	14,400	1820	2190	2390	—	69
1959	Washed Nut	1¾ x ¾ Rd.	2.6	3.1	38.5	55.8	1.5	14,390	1900	2110	2330	—	63
1956	Washed Stoker	¾ Rd. x ¼ Sl.	1.4	3.7	39.1	55.8	2.2	14,425	1860	2000	2140	7.5	63
1957	Washed Stoker	¾ Rd. x ¼ Sl.	1.9	3.8	38.5	55.8	1.9	14,060	1940	2130	2400	7.5	57
1959	Washed Stoker	¾ Rd. x ¼ Sl.	2.5	3.0	38.4	56.1	1.5	14,570	1840	2180	2320	—	58
1959	Washed Stoker	¾ Rd. x ¼ Sl.	2.6	4.0	35.6	57.8	1.9	14,460	1920	2170	2390	—	70
1959	Washed Stoker	¾ Rd. x ¼ Sl.	2.6	3.1	39.1	55.2	1.5	14,470	1940	2200	2470	—	58
1956	Fines	¼ Sl. x 0	3.8	12.0	33.3	50.9	2.5	12,695	1880	2030	2150	8.0	66
1957	Fines	¼ Sl. x 0	3.3	10.8	34.0	51.9	1.9	12,820	1910	2020	2080	7.5	62
1959	Fines	¼ Sl. x 0	5.0	10.0	32.8	52.2	1.7	12,910	1880	2340	2440	—	72
1959	Fines	¼ Sl. x 0	4.6	6.2	32.8	56.4	2.1	13,500	1870	2360	2480	—	67
1959	Fines	¼ Sl. x 0	4.8	8.7	34.4	52.1	1.4	13,010	1900	2340	2450	—	64

(1) For coals in this section, unless indicated by an asterisk (*), the moisture is that determined on specially prepared moisture samples. The asterisk indicates that the moisture is that determined on coal as received at the laboratory, special moisture samples not being prepared.

B. High Volatile C Bituminous

(All underground mines)

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur %	Calorific Value Btu/lb	Initial °F	Softening °F	Fluid °F	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %						
	1. S. J. DOUCET AND SONS LTD.—ROSEBANK No. 3 MINE, 34-in. Seam. Inverside, Inverness County. Trade Names: **INVERNESS, DOUCET**											
1959	Lump	+ ¾ Sq.	10.0	8.8	37.5	43.7	5.6	11,010	1910	2260	2370	—
1959	Slack	¾ Sq. x 0	9.3	14.2	33.7	42.8	6.1	10,350	1840	2070	2380	60
	2. EVANS' COAL MINES LTD.—EVANS MINE. St. Rose, Inverness County. Trade Names: **ST. ROSE, EVANS**											
1956	Lump	+ 4½ Sq.	4.7*	8.7	36.2	50.4	6.8	12,075	1900	2050	2100	—
1957	Lump	+ 4 Sq.	4.0	9.6	36.4	50.0	6.7	12,105	1900	2000	2040	—
1959	Lump	+ 4½ Sq.	5.3	9.3	35.9	49.5	6.6	11,970	—	—	—	—
1956	Egg	4½ x 2½ Sq.	4.8*	9.1	36.6	49.5	6.5	12,010	1920	2060	2110	—
1957	Egg	4 x 2½ Sq.	4.2	9.5	35.5	50.8	6.4	12,055	1920	2010	2040	—
1959	Egg	4½ x 2½ Sq.	5.4	9.0	37.3	48.3	6.4	12,020	1840	2080	2190	—
1956	Nut	2½ x ¾ Sq.	4.8*	9.9	35.5	49.8	6.6	11,980	1880	1980	2030	—
1957	Nut	2½ x 1 Sq.	4.5	8.3	35.9	51.3	6.0	12,265	1930	2030	2050	55
1959	Large Nut	2½ x 1 Sq.	5.0	9.7	36.2	49.1	6.4	12,040	1900	2040	2580	—
1959	Small Nut	1 x ¾ Sq.	5.0	9.0	36.9	49.1	6.3	12,130	1860	2040	2210	59
1956	Stoker	¾ x ½ Sq.	5.4*	9.5	34.2	50.9	6.3	11,665	1900	2040	2070	59
1959	Stoker	¾ x ½ Sq.	5.4	8.4	37.3	48.9	6.0	12,200	1940	2100	2160	58
1956	Slack	¾ Sq. x 0	4.9	12.2	34.3	48.6	5.9	11,480	1900	2010	2100	57
1957	Slack	1 Sq. x 0	4.6	11.1	34.8	49.5	5.7	11,755	1920	2000	2040	57
1959	Slack	½ Sq. x 0	5.3	12.2	35.9	46.6	5.8	11,410	—	—	—	64

* Calculated to equilibrium moisture basis.

B. High Volatile C Bituminous—Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value—Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
	3. CHESTICO COAL MINES CORP. LTD.—Chestico Mine.† Port Hood, Inverness County.											
1956	Lump	+ ¾ Sq.	5.3	17.8	32.5	44.4	8.0	10,385	1900	2000	2030	—
1959	Lump	+ 1 Sq.	5.3	17.4	33.8	43.5	8.8	10,860	2030	2160	2510	—
1959	Nut	1 x ¾ Sq.	5.5	15.4	34.7	44.4	8.0	11,066	1840	2020	2200	56
1956	Slack	¾ Sq. x 0	6.5	15.6	34.2	44.8	6.8	10,750	1910	2050	2180	53
			6.5	14.0	34.1	45.4	7.1	11,170	1820	2100	2190	59

† Formerly Harbourview Mine, operated by Margaree Steamship Co. Ltd.

NEW BRUNSWICK

High Volatile A Bituminous[1]

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated						Ash Fusion Temperature (in Reducing Atmosphere)			Free Swelling Index	Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid		
			Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F		
	1. AVON COAL CO. LTD.—(strip). Rothwell, Minto Area.												Trade Name: **AVON**
1955	Lump	+ 2 Sq.	1.3*	15.0	31.7	52.0	8.2	12,465	1950	2020	2040	8.5	—
1957	Lump	+ 1½ Sq.	0.9	18.0	31.7	49.4	9.0	11,950	1900	2050	2120	6.5	—
1959	Lump	+ 2½ Sq.	3.0	18.5	32.1	46.4	10.0	11,630	1890	1990	2140	—	—
1955	Washed Nut	1½ x ¾ Sq.	1.4	13.8	33.2	51.6	7.0	12,710	1900	2000	2050	7.0	65
1955	Washed Nut	1½ Sq. x ¼ Sl.	3.4	12.9	33.1	50.6	6.7	12,540	1900	2010	2060	7.0	65
1956	Washed Nut	1¼ x ¾ Sq.	3.8	13.7	32.9	49.6	6.9	12,340	1940	2020	2040	8.0	64
1956	Washed Nut	1½ x ½ Sq.	2.0	14.5	32.6	50.9	7.3	12,580	1960	2040	2050	8.5	65
1957	Washed Nut	2 x 1¼ Sq.	1.6	15.6	33.5	49.3	7.8	12,370	1900	1980	2110	6.5	57
1959	Washed Nut	2½ x ¾ Sq.	3.5	14.4	33.0	49.1	7.3	12,400	1870	1960	2160	—	60
1955	Washed Stoker	¾ Sq. x ¼ Sl.	3.4	14.1	32.4	50.1	7.3	12,280	1900	2020	2080	7.0	59
1956	Washed Stoker	¾ x ¼ Sq.	4.2	12.8	32.3	50.7	6.7	12,365	1940	2020	2040	9.0	65
1957	Washed Stoker	¾ x ¼ Sq.	2.9	15.7	32.4	49.0	8.3	12,080	1950	2100	2190	7.0	62
1959	Washed Stoker	¾ x ¼ Sq.	3.2	14.1	32.6	50.1	7.2	12,300	1920	2040	2160	—	61
1955	Washed Slack	2 Sq. x 0 Sl.	2.4	13.8	33.3	50.5	7.5	12,450	1910	2020	2060	7.0	59
1956	Washed Slack	2 Sq. x 0	2.5	15.1	32.1	50.3	7.5	12,225	1940	2000	2020	8.5	63
1956	Washed Slack	1½ Sq. x 0	4.2	13.6	31.9	50.3	7.2	12,280	1860	2000	2020	9.0	66
1957	Washed Slack	2 Sq. x 0	2.8	14.0	32.0	51.2	7.2	12,430	1900	1980	2030	7.5	59
1957	Washed Slack	1¼ Sq. x 0	2.6	14.0	32.9	50.5	7.5	12,440	1950	2100	2190	7.0	59
1959	Washed Slack	2½ Sq. x 0	2.8	15.7	31.7	49.8	7.4	12,320	1940	2040	2150	—	65
1959	Washed Slack	¾ Sq. x 0	3.4	14.0	32.2	50.4	6.9	12,510	1900	1980	2040	—	66
1955	Washed Fines	¼ Sl. x 0	2.5	17.2	31.9	48.4	8.3	11,820	1910	2030	2090	7.5	—
1956	Washed Fines	¼ Sq. x 0	2.2	13.7	32.6	51.5	6.9	12,470	1880	2000	2020	9.0	64
1957	Washed Fines	¼ Sq. x 0	5.6	14.0	31.8	48.6	7.3	11,960	1880	2100	2140	7.5	57
1959	Washed Fines	¼ Sq. x 0	6.0	14.1	31.7	48.2	6.7	12,060	1940	2020	2130	—	65

High Volatile A Bituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated						Ash Fusion Temperature (in Reducing Atmosphere)			Free Swelling Index	Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid		
			Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F		
	2. KING MINING CO. LTD.—(strip). South Minto Area.											Trade Name: **KING**	
1956	Lump	+ 1¼ Sq.	0.8*	18.1	31.4	49.7	10.1	11,930	1900	2000	2050	9.0	—
1957	Lump	+ 1¼ Sq.	1.5	16.1	32.4	50.0	9.1	12,210	2020	2120	2240	7.0	—
1959	Lump	+ 1½ Sq.	2.0	16.5	31.4	50.1	8.4	12,100	1860	1990	2080	—	—
1956	Slack	1¼ Sq. x 0	5.0	19.0	29.4	46.6	7.8	11,140	1880	1980	2020	8.0	70
1957	Slack	1¼ Sq. x 0	4.1	18.3	30.4	47.2	7.7	11,400	1910	2100	2230	7.0	60
1959	Slack	1½ Sq. x 0	5.1	17.8	30.4	46.7	7.3	11,470	1920	2040	2130	—	70
	3. LAFFERTY BROS.—(strip). Coal Creek, Chipman Area.											Trade Name: **LAFFERTY**	
1956	Mine Run†	.....	15.0	7.3	28.2	49.5	1.8	11,365	2320	2520	2640	1.0	78
1956	Mine Run	.....	4.3	18.3	32.2	45.2	6.6	11,610	1940	2040	2070	8.5	66
1957	Mine Run	.....	0.6*	19.2	32.8	47.4	8.6	11,920	—	1940	—	7.0	57
1957	Mine Run	.....	0.7*	16.8	33.1	49.4	6.4	12,450	—	1930	—	7.5	63
1959	Mine Run	.....	2.1*	17.6	33.9	46.4	7.5	12,020	1870	1920	1990	—	63
	4. McEWAN MINING CO.—(strip). Coal Creek Area.											Trade Name: **McEWAN**	
1959	Mine Run	.....	2.2*	16.8	34.0	47.0	7.8	12,170	1940	2020	2100	—	—
	5. D.W. AND R.A. MILLS LTD.—(strip). Midland, Minto Area.											Trade Names: **MILLS, MINTO**	
1959	Washed Nut	2 x ¾ Sq.	1.9	13.2	34.7	50.2	6.4	13,020	1910	2060	2160	—	—
1959	Washed Stoker	¾ x ¼ Sq.	3.0	12.0	35.6	49.4	6.1	13,150	1960	2010	2190	—	62
1957	Washed Slack	1½ x 0	2.7*	12.6	35.2	49.5	7.5	12,730	1830	1960	2050	—	61
1959	Washed Slack	2 Sq. x 0	2.1	15.5	34.0	48.4	6.6	12,530	1920	2000	2170	—	64
1959	Washed Slack	¾ Sq. x 0	2.6	12.8	33.2	51.4	6.5	12,830	1910	2020	2170	—	62

6. MIRAMICHI LUMBER CO. LTD.—(underground and strip). Minto and North Minto Area. Trade Names: **MIRAMICHI, MINTO**

(i) No. 27 Shaft

1956	Lump	+ 1 Sq.	0.8*	30.8	28.4	40.0	7.6	9,880	1850	1960	2110	8.0	—
1957	Lump	+ 1½ Sq.	3.8	27.2	28.7	40.3	7.6	10,180	1890	2050	2370	5.0	—
1959	Lump	+ 1¼ Sq.	3.4	26.4	28.9	41.3	7.6	10,230	1890	2000	2240	—	—
1956	Slack	1 Sq. x 0	3.2	29.3	28.1	39.4	6.1	9,940	1850	1980	2110	7.5	67
1957	Slack	1½ Sq. x 0	6.0	28.2	27.7	38.1	6.1	9,740	1930	2100	2450	5.0	—
1959	Slack	1¼ Sq. x 0	4.6	29.0	27.2	39.2	6.0	9,640	1980	2110	2340	—	68

(ii) No. 28 Shaft

1956	Mine Run	.....	3.5	24.3	30.0	42.2	7.2	10,355	1850	1990	2110	8.5	67
1957	Mine Run	.....	4.9	29.9	27.1	38.1	7.1	9,525	1900	2110	2410	4.5	62
1959	Mine Run	.....	3.6	32.8	28.1	35.5	7.5	9,300	1890	2010	2210	—	—

(iii) Strip Mine

1956	Lump	+ 2 Sq.	0.5*	16.7	32.1	50.7	6.5	12,420	1880	1990	2130	9.0	—
1956	Lump	+ 1½ Sq.	0.7*	11.7	34.3	53.3	6.4	13,165	1800	1900	1930	8.5	—
1957	Lump	+ 2 Sq.	1.5	15.9	32.7	49.9	7.3	12,390	1850	2000	2300	7.0	—
1959	Lump	+ 3 Sq.	2.8	14.2	32.3	50.7	7.4	12,420	1900	1990	2090	—	—
1959	Nut	3 x 1¼ Sq.	2.6	15.2	32.2	50.0	7.4	12,270	1900	2060	2140	—	66
1956	Slack	2 Sq. x 0	3.1	16.0	32.2	48.7	6.5	12,130	1880	2000	2130	9.0	71
1956	Slack	1½ Sq. x 0	6.3	15.7	31.4	46.6	7.4	11,625	1800	1900	1940	9.0	71
1957	Slack	2 Sq. x 0	4.8	19.0	30.6	45.6	5.5	11,290	1950	2050	2260	7.0	58
1959	Slack	1¼ Sq. x 0	3.8	16.2	30.2	49.8	8.5	11,940	1990	2100	2190	—	76

7. V. C. McMANN LTD.—(underground). Rothwell, Minto Area. Trade Name: **McMANN**

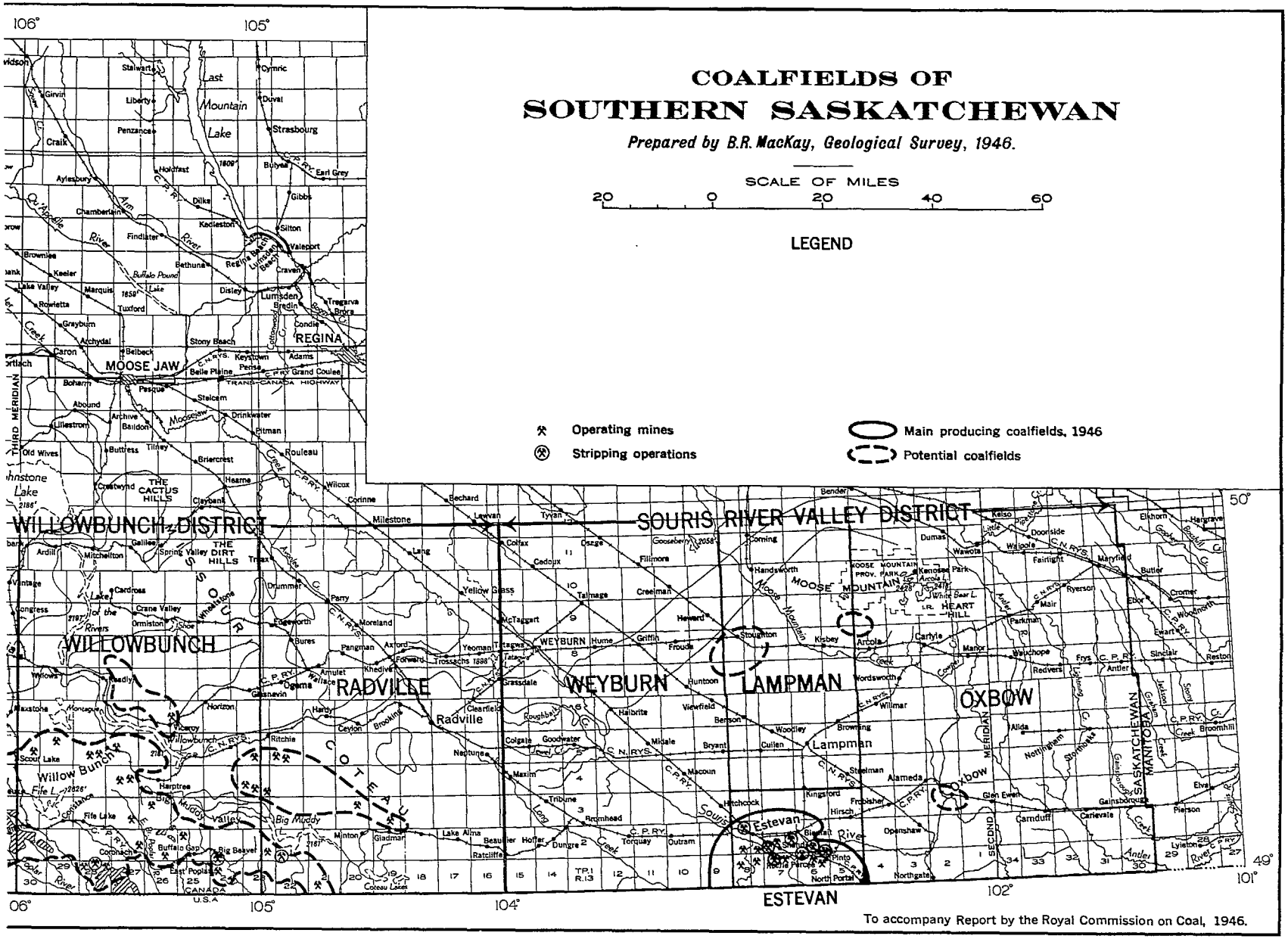
1957	Mine Run	.....	2.3	22.5	29.7	45.5	7.2	11,120	1880	1980	2020	8.5	68
1957	Mine Run	.....	3.9	22.5	29.3	44.3	7.2	10,800	1900	2040	2350	5.5	62
1959	Lump	+ 1¼ Sq.	1.8	16.4	32.8	49.0	7.6	12,310	1870	2020	2170	—	—
1959	Nut	1¼ x ⅝ Sq.	1.4	18.7	33.4	46.5	6.9	11,980	1870	1960	2080	—	—
1959	Slack	⅝ Sq. x 0	4.1	19.7	31.3	44.9	7.3	11,440	1940	2060	2150	—	66
1959	Slack	⅝ Sq. x 0	3.2*	16.3	33.3	47.2	6.9	12,000	1960	2040	2220	—	—

† "Soft" coal (oxidized)

High Volatile A Bituminous —Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On Moisture Basis Indicated: Proximate Analysis: Moisture (1) %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
	8. NEWCASTLE COAL CO. LTD.—(underground). Newcastle Bridge, Minto Area.												Trade Name: **NEWCASTLE**
1956	Mine Run	.....	3.8	20.5	30.6	45.1	6.3	11,315	1800	1970	2010	8.5	70
1957	Mine Run	.....	2.0	23.0	31.4	43.6	6.7	11,190	1870	2050	2330	5.5	60
1959	Lump	+ 1½ Sq.	1.2	20.5	31.7	46.6	6.9	11,700	1890	2010	2160	—	—
1959	Slack	1½ Sq. x 0	3.6	23.7	29.1	43.6	6.2	10,870	1960	2020	2090	—	64
	9. A. W. WASSON—(strip and underground).												
			(i) Beersville, Kent County, (strip).										Trade Name: **WASSON**
1956	Mine Run	.....	6.0*	22.5	28.1	43.4	8.8	10,220	1940	2070	2140	4.0	—
			(ii) Rothwell, Minto Area, (strip and underground).										Trade Names: **WASSON, ROTHWELL**
1956	Mine Run	.....	8.2	18.7	29.7	43.4	6.2	10,785	1810	1910	1940	8.0	71
1957	Mine Run	.....	3.6	19.7	31.3	45.4	7.1	11,410	1900	2030	2170	6.0	57
1956	Lump	+ 1¼ Sq.	2.3	16.2	32.5	49.0	6.7	12,175	1930	2030	2050	9.0	—
1957	Lump	+ 1½ Sq.	2.6	18.4	32.2	46.8	7.2	11,850	1900	2070	2180	5.5	—
1959	Lump	+ 1 Sq.	1.2	21.7	31.7	45.4	7.8	11,530	1820	1980	2090	—	—
1956	Slack	1¼ Sq. x 0	7.7	16.2	30.5	45.6	6.4	11,305	1940	2040	2060	8.0	71
1957	Slack	1½ Sq. x 0	4.4	18.9	31.7	45.0	6.8	11,530	1900	2050	2230	6.0	60
1959	Slack	1 Sq. x 0	5.9	22.7	29.4	42.0	6.5	10,620	1870	2010	2260	—	69
	10. WASSON, Mrs. W. M.—(strip). Coal Creek Area.												Trade Name: **WASSON'S**
1956	Mine Run	.....	3.2*	21.6	31.5	43.7	8.2	10,380	1940	2060	2150	1.5	—
1957	Mine Run	.....	1.5*	19.1	33.1	46.3	8.2	11,740	1800	1950	2120	—	59
1957	Mine Run	.....	1.8*	18.3	33.3	46.6	8.2	11,810	1800	1960	2120	—	57
1959	Mine Run	.....	1.1*	23.3	34.0	41.6	12.9	11,180	1960	2110	2220	—	—

(1) For coals in this section, unless indicated by an asterisk (*), the moisture is that determined on specially prepared moisture samples. The asterisk indicates that the moisture is that determined on coal as received at the laboratory, special moisture samples not being prepared.



To accompany Report by the Royal Commission on Coal, 1946.

SASKATCHEWAN

Lignite

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
1. MANITOBA AND SASKATCHEWAN COAL CO. LTD.—M. AND S. MINES, Lease No. 6218.—(strip). Bienfait, Bienfait Area. Trade Names: **M. AND S., SOO, SILKSTONE**												
1955	Cobble	6 x 4 Rd.	32.0	7.3	27.1	33.6	0.5	7,570	1930	2050	2260	53
1958	Cobble	6 x 4 Rd.	33.1	5.5	28.9	32.5	0.3	7,660	2340	2380	2450	—
1959	Cobble	6 x 4 Rd.	34.6	4.2	29.0	32.2	0.3	7,780	2410	2530	2600	—
1955	Stove	4 x 2 Rd.	33.3	7.1	27.1	32.5	0.4	7,400	1900	2030	2230	54
1958	Stove	4 x 2 Rd.	32.6	5.8	28.6	33.0	0.3	7,640	2360	2450	2450	—
1959	Stove	4 x 2 Rd.	32.4	5.2	32.9	29.5	0.4	7,770	2120	2160	2320	—
1955	Stoker	2 Rd. x 1 Sq.	32.8	7.0	26.7	33.5	0.4	7,460	1950	2060	2190	53
1958	Stoker	2 Rd. x 1 Sq.	31.5	6.8	27.9	33.8	0.2	7,730	2060	2260	2340	58
1959	Stoker	2 Rd. x 1 Sq.	31.8	5.2	31.3	31.7	0.4	7,800	2300	2400	2490	54
1955	Pea	1 x ½ Sq.	33.7	6.8	26.5	33.0	0.3	7,380	1970	2100	2200	53
1958	Pea	1 x ½ Sq.	30.9	8.3	27.5	33.3	0.1	7,520	2040	2160	2230	66
1959	Pea	1 x ½ Sq.	30.9	5.9	31.5	31.7	0.4	7,910	2240	2300	2400	62
1955	Bug Dust	½ Sq. x 0	32.8	8.4	26.5	32.3	0.5	7,340	1900	2050	2150	54
1958	Bug Dust	½ Sq. x 0	30.6	10.3	28.8	30.3	0.4	7,360	1930	2090	2170	65
1959	Bug Dust	½ Sq. x 0	30.3	8.3	29.9	31.5	0.4	7,630	2240	2290	2320	—

Lignite—Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value-Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
	2. NORTH WEST COAL CO. LTD.—Lease No. 7211,—(strip). Bienfait, Bienfait Area.										Trade Names: **SASKO, PLUS VALUE**	
1959	Cobble	+ 4 Sq.	35.3	4.5	28.0	32.2	0.4	7,500	2480	2570	2640	—
1955	Stove	4 x 2 Sq.	33.0	6.2	26.4	34.4	0.5	7,420	2080	2220	2280	67
1959	Stove	4 x 2 Sq.	34.4	5.2	27.3	33.1	0.4	7,500	2390	2440	2510	—
1955	Booker	2 x 1 Sq.	32.1	7.3	27.1	33.5	0.7	7,550	2080	2240	2260	65
1958	Booker	2 x 1 Sq.	34.3	6.0	27.3	32.4	0.4	7,470	2440	2500	2530	—
1959	Booker	2 x 1 Sq.	34.1	6.0	29.9	30.0	0.5	7,420	1890	2300	2390	63
1955	Pea	1 x ½ Sq.	33.1	7.9	26.6	32.4	0.7	7,290	2070	2230	2260	65
1958	Pea	1 x ½ Sq.	32.0	6.9	28.9	32.2	0.4	7,660	2380	2450	2500	60
1959	Pea	1 x ½ Sq.	32.8	8.9	27.4	30.9	1.0	7,250	1910	2140	2300	77
1955	Bug Dust	½ Sq. x 0	32.2	9.6	25.9	32.3	1.0	7,220	2070	2240	2260	64
1958	Bug Dust	½ Sq. x 0	32.3	8.7	26.4	32.6	0.6	7,390	2190	2300	2370	71
1959	Bug Dust	½ Sq. x 0	33.3	7.3	27.8	31.6	0.7	7,460	1870	2290	2360	69
	3. WESTERN DOMINION COAL MINES LTD.—Lease No. 6238 etc.,—(strip). Taylorton, Bienfait Area.										Trade Name: **KLIMAX**	
1955	Cobble	+ 4 Rd.	33.2	6.7	26.8	33.3	0.6	7,500	2000	2100	2140	53
1958	Cobble	+ 4 Rd.	32.4	5.7	27.8	34.1	0.3	7,840	2280	2300	2350	—
1955	Stove	4 x 2 Rd.	32.7	6.1	26.9	34.3	0.5	7,620	2000	2110	2150	53
1958	Stove	4 x 2 Rd.	33.3	5.1	29.4	32.2	0.4	7,800	2350	2350	2350	—
1955	Booker	2 Rd. x 1 Sq.	32.9	6.1	27.0	34.0	0.5	7,500	2000	2110	2150	53
1958	Booker	2 Rd. x 1 Sq.	33.2	5.7	28.7	32.4	0.4	7,700	2350	2360	2360	—
1958	Stoker	2 Rd. x ½ Sq.	33.2	5.3	29.3	32.2	0.2	7,780	2370	2450	2470	49
1955	Pea	1 x ½ Sq.	32.6	6.1	27.8	33.5	0.5	7,590	2000	2130	2200	53
1958	Pea	1 x ½ Sq.	32.7	6.1	31.0	30.2	0.4	7,710	2010	2230	2280	53
1955	Bug Dust	½ Sq. x 0	32.9	7.7	26.2	33.2	0.7	7,360	2000	2130	2160	54
1958	Bug Dust	½ Sq. x 0	32.9	6.7	30.9	29.5	0.4	7,640	1890	2170	2260	58

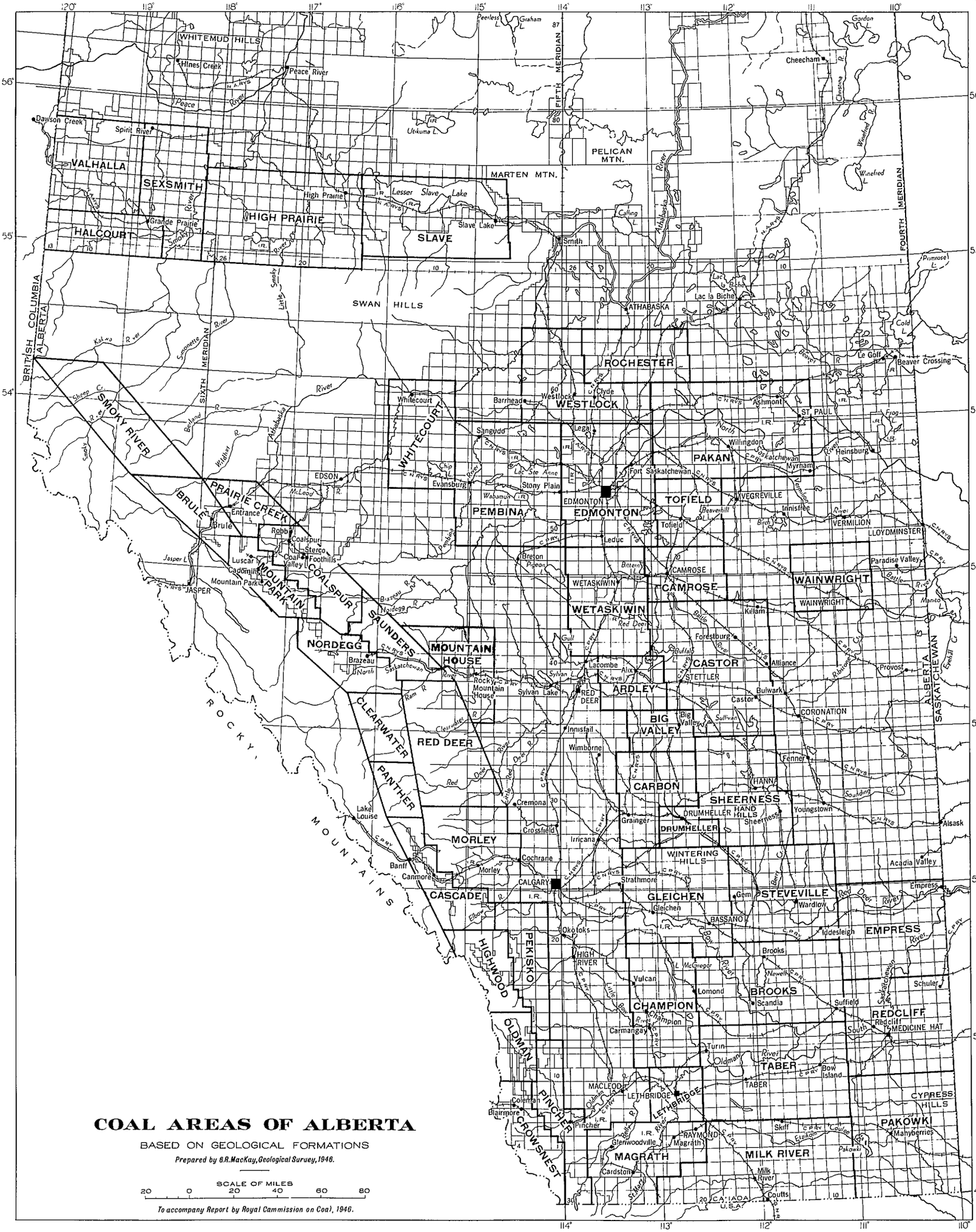
4. OLD MAC COAL LTD.—Lease No. 6248, etc.,—(strip). Roche Percée, Roche Percée Area. Trade Name: **OLD MAC**

1955	Cobble	12 x 4 Sq.	33.4	6.2	26.9	33.5	0.4	7,500	1880	2000	2190	52
1958	Cobble	12 x 4 Sq.	34.0	5.4	28.6	32.0	0.4	7,580	2010	2260	2410	—
1955	Stove	4 x 2 Sq.	33.9	5.9	26.7	33.5	0.5	7,410	1900	2030	2220	52
1958	Stove	4 x 2 Sq.	31.8	6.3	28.9	33.0	0.6	7,770	1980	2270	2320	—
1955	Nut	2 x 1 Sq.	33.5	5.9	27.1	33.5	0.5	7,510	1900	2050	2250	52
1958	Nut	2 x 1 Sq.	30.8	6.3	29.3	33.6	0.6	7,830	1990	2250	2300	52
1955	Pea	1 x ½ Sq.	33.6	6.1	27.2	33.1	0.6	7,470	1930	2080	2310	53
1958	Pea	1 x ½ Sq.	33.6	6.7	27.5	32.2	1.0	7,490	1900	2190	2280	49
1955	Bug Dust	⅛ Sq. x 0	32.4	7.7	27.3	32.6	0.5	7,410	1900	2030	2220	54
1958	Bug Dust	⅛ Sq. x 0	33.4	7.2	27.4	32.0	1.2	7,470	1870	2110	2190	49

5. DOMINION BRIQUETTES AND CHEMICALS LTD., Taylorton, Estevan Area.

1959	Commercial Briquettes (carbonized lignite)	.....	*7.6	11.3	18.5	62.6	1.0	11,940	2140	2210	2460	—

* As received moisture.



COAL AREAS OF ALBERTA

BASED ON GEOLOGICAL FORMATIONS

Prepared by G.R.MacKay, Geological Survey, 1946.

SCALE OF MILES

20 0 20 40 60 80

To accompany Report by Royal Commission on Coal, 1946.

ALBERTA

A. Semianthracite

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On 'As Received at Laboratory' Moisture Basis: Proximate Analysis: As Rec'd Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
CANMORE MINES LTD.—Mine No. 2, (underground) Cairnes Seam, Semianthracite. Canmore, Cascade Area.													
Trade Name: **CANMORE SMOKELESS**													
1957	Cobble	5 x 3 Rd.	0.1	8.1	10.0	81.8	0.6	14,125	2680	2750+	2750+	—	—
1957	Cobble	5 x 3 Rd.	0.4	11.0	15.7	72.9	0.7	13,475	1930	2250	2460	—	—
1959	Cobble	5 x 2½ Sq.	1.3	7.4	13.4	77.9	0.7	14,280	2440	2670	2750+	—	—
1957	Stove	3 x 2 Rd.	0.2	8.2	10.1	81.5	0.6	14,040	2380	2730	2750+	—	—
1957	Stove	3 x 2 Rd.	0.4	8.1	13.1	78.4	0.6	13,975	2300	2450	2740	—	—
1959	Stove	2½ x 1¼ Sq.	1.6	7.4	13.4	77.6	0.7	14,290	2360	2610	2750+	—	—
1957	Chestnut	2 x 1 Rd.	0.1	12.4	9.8	77.7	0.7	13,435	2750+	2750+	2750+	—	—
1957	Chestnut	2 x 1 Rd.	5.3	9.7	12.1	72.9	0.6	12,970	2270	2580	2750+	—	—
1959	Chestnut	2 Rd. x 1¼ Sq.	2.4	8.6	12.8	76.2	0.7	13,850	2440	2650	2750+	—	—
1957	Stoker	1½ x 9/16 Rd.	5.2	9.9	9.9	75.0	0.6	13,100	2750+	2750+	2750+	—	55
1957	Stoker	1½ x 9/16 Rd.	0.4	7.9	12.2	79.5	0.7	14,255	2410	2750+	2750+	—	74
1959	Stoker	1¼ x ½ Sq.	3.1	8.5	12.3	76.1	0.7	13,770	2690	2750+	2750+	—	88
1957	Buckwheat	9/16 x 5/16 Rd.	5.4	9.8	9.9	74.9	0.6	13,125	2750+	2750+	2750+	—	60
1957	Buckwheat*	9/16 x 5/16 Rd.	5.4	7.7	12.8	74.1	0.8	13,495	1900*	2230	2450	—	81
1959	Buckwheat	½ Sq. x 3/16 Sl.	3.8	8.0	12.1	76.1	0.7	13,710	2750+	2750+	2750+	—	88
1957	Slack	5/16 Rd. x 0	5.5	12.0	11.9	70.6	0.7	12,685	2750+	2750+	2750+	—	90
1957	Slack	5/16 Rd. x 0	0.3	9.5	12.2	78.0	0.8	13,880	2750+	2750+	2750+	—	100
1959	Slack	3/16 Sl. x 0	1.1	7.8	12.5	78.6	0.7	14,240	2750+	2750+	2750+	—	80
1959	Domestic Briquettes	.....	0.7	7.7	18.8	72.8	0.8	14,490	2570+	2750+	2750+	—	—
1959	Railway Briquettes	.....	0.7	8.3	16.8	74.2	0.7	14,230	2750+	2750+	2750+	—	—

* This coal was treated with iron oxide.

B. Medium Volatile Bituminous

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On 'As Received at Laboratory' Moisture Basis: Proximate Analysis: As Rec'd Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb.	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
1. COLEMAN COLLIERIES LTD.—Mines No. 1747 and No. 204, (underground). Coleman, Crowsnest Area.													
(i) Mine No. 1747, VICARY CREEK MINE. Trade Name: **VICARY CREEK**													
1959	Nut Stoker	2 Sq. x $\frac{5}{32}$ Ty.	2.0	7.4	22.4	68.2	0.4	14,070	2750+	2750+	2750+	—	106
1959	Slack	$\frac{5}{32}$ Ty. x 0	3.9	13.1	20.1	62.9	0.4	12,690	2750+	2750+	2750+	—	105
(ii) Mine No. 204, MCGILLIVRAY CREEK MINE. Trade Name: **COLEMAN**													
1956	Furnace	$5\frac{1}{2}$ Rd. x 2 Sq.	1.8	10.1	26.7	61.4	1.1	13,205	2300	2480	2700	—	—
1959	Furnace	5 Rd. x $1\frac{1}{4}$ Sq.	2.8	14.5	24.8	57.9	0.7	12,550	2310	2400	2490	—	—
1956	Stove	2 x 1 Sq.	1.8	10.6	26.2	61.4	0.9	13,295	2450	2750+	2750+	—	—
1956	Baum Stoker	1 Sq. x $\frac{1}{4}$ Sl.	1.7	11.5	25.4	61.4	0.9	12,995	2670	2750+	2750+	—	68
1959	Stoker	$1\frac{1}{4}$ Sq. x $\frac{5}{16}$ Ty.	4.6	10.4	23.4	61.6	0.5	12,920	2750+	2750+	2750+	—	77
1959	Screenings	$\frac{5}{16}$ x $\frac{5}{32}$ Ty.	6.7	11.4	22.3	59.6	0.4	12,440	2750+	2750+	2750+	—	74
1956	Slack	$\frac{1}{4}$ Sl. x 0	1.8	14.4	24.3	59.5	0.8	12,525	2750+	2750+	2750+	—	80
1959	Slack	$\frac{5}{32}$ Ty. x 0	1.5	14.6	23.7	60.2	0.5	12,620	2750+	2750+	2750+	—	—

2. WEST CANADIAN COLLIERIES LTD.—Mines No. 396 and No. 87, (underground). Crowsnest Area.

(i) Mine No. 396, GREENHILL MINE, Blairmore. Trade Name: **GREENHILL**

1957	Furnace	5 Sl. x 1¼ Rd.	0.3	11.2	23.1	65.4	0.5	13,655	2320	2400	2750	2.5	—
1957	Stoker	1¼ x ¼ Rd.	5.3	9.7	21.6	63.4	0.6	13,025	2320	2560	2750+	1.5	—
1959	Stoker and Nut	2¼ x ¼ Sq.	1.2	8.7	26.4	63.7	0.4	13,970	2750+	2750+	2750+	—	79
1957	Slack	¼ Rd. x 0	9.1	10.9	20.4	59.6	0.5	12,155	2750+	2750+	2750+	1.5	81
1959	Slack	¼ Sq. x 0	1.0	14.4	24.4	60.2	0.5	12,990	2750+	2750+	2750+	—	79

(ii) Mine No. 87, BELLEVUE MINE, Bellevue. Trade Name: **BELLEVUE**

1957	Mine Run	.....	0.4	12.8	25.9	60.9	0.5	13,305	2320	2400	2600	2.0	71
1959	Furnace	6 x 2 Sq.	0.9	12.6	23.3	63.2	0.4	13,140	2460	2620	2750+	—	—
1959	Stoker	1¼ x ¼ Sq.	0.9	14.5	21.5	63.1	0.3	12,950	—	—	—	—	76

C. High Volatile Bituminous

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis: Proximate Analysis: Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (In reducing atmosphere): Initial °F	Softening °F	Fluid °F	Grindability (Hardgrove Index)
1. CANADIAN COLLIERIES RESOURCES LTD.—Mines No. 1749 and No. 846, (underground). High Volatile C Bituminous												
(i) MINE No. 1749*, Foothills, Coalspur Area. Trade Name: **FOOTHILLS**												
1958	Egg	4½ x 2 Rd.	7.9	10.8	32.9	48.4	0.1	10,920	1950	2180	2250	—
1958	Nut	2 Rd. x 1¼ Sq.	8.1	11.8	31.4	48.7	0.1	10,780	2000	2210	2340	54
1958	Stoker	1½ x ⅜ Sq.	8.0	11.3	33.2	47.5	0.1	10,940	1800	2200	2330	54
1958	Slack	⅜ Sq. x 0	8.7	10.1	32.7	48.5	0.1	10,920	2040	2220	2350	50
(ii) MINE No. 846*, Mercoal, Coalspur Area. Trade Name: **McLEOD RIVER HARD**												
1956	Lump	+ 6 Rd.	7.1	7.5	35.1	50.3	0.1	11,435	2110	2300	2330	—
1958	Lump	+ 6 Rd.	7.0	7.7	35.1	50.2	0.1	11,530	2130	2230	2270	—
1956	Egg	6 x 2 Rd.	7.0	7.6	35.2	50.2	0.2	11,465	2200	2270	2310	—
1958	Egg	6 x 2 Rd.	6.1	9.7	35.3	48.9	0.1	11,580	2030	2210	2260	—
1956	Nut	2 Rd. x 1½ Sq.	6.8	9.4	35.1	48.7	0.3	11,340	2050	2180	2220	—
1958	Nut	2 Rd. x 1¼ Sq.	6.3	10.5	34.5	48.7	0.1	11,380	1970	2170	2240	52
1956	Stoker	1½ x ⅜ Sq.	6.7	9.3	34.2	49.8	0.1	11,225	2050	2170	2200	40
1958	Stoker	1¼ Sq. x ⅜ Ty.	6.4	7.9	34.7	51.0	0.1	11,810	1970	2160	2230	56
1956	Slack	⅜ Sq. x 0	6.7	8.9	36.3	48.1	0.3	11,270	2100	2210	2250	48
1958	Slack	⅜ Ty. x 0	6.7	9.4	35.1	48.8	0.1	11,300	2030	2230	2320	53

2. HAMILTON COAL CO.—Mine No. 1581** (underground). High Volatile C Bituminous. Lethbridge, Lethbridge Area. Trade Name: **FEDERAL**

1955	Lump	+ 4	9.0	8.6	34.6	47.8	0.4	11,245	2270	2380	2470	40.3
1955	Stove	4 x 2	9.7	11.6	32.7	46.0	0.5	10,690	2280	2390	2500	40.7
1955	Stoker	2 x $\frac{5}{8}$	10.3	14.9	32.1	42.7	0.5	10,070	2330	2470	2620	43.9
1955	Slack	$\frac{5}{8}$ x 0	9.3	15.6	31.7	43.4	0.6	10,125	2270	2450	2550	46.4

3. IDEAL COAL LTD.—Mine No. 1516*, (underground). High Volatile B Bituminous. Priddis, Pekisko Area. Trade Name: **IDEAL**

1955	Lump	+ 4	5.3	9.3	37.4	48.0	0.4	12,290	2400	2500	2730	46.4
1955	Stove	4 x 1¼	5.3	10.3	37.6	46.8	0.5	12,120	2400	2510	2730	47.1
1955	Stoker	1¼ x ¼	5.3	8.1	38.3	48.3	0.5	12,500	2370	2470	2520	48.3
1955	Slack	¼ x 0	5.3	10.6	37.7	46.4	0.4	11,930	2340	2450	2500	49.0

4. LETHBRIDGE COLLIERIES LTD.—Mine No. 1263, (underground). High Volatile C Bituminous. Lethbridge, Lethbridge Area. Trade Names: **CADILLAC, GALT**

1958	Lump	+ 4½ Rd.	10.0	9.9	36.5	43.6	0.7	10,800	2110	2220	2400	—
1958	Stove	4½ x 2 Rd.	9.9	10.7	35.5	43.9	0.6	10,760	2180	2320	2410	—
1958	Nut	2 x 1½ Rd.	10.2	10.5	36.0	43.3	0.6	10,780	2220	2330	2480	40
1958	Stoker	1¼ x ¾ Rd.	10.1	13.5	35.1	41.3	0.7	10,340	2230	2330	2490	42
1958	Slack	¾ Rd. x 0	9.9	13.7	34.4	42.0	0.7	10,290	2080	2240	2410	43

** Not operating, 1960.

D. Subbituminous

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
1. ALBERTA COAL CO. LTD.—Mine No. 419, (strip). Subbituminous B. Wabamun, Pembina Area. Trade Names: **VICTORY, BLUE FLAME**												
1955	Lump	+ 4 Rd.	19.8	8.6	28.7	42.9	0.1	8,940	2280	2450	2500	49
1957	Lump	+ 4 Rd.	20.2	8.4	28.8	42.6	0.2	8,840	2190	2350	2380	—
1958	Lump	+ 4 Rd.	19.7	8.7	29.6	42.0	0.1	8,880	2210	2450	2500	—
1959	Lump	+ 4 Rd.	19.3	10.3	31.0	39.4	0.1	8,740	2400	2500	2570	—
1955	Egg	4 x 2 Rd.	20.0	8.2	29.5	42.3	0.2	9,045	2350	2500	2570	44
1957	Egg	4 x 2 Rd.	20.7	9.9	28.0	41.4	0.2	8,610	2210	2380	2400	—
1958	Egg	4 x 2 Rd.	20.3	8.7	29.9	41.1	0.2	8,840	2220	2450	2470	—
1959	Egg	4 x 2 Rd.	20.5	9.1	29.1	41.3	0.1	8,840	2380	2490	2580	—
1955	Nut	2 x 1 Rd.	20.2	7.9	29.7	42.2	0.2	8,860	2220	2350	2450	41
1957	Nut	2 x 1½ Rd.	22.1	9.2	27.9	40.8	0.2	8,620	2210	2370	2400	44
1958	Nut	2 x 1½ Rd.	19.6	8.8	29.6	42.0	0.2	8,910	2230	2450	2500	49
1959	Nut	2 x 1½ Rd.	20.9	8.4	30.2	40.5	0.1	8,850	2590	2750+	2750+	41
1955	Stoker	1 x $\frac{7}{16}$ Rd.	20.2	8.8	29.4	41.6	0.1	8,830	2280	2450	2530	45
1957	Stoker	1½ x $\frac{7}{16}$ Rd.	20.5	10.1	28.8	40.6	0.4	8,665	2200	2360	2400	39
1958	Stoker	1½ x $\frac{7}{16}$ Rd.	19.3	9.9	29.2	41.6	0.2	8,810	2230	2450	2500	53
1959	Stoker	1¼ x $\frac{7}{16}$ Rd.	20.4	9.6	29.7	40.3	0.2	8,710	2490	2590	2680	—
1955	Slack	$\frac{7}{16}$ Rd. x 0	19.1	9.6	28.2	43.1	0.3	8,985	2200	2350	2440	45
1957	Slack	$\frac{7}{16}$ Rd. x 0	20.6	10.7	27.3	41.4	0.4	8,420	2230	2410	2500	56
1958	Slack	$\frac{7}{16}$ Rd. x 0	18.9	11.0	28.7	41.4	0.2	8,890	2110	2360	2510	55
1959	Slack	$\frac{7}{16}$ Rd. x 0	19.6	10.5	30.1	39.8	0.2	8,760	2250	2360	2410	46
2. ALBERTA COAL SALES LTD.—Mine No. 1604*, (strip). Subbituminous A. Taber, Taber Area. Trade Names: **SOUTHALTA, MAJESTIC**												
1956	Lump	+ 4½ Rd.	14.3	11.2	30.2	44.3	1.3	9,795	2070	2370	2470	44
1958	Lump	+ 4½ Rd.	14.2	9.8	32.4	43.6	1.1	10,200	2170	2320	2430	—

1956	Egg	4½ x 2 Rd.	14.2	10.7	30.7	44.4	1.2	9,890	2060	2430	2550	46
1958	Egg	4½ Rd. x 2 Sq.	14.5	9.1	32.9	43.5	1.0	10,330	2190	2380	2510	—
1956	Nut	2 x 1¼ Rd.	14.6	9.0	30.8	45.6	1.2	10,105	2060	2290	2470	46
1958	Nut	2 x 1¼ Sq.	14.2	9.9	33.6	42.3	1.4	10,130	2210	2350	2500	47
1956	Stoker	1¼ x ⅜	14.4	9.8	29.9	45.9	1.2	10,005	2040	2250	2300	47
1958	Stoker	1½ x ¼ Sq.	14.3	10.5	31.2	44.0	1.1	10,100	2200	2320	2430	50
1958	Slack	¼ Sq. x 0	14.1	9.9	32.7	43.3	1.0	10,150	2200	2310	2490	50

3. ALLYN MANN CONSTRUCTION CO.—Mine No. 809, (strip). Subbituminous B. Alix, Ardley Area. Trade Name: **ECLIPSE**

1955	Lump	+ 4 Sl.	19.3	6.5	28.1	46.1	0.3	9,410	2180	2280	2330	47
1958	Lump	+ 4½ Sl.	18.0	6.2	29.1	46.7	0.2	9,760	1960	2170	2280	—
1955	Egg or Stove	4 x 1 Sl.	19.2	7.1	27.0	46.7	0.3	9,400	2180	2280	2340	45
1958	Egg or Stove	4½ x 1 Sl.	17.5	7.1	28.6	46.8	0.3	9,700	1950	2150	2290	—
1955	Stoker	1 Sl. x ½ Rd.	16.9	7.4	29.0	46.7	0.4	9,590	2160	2280	2350	44
1958	Stoker	1 Sl. x ½ Rd.	17.3	7.4	28.8	46.5	0.2	9,630	2010	2180	2230	43
1955	Slack	½ Rd. x 0	16.7	8.0	28.9	46.4	0.4	9,455	2160	2280	2340	44
1958	Slack	½ Rd. x 0	17.1	10.1	28.0	44.8	0.3	9,180	2050	2280	2420	43

4. AMALGAMATED COALS LTD.—Mine No. 1573, (underground). Subbituminous B. East Coulee, Drumheller Area.
Trade Names: **NEW STAR, WESTERN MONARCH**

1956	Lump	+ 4 Rd.	19.5	6.2	30.0	44.3	0.5	9,480	1780	1920	2080	32
1958	Lump	+ 4 Rd.	17.8	7.5	31.5	43.2	0.3	9,770	1880	2180	2360	33
1956	Egg	4 x 2 Rd.	19.6	6.4	29.0	45.0	0.5	9,410	1820	1920	2050	31
1958	Egg	4 x 2 Rd.	17.4	8.8	31.2	42.6	0.2	9,520	1990	2290	2430	32
1956	Nut	2 Rd. x 1⅛ Sq.	19.3	7.3	29.9	43.5	0.6	9,310	1830	1930	2130	31
1958	Nut	2 Rd. x 1⅛ Sq.	17.2	9.1	31.1	42.6	0.5	9,690	2030	2270	2410	33
1956	Stoker	1⅛ x ¾ Sq.	19.0	9.8	29.0	42.2	0.6	9,100	2110	2300	2440	31
1958	Stoker	1⅛ x ¾ Sq.	17.5	12.3	30.1	40.1	0.4	9,190	2050	2340	2520	32
1956	Slack	¾ Sq. x 0	18.6	9.3	30.0	42.1	0.8	9,170	2130	2300	2420	32
1958	Slack	¾ Sq. x 0	17.2	8.9	31.1	42.8	0.3	9,590	1850	2120	2330	32

* Formerly operated by Alberta Southern Coal Company, Limited.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
5. BATTLE RIVER COAL CO. LTD.—Mine No. 1046, (strip). Subbituminous B. Halkirk, Castor Area. Trade Names: VESTA, CORDEL												
1955	Lump	+ 4½ Rd.	24.5	7.0	29.2	39.3	0.6	8,650	1970	2060	2130	31
1958	Lump	+ 4½ Rd.	24.6	5.5	30.4	39.5	0.4	9,150	1910	2160	2240	—
1959	Lump	+ 4½ Rd.	24.1	5.4	30.8	39.7	0.3	8,980	2180	2270	2340	—
1955	Egg	4½ x 2 Rd.	24.8	7.2	28.8	39.2	0.4	8,560	1970	2070	2140	32
1958	Egg	4½ x 2 Rd.	25.4	5.8	29.5	39.3	0.4	8,860	1900	2070	2160	—
1959	Egg	4½ x 2 Rd.	25.4	5.8	30.6	38.2	0.3	8,830	1960	2210	2370	34
1955	Nut	2 x 1 Rd.	25.2	6.8	28.7	39.3	0.4	8,660	1970	2060	2170	30
1958	Nut	2 x 1¼ Rd.	24.8	5.5	29.9	39.8	0.4	8,880	1840	2130	2200	40
1959	Nut	2 x 1¼ Rd.	24.8	5.5	30.4	39.3	0.4	8,690	2000	2140	2220	45
1955	Stoker	1 x ½ Rd.	24.5	7.1	29.4	39.0	0.4	8,640	1970	2070	2180	30
1958	Stoker	1¼ x ¾ Rd.	25.2	5.3	29.5	40.0	0.4	8,880	1850	2120	2210	38
1959	Stoker	1¼ x ¾ Rd.	26.7	5.5	29.7	38.1	0.4	8,560	2090	2150	2220	30
1955	Slack	½ Rd. x 0	25.3	7.8	28.9	38.0	0.4	8,430	1970	2070	2180	31
6. BLACK GEM COAL CO. LTD.—Mine No. 1266, (underground). Subbituminous C. Namao, Edmonton Area. Trade Name: BLACK GEM												
1958	Lump	+ 6 Rd.	23.1	7.7	28.5	40.7	0.1	8,870	2220	2420	2670	—
1956	Egg or Stove	4½ x 2 Sq.	23.6	8.4	27.6	40.4	0.2	8,475	2080	2180	2390	—
1958	Egg or Stove	6 x 3 Rd.	23.6	7.9	28.7	39.8	0.1	8,750	2190	2440	2690	—
1956	Nut	2 x 1½ Sq.	23.3	9.8	27.5	39.4	0.4	8,265	2120	2380	2410	39
1958	Nut	3 Rd. x 1⅝ Sq.	23.3	8.5	28.3	39.9	0.1	8,730	2240	2440	2610	31
1956	Stoker	1¼ x ½ Sq.	24.0	10.8	27.0	38.2	0.3	8,080	2280	2410	2480	31
1958	Stoker	1⅝ x ⅞ Sq.	24.4	11.3	27.0	37.3	0.3	8,140	2270	2450	2630	36
1956	Slack	½ Sq. x 0	23.6	13.2	27.3	35.9	0.4	7,810	2290	2420	2590	35
1958	Slack	⅞ Sq. x 0	24.1	11.7	26.7	37.5	0.1	8,060	2300	2470	2610	41

7. BLACK NUGGET COAL CO. LTD.—Mine No. 1107, (strip). Subbituminous C. Dodds, Tofield Area. Trade Name: **HI-LO**

1955	Lump	+ 4 Sl.	26.7	6.6	28.1	38.6	0.6	8,370	1950	2020	2100	37
1958	Lump	+ 4 Sl.	26.4	5.9	27.9	39.8	0.3	8,770	2020	2110	2210	—
1955	Stove	4 Sl. x 2 Sq.	27.0	7.0	28.7	37.3	0.5	8,230	2040	2180	2180	37
1958	Stove	4 Sl. x 2 Sq.	25.7	8.0	28.9	37.4	0.3	8,460	1970	2120	2300	—
1955	Nut	2 x 1½ Sq.	27.1	8.0	27.9	37.0	0.6	7,980	2040	2100	2200	36
1958	Nut	2 x 1½ Sq.	26.1	8.1	28.6	37.2	0.3	8,400	2010	2180	2320	32
1955	Stoker	1½ x ½ Sq.	27.0	8.9	27.7	36.4	0.4	7,950	2060	2160	2250	37
1958	Stoker	1½ x ½ Sq.	26.0	9.2	28.0	36.8	0.3	8,160	1990	2200	2410	34
1955	Slack	½ Sq. x 0	26.5	11.2	26.7	35.6	0.7	7,700	2080	2180	2250	38
1958	Slack	½ Sq. x 0	24.8	13.7	28.5	33.0	0.5	7,790	2200	2360	2370	38

8. BURNSTAD COAL LTD.—Mine No. 724, (strip). Subbituminous C. Chaton, Camrose Area. Trade Name: **BURNSTAD'S**

1956	Lump	+ 4 Sl.	28.0	3.9	29.6	38.5	0.4	8,330	2100	2340	2350	—
1958	Lump	+ 4 Bar	28.1	4.5	28.9	38.5	0.4	8,540	2020	2140	2280	—
1956	Egg or Stove	4 Sl. x 2 Sq.	28.7	4.7	27.9	38.7	0.5	8,115	1750	2180	2290	—
1958	Egg or Stove	4 Bar x 2½ Sq.	28.1	4.0	28.7	39.2	0.3	8,600	2160	2270	2420	—
1958	Nut	2½ x 1½ Sq.	28.1	5.5	28.5	37.9	0.4	8,400	2040	2170	2300	36
1955	Stoker	1½ x ½ Sq.	26.7	6.8	26.6	39.9	0.6	8,050	2130	2220	2320	28
1958	Stoker	1½ x ½ Sq.	28.2	6.0	28.0	37.8	0.3	8,330	1910	2240	2410	36
1958	Slack	½ Sq. x 0	27.7	7.6	27.1	37.6	0.6	8,150	2110	2260	2330	43

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis: Proximate Analysis: Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (In reducing atmosphere): Initial °F	Softening °F	Fluid °F	Grindability (Hardgrove Index)
9. CAMROSE COLLIERIES LTD.—Mine No. 1603, (strip). Subbituminous C. Camrose, Camrose Area. Trade Names: **CAMCOAL, CAMROSE**												
1955	Lump	+ 4 Rd.	24.7	4.4	30.2	40.7	0.3	8,940	2190	2320	2350	31
1955	Lump	+ 4 Rd.	25.0	4.8	29.8	40.4	0.2	8,810	2070	2160	2220	34
1958	Lump	+ 4 Rd.	24.6	4.2	30.2	41.0	0.2	9,120	2060	2150	2220	—
1955	Egg or Stove	4 Rd. x 2 Sq.	25.3	4.7	29.2	40.8	0.3	8,920	2190	2280	2300	34
1955	Egg or Stove	4 Rd. x 2 Sq.	25.2	5.1	29.6	40.1	0.3	8,720	2060	2160	2720	34
1958	Egg or Stove	4 Rd. x 2 Sq.	24.1	5.2	31.3	39.4	0.3	9,030	2160	2160	2310	—
1955	Nut	2 x 1¼ Sq.	25.2	8.2	27.9	38.7	0.4	8,380	2200	2300	2330	31
1955	Nut	2 x 1⅜ Sq.	25.3	6.3	28.8	39.6	0.2	8,690	2110	2220	2300	32
1958	Nut	2 x 1⅜ Sq.	21.4	5.8	32.4	40.4	0.3	9,250	2060	2160	2310	31
1955	Stoker	1¼ x ¾ Sq.	25.0	6.7	29.3	39.0	0.3	8,560	2250	2330	2330	30
1955	Stoker	1⅜ x ¾ Sq.	24.8	8.5	29.2	37.5	0.3	8,450	2100	2300	2370	33
1958	Stoker	1⅜ x ¾ Sq.	19.9	7.7	31.6	40.8	0.3	9,220	2220	2310	2390	34
1955	Slack	¾ Sq. x 0	25.1	8.5	29.0	37.4	0.3	8,260	2200	2330	2370	31
1958	Slack	¾ Sq. x 0	20.9	9.9	29.7	39.5	0.3	8,760	2290	2380	2480	46
10. CENTURY COALS LTD.—Mine No. 1742, (underground). Subbituminous B. East Coulee, Drumheller Area. Trade Names: **ATLAS, NEW WILDFIRE, COMMANDER**												
1957	Lump	+ 4½ Rd.	20.8	6.0	31.5	41.7	0.5	9,325	1920	2110	2150	—
1958	Lump	+ 4½ Rd.	18.2	7.3	31.4	43.1	0.3	9,750	1870	2170	2460	—
1957	Egg	4½ x 2 Rd.	18.3	6.5	30.7	44.5	0.3	9,590	1980	2150	2200	—
1958	Egg	4½ x 2 Rd.	17.9	8.6	32.0	41.5	0.2	9,670	1970	2370	2480	33
1957	Nut	2 x 1¼ Rd.	17.9	9.1	29.9	43.1	0.4	9,260	2220	2330	2370	—
1958	Nut	2 x 1¼ Rd.	17.6	10.8	30.9	40.7	0.3	9,350	2110	2420	2530	36

1957	Stoker	1¼ x ⅝ Rd.	18.6	10.6	29.9	40.9	0.4	8,935	2050	2270	2320	—
1958	Stoker	1¼ x ⅝ Rd.	17.5	11.0	31.7	39.8	0.3	9,310	2100	2370	2480	36
1957	Slack	⅝ Rd. x 0	19.4	10.6	29.5	40.5	0.6	8,820	2200	2330	2440	34
1958	Slack	⅝ Rd. x 0	17.2	10.8	30.5	41.5	0.1	9,280	2000	2340	2480	35
	11. CHAMPION COAL CO. LTD.—Mine No. 1509, (underground). Subbituminous A. Champion, Champion Area.										Trade Name: **CHAMPION**	
1958	Lump	+ 4 Rd.	12.4	9.2	34.7	43.7	0.5	10,170	1900	2020	2110	—
1958	Stove	4 x 2 Rd.	12.5	10.9	34.4	42.2	0.5	9,990	1960	2130	2420	—
1958	Stoker	2 x ½ Rd.	12.9	15.1	33.8	38.2	0.6	9,190	2060	2220	2480	50
1958	Slack	½ Rd. x 0	13.7	11.4	34.0	40.9	0.5	9,780	2140	2240	2360	44
	12. CONSUMER'S MINE—Mine No. 1431, (underground). Subbituminous B. Rosebud, Gleichen Area.										Trade Name: **CONSUMER'S**	
1958	Mine Run	.....	16.0	7.5	33.3	43.2	0.4	9,900	1850	1930	1980	35
	13. EAST CARBON COAL CO. LTD.—Mine No. 1060** (underground). Subbituminous B. Carbon, Carbon Area.										Trade Name: **RELIABLE**	
1956	Lump	+ 4 Rd.	16.4	8.2	29.9	45.5	0.3	9,820	1980	2110	2170	38
1956	Nut	2 Rd. x 1¼ Sl.	16.2	9.1	30.0	44.7	0.3	9,775	2050	2180	2280	37
1956	Stoker	1¼ Sl. x ⅝ Rd.	16.5	10.9	28.7	43.9	0.3	9,455	2120	2240	2320	38
1956	Slack	⅝ Rd. x 0	16.4	13.2	27.9	42.5	0.3	9,235	2230	2280	2480	38
	14. EAST TROCHU COAL CO.—Mine No. 710, (underground). Subbituminous B. Trochu, Carbon Area.										Trade Name: **TRO-ALTA**	
1956	Lump	+ 3 Bar	17.3	10.4	27.6	44.7	0.3	9,285	1960	2220	2330	—
1956	Egg	3 Bar x 1½ Sq.	16.8	10.7	26.4	46.1	0.3	9,370	1960	2200	2310	—
1956	Stoker	1½ x ½ Sq.	17.3	8.7	27.3	46.7	0.3	9,520	1960	2190	2290	38
1956	Slack	½ Sq. x 0	17.2	10.3	26.1	46.4	0.5	9,500	1970	2180	2300	39

** Not operating, 1960.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
15. EGG LAKE COAL CO. LTD.—Mine No. 1582, (strip). Subbituminous C. Morinville, Edmonton Area.												Trade Name: **EGG LAKE**
1955	Lump	+ 4 Sq.	26.0	6.1	29.0	38.9	0.3	8,520	2180	2240	2320	36
1958	Lump	+ 4 Sq.	25.7	6.0	29.6	38.7	0.3	8,710	2010	2220	2410	—
1955	Stove	4 x 2 Sq.	26.3	8.0	28.2	37.5	0.2	8,160	2150	2260	2300	33
1958	Stove	4 x 2 Sq.	26.0	5.8	29.9	38.3	0.3	8,700	2000	2230	2440	—
1955	Nut	2 x 1 Sq.	25.0	9.6	28.1	37.3	0.3	8,155	2160	2270	2320	35
1958	Nut	2 x 1½ Sq.	25.4	15.2	25.3	34.1	0.2	7,440	2260	2430	2670	35
1955	Stoker	1¼ Rd. x ½ Sq.	25.7	11.1	28.2	35.0	0.2	7,820	2170	2280	2340	35
1958	Stoker	1½ x ½ Sq.	25.5	12.7	26.9	34.9	0.1	7,810	2290	2450	2650	35
1955	Slack	½ Sq. x 0	26.0	12.2	27.1	34.7	0.2	7,640	2170	2280	2340	37
1958	Slack	½ Sq. x 0	24.3	22.6	23.3	29.8	0.1	6,560	2170	2400	2660	50
16. FEDERATED CO-OPS LTD.*—Mine No. 1421, (underground). Subbituminous B. Drumheller, Drumheller Area.												Trade Names: **HY-GRADE, PURITY HARD**
1958	Lump	+ 4 Rd.	15.5	7.4	32.6	44.5	0.2	10,020	1990	2260	2470	36
1958	Egg	4 Rd. x 2 Sl.	16.2	8.1	31.9	43.8	0.3	9,800	1930	2280	2430	36
1958	Nut	2 x 1¼ Sl.	16.0	9.2	32.2	42.6	0.1	9,620	2090	2290	2450	41
1958	Stoker	1¼ Sl. x ¾ Sq.	16.3	9.9	30.8	43.0	0.6	9,590	2000	2310	2430	40
1958	Slack	¾ Sq. x 0	16.5	10.2	30.6	42.7	0.5	9,520	1860	2100	2340	41

17. FERGSTAD, CHAS.**—Mine No. 1055, (strip). Subbituminous C. Round Hill, Camrose Area. Trade Name: **ESKIMO**

1956	Lump	+ 4 Sl.	28.1	4.9	28.1	38.9	0.4	8,465	1950	2200	2320	—

18. FORESTBURG COLLIERIES LTD.—Mine No. 1578, (strip). Subbituminous B to C. Forestburg, Castor Area. Trade Name: **DIPLOMAT**

1955	Lump	+ 4½ Rd.	25.0	6.1	29.7	39.2	0.5	8,710	2160	2270	2310	28
1957	Lump	+ 4 Rd.	26.0	5.5	29.2	39.3	0.3	8,690	2160	2190	2210	—
1958	Lump	+ 4 Rd.	25.5	5.3	30.5	38.7	0.3	9,020	1860	2050	2170	—
1959	Lump	+ 4 Rd.	26.0	4.6	30.7	38.7	0.4	8,800	1980	2250	2340	—
1960	Lump	+ 4 Rd.	25.5	5.2	31.2	38.1	0.4	8,860	1900	2090	2160	—
1955	Egg or Stove	4½ x 2 Rd.	25.3	6.5	29.8	38.4	0.3	8,660	2160	2270	2310	30
1957	Egg or Stove	4 x 2 Rd.	25.4	5.8	28.8	40.0	0.4	8,675	2170	2200	2240	—
1958	Egg or Stove	4 x 2 Rd.	24.6	5.5	30.7	39.2	0.3	9,100	1980	2160	2260	—
1959	Egg or Stove	4 x 2 Rd.	25.5	5.0	31.6	37.9	0.4	8,860	2010	2180	2260	—
1960	Egg or Stove	4 x 2 Rd.	25.4	6.0	30.6	38.0	0.4	8,820	1870	2100	2210	—
1955	Nut	2 x 1¼ Rd.	25.8	6.4	29.5	38.3	0.2	8,590	2100	2250	2300	30
1957	Nut	2 x 1 Rd.	25.6	6.7	29.1	38.6	0.4	8,500	2180	2230	2280	34
1958	Nut	2 x 1 Rd.	23.5	6.2	31.1	39.2	0.3	9,130	2020	2150	2260	40
1959	Nut	2 x 1 Rd.	25.7	5.1	31.5	37.7	0.4	8,700	2090	2190	2300	31
1960	Nut	2 x 1 Rd.	25.7	5.9	30.4	38.0	0.4	8,790	1860	2100	2180	32
1955	Stoker	1¼ Rd. x ⅜ Sl.	25.5	7.2	28.4	38.9	0.4	8,560	2100	2200	2260	30
1957	Stoker	1 Rd. x ⅜ Sl.	29.3	6.2	27.8	36.7	0.3	8,240	2160	2190	2240	35
1958	Stoker	1 Rd. x ⅜ Sl.	25.1	5.8	29.3	39.8	0.4	8,910	2050	2140	2220	46
1958	Stoker	1 Rd. x ⅜ Sl.	23.5	5.9	30.2	40.4	0.4	9,130	2050	2160	2260	41
1959	Stoker	1 Rd. x ⅜ Sl.	25.8	5.5	31.4	37.3	0.4	8,770	1980	2160	2280	31
1960	Stoker	1 Rd. x ⅜ Sl.	25.6	6.2	30.6	37.6	0.4	8,790	1890	2040	2120	30
1955	Slack	⅜ Sl. x 0	25.7	6.6	28.2	39.5	0.4	8,600	2160	2270	2330	30
1957	Slack	⅜ Sl. x 0	26.1	8.0	27.7	38.2	0.3	8,315	2010	2210	2280	37
1958	Slack	⅜ Sl. x 0	25.0	7.4	29.0	38.6	0.5	8,750	1900	2060	2160	46
1959	Slack	⅜ Sl. x 0	25.6	6.5	33.2	34.7	0.5	8,620	1990	2100	2150	32
1960	Slack	⅜ Sl. x 0	25.3	7.0	30.2	37.5	0.4	8,770	1920	2080	2140	34

* Formerly Saskatchewan Federated Co-Ops Ltd.

** Formerly A. Campbell and G. Fergstad. Not operating, 1960.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
	19. JET CONSTRUCTION LTD.*—Mine No. 215, (strip). Subbituminous C. Dodds, Tofield Area.											Trade Name: **RED FLAME**
1955	Lump	+ 4 Sl.	27.1	6.3	27.7	38.9	0.5	8,170	2000	2100	2170	31
1955	Stove	4 Sl. x 2 Sq.	27.7	6.8	27.4	38.1	0.6	7,980	2000	2130	2190	33
1955	Nut	2 x 1¾ Sq.	27.5	7.2	27.2	38.1	0.6	8,010	2000	2130	2170	31
1955	Stoker	1¾ x ¾ Sq.	27.6	7.2	26.9	38.3	0.7	7,970	2000	2130	2200	32
1955	Pea	¾ x ½ Sq.	27.8	9.9	26.0	36.3	0.6	7,660	2000	2140	2220	34
1955	Slack	½ Sq. x 0	26.4	13.7	25.0	34.9	0.6	7,250	2200	2260	2290	32
	20. JOY COAL CO.—Mine No. 1669**, (underground). Subbituminous B. Cambria, Drumheller Area.											Trade Name: **JOY**
1955	Lump	+ 2	18.4	5.5	31.5	44.6	0.6	9,850	1920	2050	2240	39
	21. LYNASS, JOHN H.—Mine No. 1734, (strip). Subbituminous B. Delburne, Ardley Area.											Trade Name: **LYNASS**
1955	Lump	+ 3 Rd.	18.4	7.3	29.1	45.2	0.3	9,485	2170	2280	2320	45
1958	Lump	+ 4 Rd.	19.1	9.8	27.4	43.7	0.2	9,150	2040	2250	2370	—
1955	Stove	3 x 1½ Rd.	16.8	9.3	28.8	45.1	0.3	9,270	2160	2250	2310	45
1958	Stove	4 x 1¼ Rd.	19.9	8.1	28.9	43.1	0.2	9,230	2060	2200	2250	—
1955	Stoker	1½ Rd. x ½ Sq.	16.4	9.4	30.3	43.9	0.4	9,520	2160	2260	2340	44
1958	Stoker	1¼ Rd. x ¾ Sq.	18.4	9.0	29.5	43.1	0.3	9,390	1970	2170	2270	48
1955	Slack	½ Sq. x 0	18.4	8.5	28.9	44.2	0.3	9,310	2170	2270	2300	46
1958	Slack	¾ Sq. x 0	18.4	16.9	26.5	38.2	0.4	8,310	2200	2350	2440	56

22. McARTHUR, MRS. MARJORIE†—MINE No. 194, (strip). Subbituminous B. Carbon, Carbon Area.

Trade Names: **KNEE HILL, OLD GHOST PINE**

1956	Lump	+ 2 Rd.	17.5	8.1	29.1	45.3	0.3	9,770	1940	2060	2130	37
1958	Lump	+ 2 Rd.	15.6	8.4	30.2	45.8	0.1	10,030	1890	2070	2290	—
1956	Nut	2 x 1¼ Rd.	16.9	9.0	29.0	45.1	0.2	9,665	1970	2110	2170	38
1958	Nut	2 x 1¼ Rd.	14.8	9.9	30.6	44.7	0.3	11,690	2060	2250	2430	—
1956	Stoker	1¼ x ⅜ Rd.	17.2	14.3	27.1	41.4	0.3	8,835	2140	2290	2470	41
1958	Stoker	1¼ x ⅜ Rd.	14.3	10.9	30.8	44.0	0.3	9,880	2110	2260	2440	40
1956	Slack	¾ Rd. x 0	17.8	21.9	24.2	36.1	0.4	7,690	2040	2210	2310	48
1958	Slack	¾ Rd. x 0	14.8	14.9	28.7	41.6	0.3	9,320	2090	2250	2460	43

23. McMILLAN, ALEX††—MINE No. 1521, (underground). Subbituminous B. Rosebud, Gleichen Area. Trade Name: **SUPREME OF THE VALLEY**

1958	Mine Run	.....	16.1	8.8	32.4	42.7	0.2	9,760	1920	2030	2130	35

24. MIDLAND COAL MINING CO. LTD.—MINE No. 367**, (underground). Subbituminous B. Midlandvale, Drumheller Area.

Trade Names: **MIDLAND, MERCURY, NEW ROSEDALE**

1958	Lump	+ 4½ Rd.	16.2	5.2	31.7	46.9	0.1	10,310	1850	1960	2010	37
1958	Egg	4½ x 1⅝ Rd.	15.6	6.1	32.1	46.2	0.2	10,210	1900	2060	2250	38
1958	Nut	1⅝ x 1⅛ Rd.	16.0	10.5	31.2	42.3	0.0	9,560	2120	2360	2510	36
1958	Stoker	1⅛ Rd. x ⅝ Sq.	17.4	10.5	30.2	41.9	0.1	9,520	2120	2160	2470	39
1958	Slack	⅝ Sq. x 0	17.0	8.6	30.5	43.9	0.2	9,800	2000	2290	2460	38

25. MILLER, HENRY‡—MINE No. 772, (underground). Subbituminous C. Medicine Hat, Redcliffe Area. Trade Name: **AJAX**

1956	Lump	+ 2½ Sl.	23.6	8.1	27.7	40.6	0.4	8,580	1920	2080	2100	—
1956	Stove	2½ Sl. x 1¼ Rd.	23.8	10.1	26.6	39.5	0.4	8,300	1870	2020	2120	—

* Formerly Dodds Coal Mine.
† Formerly McArthur, A.A.
** Not operating, 1960.
†† Formerly Lucky Strike Mine.
‡ Formerly Ajax Coal Co. Ltd.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
26. MORINVILLE COLLIERY LTD.—Mine No. 1635**, (underground). Subbituminous C. Morinville, Edmonton Area. Trade Name: **SPITFIRE**												
1956	Egg	4 x 2 Sq.	24.6	7.0	29.1	39.3	0.4	8,620	1980	2050	2090	—
1956	Nut	2 x 1 Sq.	25.6	9.1	27.9	37.4	0.5	8,155	2080	2220	2280	32
1956	Stoker	1 x ½ Sq.	25.7	10.5	27.3	36.5	0.3	7,905	2080	2230	2300	32
1956	Slack	½ Sq. x 0	26.1	10.2	26.4	37.3	0.3	7,840	1990	2200	2260	34
27. MURRAY COLLIERIES LTD.—Mine No. 1491**, (underground). Subbituminous B. East Coulee, Drumheller Area. Trade Name: **NEW MURRAY**												
1957	Lump	+ 4½ Rd.	21.9	7.0	29.6	41.5	0.4	9,065	1890	1970	2050	—
1958	Lump	+ 4½ Rd.	18.3	7.6	31.2	42.9	0.3	9,540	1860	2080	2130	34
1957	Egg	4½ x 2 Rd.	21.6	8.6	27.0	42.8	0.3	8,890	1890	2040	2310	—
1958	Egg	4½ x 2 Rd.	18.6	7.1	31.7	42.6	0.2	9,610	1890	2070	2100	—
1957	Nut	2 x 1¼ Rd.	21.0	7.9	27.1	44.0	0.4	9,055	1890	2000	2100	—
1958	Nut	2 x 1¼ Rd.	17.8	10.0	31.0	41.2	0.5	9,280	1880	2190	2300	34
1957	Stoker	1¼ x ⅝ Rd.	21.4	9.1	26.8	42.7	0.5	8,810	1890	2000	2200	35
1958	Stoker	1¼ x ⅝ Rd.	17.9	11.1	31.0	40.0	0.5	9,130	1830	2170	2310	36
1957	Slack	⅝ Rd. x 0	21.5	8.8	27.3	42.4	0.5	8,915	1900	2000	2150	33
1958	Slack	⅝ Rd. x 0	18.0	12.1	29.8	40.1	0.5	8,910	1860	2150	2250	33

28. NORTH POINT COAL CO. LTD.—Mine No. 1562, (strip). Subbituminous C. Thorhild, Westlock Area. Trade Name: **NORTH POINT**

1958	Lump	+ 2½ Sq.	29.6	3.5	30.6	36.3	0.7	8,490	2080	2360	2460	—
1958	Nut	2½ x 1$\frac{1}{16}$ Sq.	29.1	5.2	29.4	36.3	0.2	8,250	2070	2190	2260	50
1958	Stoker	1$\frac{1}{16}$ x ½ Sq.	28.7	7.1	28.6	35.6	0.2	8,120	2010	2180	2240	50
1958	Slack	½ Sq. x 0	28.4	9.7	28.3	33.6	0.0	7,590	2140	2220	2290	69

29. B. PICKERING AND SONS—Mine No. 817, (strip). Subbituminous B. Ghost Pine Creek, Orkney Mine, Carbon Area.
Trade Name: **ORKNEY**

1956	Lump	+ 6	17.8	5.9	30.2	46.1	0.4	9,880	1930	2100	2170	43

30. RED DEER VALLEY COAL CO. LTD.—Mine No. 402, (underground). Subbituminous B. Drumheller, Drumheller Area.
Trade Names: **GLOCOAL, "10-5", RENOWN**

1958	Lump	+ 4 Rd.	16.7	5.7	31.4	46.2	0.2	10,390	1830	2000	2090	36
1959	Lump	+ 4½ Rd.	17.9	4.8	30.9	46.4	0.3	10,260	1860	2140	2200	—
1958	Stove or Egg	4 x 2 Rd.	16.6	7.0	30.6	45.8	0.2	10,180	1900	2270	2360	36
1959	Stove or Egg	4½ x 2 Rd.	18.0	4.1	31.4	46.5	0.3	10,250	1850	2040	2160	—
1958	Nut	2 Rd. x 1¼ Sq.	16.5	8.2	31.1	44.2	0.3	9,980	1940	2290	2400	37
1959	Nut	2 Rd. x 1¼ Sq.	17.8	4.4	31.4	46.4	0.3	10,270	1840	2010	2180	—
1958	Stoker	1¼ x ½ Sq.	16.0	13.4	29.0	41.6	0.2	9,320	2070	2390	2500	37
1959	Stoker	1¼ x ¾ Sq.	18.2	6.4	30.8	44.6	0.4	10,010	1860	2200	2290	—
1958	Slack	½ Sq. x 0	16.1	11.3	29.7	42.9	0.3	9,520	1820	2260	2490	36
1959	Slack	¾ Sq. x 0	17.8	8.7	29.9	43.6	0.4	9,680	1950	2220	2300	—

31. REMILLARD, O. V.—Mine No. 902, (underground). Subbituminous C. Castor, Castor Area. Trade Name: **REMILLARD**

1956	Mine Run	1 Fork	26.6	8.3	31.2	33.9	0.5	7,845	2040	2130	2150	—

** Not operating, 1960.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
	32. SAMIS COLLIERIES—Mine No. 1316** (underground). Subbituminous C. Namao, Edmonton Area.											Trade Name: **SAMIS**
1955	Lump	+ 4½ Rd.	23.4	11.8	27.4	37.4	0.2	8,100	2110	2250	2450	38
1955	Stove	4½ Rd. x 2 Sq.	23.4	8.8	28.8	39.0	0.4	8,540	2150	2380	2470	38
1955	Nut	2 x 1 Sq.	23.7	9.3	28.3	38.7	0.1	8,140	2170	2380	2470	37
1955	Pea	1 x ½ Sq.	23.9	9.7	27.4	39.0	0.2	8,310	2190	2400	2490	37
1955	Slack	½ Sq. x 0	23.4	8.5	28.6	39.5	0.2	8,580	2200	2400	2500	38
	33. STAR-KEY MINES LTD.*—Mine No. 1626, (underground). Subbituminous C. St. Albert, Edmonton Area.											Trade Name: **STAR-KEY**
1955	Lump	+ 4 Rd.	23.6	9.1	28.4	38.9	0.4	8,450	2020	2200	2400	37
1958	Lump	+ 3¾ Sq.	21.2	8.7	31.1	39.0	0.3	8,960	1960	2180	2360	—
1955	Stove	4 x 2 Rd.	24.1	8.8	27.3	39.8	0.3	8,430	2200	2400	2450	33
1958	Stove	3¾ x 1¾ Sq.	22.1	8.5	29.0	40.4	0.2	8,790	2050	2340	2540	—
1955	Nut	2 Rd. x 1 Sq.	24.2	9.5	27.7	38.6	0.4	8,330	2020	2280	2420	32
1958	Nut	1¾ x 1⅛ Sq.	22.8	9.5	28.1	39.6	0.2	8,600	2080	2340	2530	45
1955	Stoker	1 x ½ Sq.	24.3	11.6	26.2	37.9	0.4	7,980	2200	2340	2420	31
1958	Stoker	1⅛ x 7/16 Sq.	22.5	11.2	27.9	38.4	0.4	8,410	2090	2340	2560	43
1955	Slack	½ Sq. x 0	24.6	13.8	26.1	35.5	0.5	7,660	2250	2410	2470	33
1958	Slack	7/16 Sq. x 0	22.7	12.5	27.0	37.8	0.3	8,170	2210	2360	2570	46

34. STETTLER COAL CO. LTD.—Mine No. 1614, (strip). Subbituminous C. Halkirk, Castor Area. Trade Name: **ALL-FIRE**

1955	Lump	+ 1 7/16 Sq.	25.1	6.4	28.6	39.9	0.4	8,710	2010	2100	2200	32
1958	Lump	+ 1 5/16 Sq.	25.7	5.5	29.5	39.3	0.4	8,820	1990	2070	2150	—
1955	Nut	1 7/16 x 1 3/16 Sq.	24.9	7.3	28.6	39.2	0.4	8,560	2030	2120	2210	31
1958	Nut	1 5/16 x 1 5/16 Sq.	25.5	7.3	28.6	38.6	0.4	8,550	2210	2300	2490	32
1955	Stoker	1 3/16 x ½ Sq.	24.8	9.2	28.3	37.7	0.5	8,350	2050	2140	2210	29
1958	Stoker	1 5/16 x 9/16 Sq.	25.7	6.8	29.1	38.4	0.4	8,630	—	2320	2470	32
1958	Slack	½ Sq. x 0	25.7	8.5	27.9	37.9	0.5	8,360	2280	2360	2460	35

35. STRAWBERRY CREEK COAL CO. LTD.—Mine No. 1644** (strip). Subbituminous B. Warburg, Pembina Area.
Trade Name: **STRAWBERRY CREEK**

1955	Stove	4 Sq. x 2 Rd.	17.8	8.3	27.4	46.5	0.3	9,760	2240	2380	2420	38
1955	Stoker	1½ x ½ Sq.	18.0	7.7	27.9	46.4	0.4	9,850	2220	2400	2440	38

36. SUBWAY COAL CO.†—Mine No. 1666, (strip). Subbituminous B. Rosedale, Drumheller Area. Trade Name: **SUBWAY COAL**

1958	Lump	+ 4 Bar	17.3	8.6	31.1	43.0	0.6	9,760	1930	2280	2410	—
1958	Egg	4 Bar x 2 Rd.	17.6	11.2	29.7	41.5	0.6	9,420	2120	2320	2490	—
1958	Nut	2 x ⅞ Rd.	16.5	13.0	29.6	40.9	0.6	9,340	2130	2330	2470	35
1958	Slack	⅞ Rd. x 0	17.2	18.6	27.7	36.5	0.6	8,400	2020	2310	2460	41

** Not operating, 1960.
* Formerly J. B. Starky Co. Ltd.
† Formerly Sands, Mark, and Partners.

D. Subbituminous—Continued

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis: Proximate Analysis: Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (In reducing atmosphere): Initial °F	Softening °F	Fluid °F	Grindability (Hardgrove Index)
37. SUNDANCE COAL LTD.—Mine No. 129 (strip). Subbituminous C. Cardiff, Edmonton Area.**												**Trade Name: SUNCOLE**
1955	Lump	+ 5 Sq.	23.3	8.2	29.3	39.2	0.4	8,630	2210	2310	2390	40
1958	Lump	+ 5 Sq.	22.1	12.6	29.4	35.9	0.0	8,350	2310	2420	2570	—
1955	Egg	5 x 2 Sq.	22.6	7.8	29.3	40.3	0.3	8,790	2230	2320	2430	33
1958	Egg	5 x 2 Sq.	22.5	12.8	29.3	35.4	0.0	8,280	2210	2390	2430	—
1955	Nut	2 x 1 Sq.	24.3	9.1	27.9	38.7	0.2	8,430	2220	2320	2420	39
1958	Nut	2 x 1 Sq.	23.5	13.7	27.8	35.0	0.2	8,080	2200	2370	2440	38
1955	Stoker	1 x ½ Sq.	24.5	11.2	27.3	37.0	0.4	8,090	2220	2310	2390	36
1958	Stoker	1 x ½ Sq.	22.8	12.2	29.5	35.5	0.2	8,270	2310	2420	2440	40
38. WARBURG COAL CO. LTD.—Mine No. 1670, (strip). Subbituminous B. Warburg, Pembina Area.												**Trade Name: PINTER**
1959	Lump	+ 8 Sl.	17.1	7.9	29.4	45.6	0.3	9,770	2160	2280	2400	—
1956	Stove	8 Rd. x 1½ Sq.	17.4	7.6	27.7	47.3	0.2	9,755	2080	2230	2310	41
1959	Stove	8 Sl. x 2 Rd.	17.1	7.4	29.2	46.3	0.3	9,720	2180	2260	2360	—
1956	Stoker	1½ x ½ Sq.	15.5	11.0	27.8	45.7	0.2	9,570	2080	2330	2520	45
1959	Stoker	2 x ⅝ Rd.	16.5	8.8	29.6	45.1	0.2	9,640	2170	2260	2340	—

39. WAYNE COALS LTD.—Mine No. 1570** (underground). Subbituminous B. Wayne, Drumheller Area. Trade Name: **SOVEREIGN**

1955	Lump	+ 3	16.8	7.3	31.8	44.1	0.5	9,640	1970	2150	2210	35.6
1955	Stove	4 x 2	17.6	7.9	32.6	41.9	0.5	9,495	2050	2200	2270	36.2
1955	Nut	2 x 1	17.0	8.6	31.4	43.0	0.5	9,450	2040	2170	2250	36.6
1955	Stoker	1 x ½	18.2	7.6	30.4	43.8	0.5	9,610	1980	2100	2130	36.2
1955	Slack	½ x 0	16.2	12.0	30.1	41.7	0.6	9,085	2130	2280	2380	40.0

40. WESTERN DOMINION COAL MINES LTD.—Mines No. 443 and No. 1597, (strip). Subbituminous C.

(i) Mine No. 443, Sheerness, Sheerness Area. Trade Name: **ROSELYN**

1955	Lump	+ 4½ Rd.	26.6	6.1	32.4	34.9	0.3	8,420	2080	2160	2250	33
1958	Lump	+ 4½ Rd.	25.5	5.9	30.7	37.9	0.3	8,680	2060	2120	2230	—
1955	Egg	4½ x 2 Rd.	25.8	6.2	30.7	37.3	0.4	8,480	2080	2170	2250	31
1958	Egg	4½ x 2 Rd.	24.8	6.2	31.9	37.1	0.3	8,740	2050	2140	2240	—
1955	Nut	2 Rd. x 1¼ Sq.	26.8	5.8	28.6	38.8	0.4	8,410	2050	2100	2170	31
1958	Nut	2 Rd. x 1¼ Sq.	25.0	6.5	32.3	36.2	0.3	8,690	2080	2130	2230	29
1955	Stoker	1¼ x ½ Sq.	26.3	5.8	29.7	38.2	0.4	8,390	2040	2110	2180	35
1958	Stoker	1¼ x ½ Sq.	24.0	6.7	31.0	38.3	0.3	8,690	2010	2070	2130	30
1955	Slack	½ Sq. x 0	26.6	6.4	29.4	37.6	0.6	8,240	2000	2090	2170	33
1958	Slack	½ Sq. x 0	24.7	7.5	30.8	37.0	0.5	8,570	1960	2070	2120	30

(ii) Mine No. 1597*, Sheerness, Sheerness Area. Trade Name: **VOLCANO**

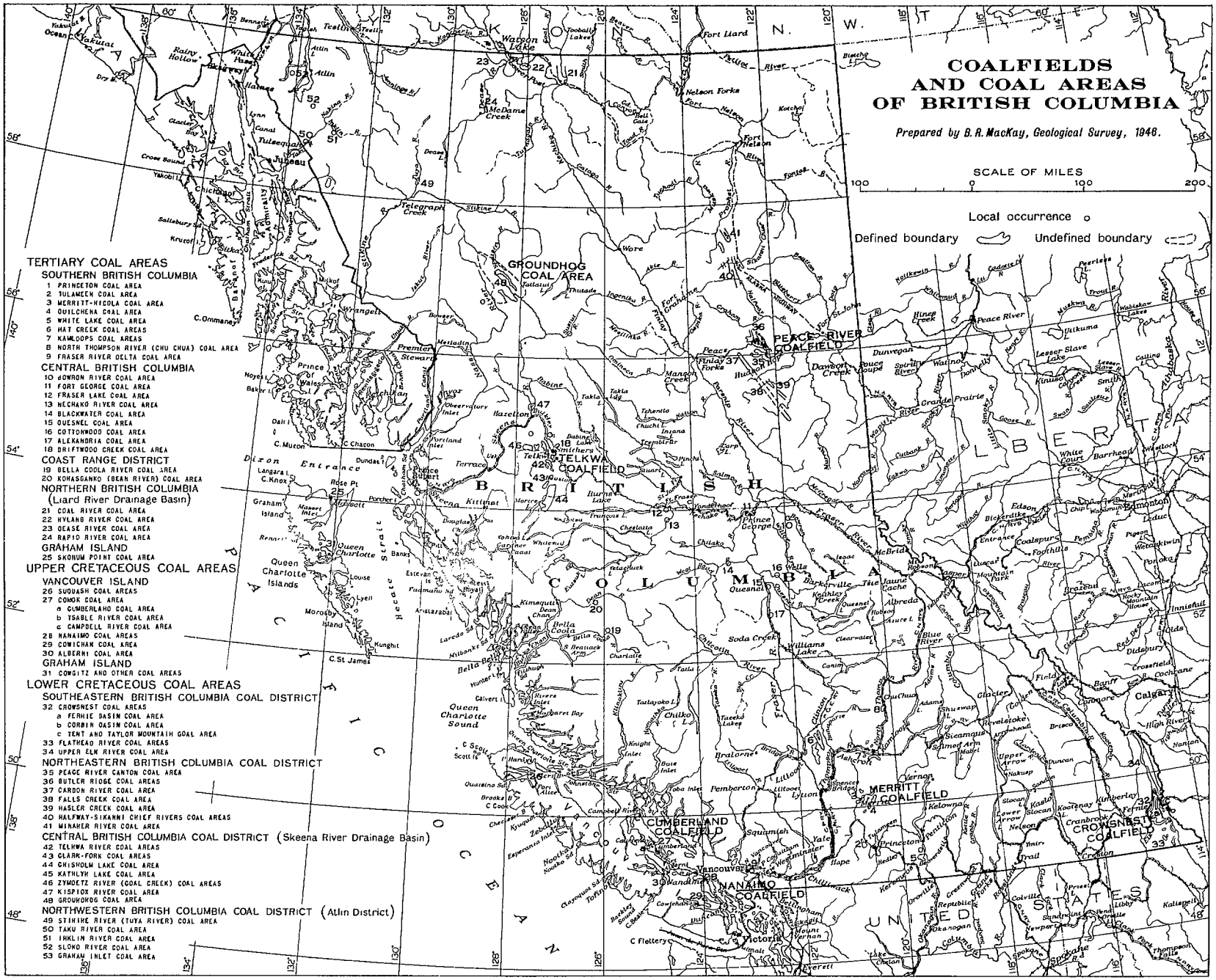
1955	Lump	+ 4½ Rd.	26.8	6.3	28.6	38.3	0.4	8,260	2070	2170	2250	36
1955	Egg	4½ x 2 Rd.	26.8	7.1	28.6	37.5	0.7	8,260	2090	2190	2270	32
1955	Nut	2 Rd. x 1¼ Sq.	26.4	7.6	29.1	36.9	0.5	8,190	2060	2130	2200	33
1955	Stoker	1¼ Sq. x ½ Rd.	26.8	7.4	28.2	37.6	0.5	8,120	2040	2120	2200	33

** Not operating, 1960.

* Formerly Operated by Lehigh Coal Co. Ltd. Not operating, 1960.

D. Subbituminous—Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis and Calorific Value–Equilibrium Moisture Basis						Ash Fusion Temperature (In reducing atmosphere)			Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value	Initial	Softening	Fluid	
			Equilibrium Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	°F	°F	°F	
41. WHITEMUD CREEK COAL LTD.—Mine No. 1727, (underground). Subbituminous C. Edmonton, Edmonton Area. Trade Name: **RED HOT**												
1955	Lump	+ 4 Rd.	22.1	7.4	28.3	42.2	0.3	8,870	2160	2240	2350	31
1958	Lump	+ 4 Rd.	20.9	8.4	29.0	41.7	0.2	9,120	1940	2220	2340	—
1955	Stove	4 x 2 Rd.	21.8	7.8	28.4	42.0	0.3	8,940	2170	2250	2350	32
1958	Stove	4 x 2 Rd.	20.5	7.0	29.9	42.6	0.3	9,380	1900	2180	2330	—
1955	Nut	2 Rd. x 1 Sq.	21.8	8.8	28.6	40.8	0.4	8,760	2160	2270	2350	31
1958	Nut	2 Rd. x 1 Sq.	21.4	9.4	28.4	40.8	0.2	9,010	2090	2330	2450	34
1955	Stoker	1 x ½ Sq.	22.1	10.3	27.8	39.8	0.3	8,510	2130	2290	2370	32
1958	Stoker	1 x ½ Sq.	21.5	8.4	28.4	41.7	0.2	9,030	2000	2290	2490	34
1955	Slack	½ Sq. x 0	22.3	10.3	27.4	40.0	0.4	8,620	2150	2280	2320	34
1958	Slack	½ Sq. x 0	21.5	8.4	28.6	41.5	0.2	9,070	1910	2270	2400	34


COALFIELDS
AND COAL AREAS
OF BRITISH COLUMBIA
Prepared by B. R. MacKay, Geological Survey, 1946.
SCALE OF MILES
100 0 100 200
Local occurrence o
Defined boundary
Undefined boundary
TERTIARY COAL AREAS
SOUTHERN BRITISH COLUMBIA
1 PRINCETON COAL AREA
2 TULAMEEN COAL AREA
3 MERRITT-NICOLA COAL AREA
4 QUILCHENA COAL AREA
5 WHITE LAKE COAL AREA
6 HAT CREEK COAL AREAS
7 KAMLOOPS COAL AREAS
8 NORTH THOMPSON RIVER (CHU CHUA) COAL AREA
9 FRASER RIVER DELTA COAL AREA
CENTRAL BRITISH COLUMBIA
10 BOWRON RIVER COAL AREA
11 FORT GEORGE COAL AREA
12 FRASER LAKE COAL AREA
13 MCHAKO RIVER COAL AREA
14 BLACKWATER COAL AREA
15 QUESNEL COAL AREA
16 COTTONWOOD COAL AREA
17 ALEXANDRIA COAL AREA
18 DRIFTWOOD CREEK COAL AREA
COAST RANGE DISTRICT
19 BELLA COOLA RIVER COAL AREA
20 KOHASGANKO (BEAN RIVER) COAL AREA
NORTHERN BRITISH COLUMBIA
(Liard River Drainage Basin)
21 COAL RIVER COAL AREA
22 HYLAND RIVER COAL AREA
23 GEASE RIVER COAL AREA
24 RAPID RIVER COAL AREA
GRAHAM ISLAND
25 SKONUN POINT COAL AREA
UPPER CRETACEOUS COAL AREAS
VANCOUVER ISLAND
26 SUQUASH COAL AREAS
27 COMOX COAL AREA
a CUMBERLAND COAL AREA
b ISABELLE RIVER COAL AREA
c CAMPBELL RIVER COAL AREA
28 NANAIMO COAL AREAS
29 COWICHAN COAL AREA
30 ALBERNI COAL AREA
GRAHAM ISLAND
31 COWGITZ AND OTHER COAL AREAS
LOWER CRETACEOUS COAL AREAS
SOUTHEASTERN BRITISH COLUMBIA COAL DISTRICT
32 CROWSNEST COAL AREAS
a FERNIE BASIN COAL AREA
b CORBIN OASIN COAL AREA
c TENT AND TAYLOR MOUNTAIN COAL AREA
33 FLATHEAD RIVER COAL AREAS
34 UPPER ELK RIVER COAL AREA
NORTHEASTERN BRITISH COLUMBIA COAL DISTRICT
35 PEACE RIVER CANYON COAL AREA
36 BUTLER RIDGE COAL AREAS
37 CARBON RIVER COAL AREA
38 FALLS CREEK COAL AREA
39 HASLER CREEK COAL AREA
40 HALFWAY-SIKANNI CHIEF RIVERS COAL AREAS
41 MINAKER RIVER COAL AREA
CENTRAL BRITISH COLUMBIA COAL DISTRICT (Skeena River Drainage Basin)
42 TELKWA RIVER COAL AREAS
43 CLARK-FORK COAL AREAS
44 OWSHOLM LAKE COAL AREA
45 KATHLYN LAKE COAL AREA
46 ZYMOETZ RIVER (COAL CREEK) COAL AREAS
47 KISPIOX RIVER COAL AREA
48 GROUNDHOG COAL AREA
NORTHWESTERN BRITISH COLUMBIA COAL DISTRICT (Atlin District)
49 STIKINE RIVER (TUYA RIVER) COAL AREA
50 TAKU RIVER COAL AREA
51 INKLIN RIVER COAL AREA
52 SLOKO RIVER COAL AREA
53 GRAHAM INLET COAL AREA
GROUNDHOG COAL AREA
TELKWA COALFIELD
PEACE RIVER COALFIELD
MERRITT COALFIELD
CUMBERLAND COALFIELD
NANAIMO COALFIELD
CROWSNEST COALFIELD
BRITISH COLUMBIA
ALBERTA
UNITED STATES
PACIFIC OCEAN
Queen Charlotte Islands
Hecate Strait
Dixon Entrance
Queen Charlotte Sound

BRITISH COLUMBIA

Bituminous

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On 'As Received at Laboratory' Moisture Basis: Proximate Analysis: As Rec'd Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	Sulphur %	Calorific Value Btu/lb	Ash Fusion Temperature (in Reducing Atmosphere): Initial °F	Softening °F	Fluid °F	Free Swelling Index	Grindability (Hardgrove Index)
1. CROW'S NEST PASS COAL CO. LTD.—Medium Volatile Bituminous													
(i) MICHEL COLLIERY, (strip and underground). Michel, East Kootenay District. Trade Name: **MICHEL**													
1956	Lump	+ 7 D.	0.7	10.8	25.4	63.1	0.6	13,565	2210	2320	2620	—	—
1960	Lump	+ 7 D.	0.3	9.7	23.9	66.1	0.4	14,000	2200	2290	2390	—	—
1956	Cobble	7 D. x 1⅝ Rd.	1.4	8.2	21.3	69.1	0.4	13,775	2260	2500	2750+	—	—
1960	Cobble	7 D. x 1⅝ Rd.	0.4	9.5	23.8	66.3	0.4	13,920	2160	2300	2360	—	—
1956	Stoker	1⅝ Rd. x ¼ Sl.	2.4	9.5	22.5	65.6	0.4	13,520	2310	2740	2750+	—	88
1960	Stoker I	1⅝ Rd. x ⅜ Ty.	0.4	9.2	23.3	67.1	0.4	14,150	2250	2320	2400	—	—
1960	Stoker II	⅜ x ¼ Ty.	0.4	7.0	24.1	68.5	0.4	14,480	2600	2750+	2750+	—	—
1956	Slack	¼ Sl. x 0	1.0	10.7	23.5	64.8	0.7	13,540	2550	2750+	2750+	—	93
1960	Slack	¼ Ty. x 0	0.3	7.8	23.5	68.4	0.4	14,430	2540	2750+	2750+	—	—
(ii) ELK RIVER COLLIERY** (underground) Coal Creek, East Kootenay District													
1957	Cobble	6 x 1⅜ Rd.	0.8	6.6	25.5	67.1	0.4	14,300	2120	2240	2390	8.0	—
1957	Stoker	1⅜ Rd. x ⅛ Ty.	0.4	7.2	25.7	66.7	0.3	14,445	2330	2400	2550	9.0	—
1957	Fines	⅛ Ty. x 0	3.5	11.6	24.3	60.6	0.4	13,370	2200	2600	2750+	9.0	102

** Not operating, 1960.

Bituminous—Concluded

Date of Sampling	Commercial Grade	Screen Limits (at mine) in.	Chemical Analysis—On 'As Received at Laboratory' Moisture Basis						Ash Fusion Temperature (in Reducing Atmosphere)			Free Swelling Index	Grindability (Hardgrove Index)
			Proximate Analysis				Sulphur	Calorific Value					
			As Rec'd Moisture %	Ash %	Volatile Matter %	Fixed Carbon %	%	Btu/lb	Initial °F	Softening °F	Fluid °F		
2. CANADIAN COLLIERIES RESOURCES LTD.*—T'SABLE RIVER MINE, (underground). High Volatile A Bituminous T'Sable River, Vancouver Island District. Trade Name: **COMOX**													
1956	Lump	+ 8 Rd.	2.1	10.8	32.3	54.8	1.6	13,015	2100	2200	2270	8.5	—
1957	Lump	+ 8 Rd.	1.3	11.0	33.3	54.4	1.7	12,995	1950	2050	2100	8.5	—
1956	Cobble	8 x 2½ Rd.	0.6	9.5	32.8	57.1	1.3	13,525	2000	2120	2190	9.0	—
1957	Cobble	8 x 2½ Rd.	1.5	10.1	33.1	55.3	1.3	13,260	1950	2050	2190	8.5	—
1956	No. 1 Nut	2½ x 1½ Rd.	4.1	10.2	30.9	54.8	1.3	12,910	2190	2300	2400	9.0	64
1957	No. 1 Nut	2½ x 1½ Rd.	0.9	13.3	33.0	52.8	1.4	12,670	2160	2300	2340	8.5	59
1956	No. 2 Nut	1½ x ⅞ Rd.	2.8	12.9	31.1	53.2	1.4	12,620	2310	2430	2460	9.0	63
1957	No. 2 Nut	1½ x ⅞ Rd.	1.4	12.9	33.1	52.6	1.4	12,780	2220	2320	2360	8.0	57
1956	Stoker	⅞ Rd. x 5/16 Sl.	2.7	13.7	30.9	52.7	1.5	12,505	2320	2420	2460	9.0	66
1957	Stoker	⅞ x 5/16 Rd.	2.0	14.4	33.0	50.6	1.6	12,390	2280	2340	2380	8.5	56
1956	Washed Smalls	5/16 Sl. x 0	10.9	14.5	28.0	46.6	1.3	11,035	2310	2410	2440	9.0	73
1957	Washed Smalls	5/16 Sl. x 0	6.9	15.0	30.0	48.1	1.4	11,415	2250	2360	2420	8.5	64

* Formerly Canadian Collieries (Dunsmuir) Ltd.

Analysis Directory of Canadian Coals

INDEX

(Words in italics identify trade names of coals)

PAGE

A

Acadia Coal Co. Ltd. ... 11
Ajax ... 43
Alberta ... 29–50
Alberta Coal Co. Ltd. ... 34
Alberta Coal Sales Ltd. ... 34
Alix ... 35
All-Fire ... 47
Allyn Mann Construction Co. ... 35
Amalgamated Coals Ltd. ... 35
Ardley Area ... 35
Mine No. 809 ... 35
" 1734 ... 42
Atlas ... 38
Avon Coal Co. Ltd. ... 21

B

Battle River Coal Co. Ltd. ... 36
Bayview No. 8 Mine ... 17
Beaver Coal Co. Ltd. ... 12
Mine ... 12
Beersville, Kent County ... 24
Bellevue Mine ... 31
Bienfait (Area) ... 25, 26
Black Gem Coal Co. Ltd. ... 36
Black Nugget Coal Co. Ltd. ... 37
Blairmore ... 31
Blue Flame ... 34
British Columbia ... 51–52
Broughton ... 12, 16
Burnstad('s) Coal Ltd. ... 37

C

Cadillac ... 33
Cairnes Seam ... 29
Cambria ... 42
Camcoal ... 38
Camrose Area ... 37
Mine No. 724 ... 37
" 1603 ... 38
" 1055 ... 41
Camrose Collieries Ltd. ... 38
Canadian Collieries Resources Ltd. ... 32, 52
Canmore ... 29
Canmore Mines Ltd. ... 29
Canmore Smokeless ... 29
Cape Breton County ... 12, 16, 17, 18
Carbon (Area) ... 39
Mine No. 194 ... 43
" 817 ... 45
" 1060 ... 39
Cardiff (Alta.) ... 48
Cascade Area ... 29
Castor (Area) ... 36
Mine No. 902 ... 45
" 1046 ... 36
" 1578 ... 41
Century Coals Ltd. ... 38

PAGE

C—Conc.

Champion Area ... 39
Mine No. 1509 ... 39
Champion Coal Co. Ltd. ... 39
Chaton ... 37
Chestico Coal Mines Corp. Ltd. ... 20
Chestico Mine (formerly Harbour-view Mine) ... 20
Chipman Area ... 22
Coal Creek Area (N.B.) ... 22, 24
Coal Creek (B.C.) ... 51
Coalspur Area ... 32
Mine No. 846 ... 32
" 1749 ... 32
Cochrane Mine ... 12
Coleman Collieries Ltd. Crowsnest Area ... 30
Commander ... 38
Comox ... 52
Consumer's Mine ... 39
Cordel ... 36
Crowsnest Area
Coleman Collieries Ltd. ... 30
West Canadian Collieries Ltd. ... 31
Crow's Nest Pass Coal Co. Ltd. ... 51
Cumberland County ... 12, 17
Cumberland Fuel and Trading Co. Ltd. ... 12

D

Delburne ... 42
Diplomat ... 41
Dodds ... 37, 42
Dominion Briquettes and Chemicals Ltd. ... 27
Dominion Coal Co. Ltd. ... 12
Dominion No. 4 Mine
Phalen Seam ... 12
Dominion No. 12 Mine
Harbour Seam ... 13
Dominion No. 16 Mine
Phalen Seam ... 13
Dominion No. 18 Mine
Harbour Seam ... 14
Dominion No. 20 Mine
Harbour Seam ... 14
Dominion No. 25 Mine
Gardiner Seam ... 15
Dominion No. 26 Mine
Harbour Seam ... 15
Doucet, S. J. & Sons Ltd. ... 19
Drumheller (Area)
Mine No. 367 ... 43
" 402 ... 45
" 1421 ... 40
" 1491 ... 44
" 1673 ... 35
" 1666 ... 47

PAGE

D—Conc.

Mine No. 1669 42
" 1742 38
Drummond Coal Co. Ltd. 15
Drummond No. 1 Mine
Main Seam 15
Drummond No. 2 Mine
Second or Scott Seam 16

E

East Carbon Coal Co. Ltd. 39
East Coulee 35, 38, 44
East Kootenay District 51
East Trochu Coal Co. 39
Eclipse 35
Edmonton (Area) 36
Mine No. 1266 36
" 1316 46
" 1626 46
" 1635 44
" 1582 40
" 1727 50
Egg Lake 40
Egg Lake Coal Co. Ltd. 40
Elk River Colliery 51
Eskimo 41
Estevan Area 27
Evans' Coal Mines Ltd. 19
Evans (Mine) 19

F

Federal 33
Federated Co-Ops. Ltd. 40
Fergstad, Chas. 41
Florence Mine 18
Foothills 32
Forestburg 41
Forestburg Collieries Ltd. 41
Forty Brine Seam 17
Four Star Collieries Ltd. 16
Mine 16

G

Galt 33
Gardiner Seam
Dominion No. 25 Mine 15
Ghost Pine Creek 45
Gleichen Area
Mine No. 1431 39
" 1521 43
Glocoal 45
Greener Mine 17
Greenhill Mine 31
Mine No. 396 31
Greenwood Coal Co. Ltd. 17
No. 2 Mine 17

H

Halkirk 36, 47
Hamilton Coal Co. 33
Harbour Seam 13
Dominion No. 12 Mine 13
" No. 18 " 14
" No. 20 " 14
" No. 26 " 15
Princess and Florence Mines 18

PAGE

H—Conc.

Harbourview Mine (now Chestico Mine) 20
Hi-Lo 37
Hy-Grade 40

I

Ideal Coal Ltd. 33
Indian Cove Coal Co. Ltd. 17
Inverness (County) 19, 20
Inverside 19

J

Jet Construction Ltd. 42
Joggins 17
Joggins Coal Co. Ltd. 17
Joy Coal Co. 42

K

Kent County, Beersville 24
Kimberley Seam 12
King Mining Co. Ltd. 22
Klimax 26
Knee Hill 43

L

Lafferty Bros. 22
Lethbridge (Area)
Mine No. 1263 33
" 1581 33
Lethbridge Collieries Ltd. 33
Lynass, John H. 42

M

MacKay Seam 17
MacLellan's Brook 17
Main Seam
Drummond No. 1 Mine 15
Majestic 34
Manitoba and Saskatchewan Coal Co. Ltd. 25
M. and S. Mines 25
McArthur, Mrs. Marjorie 43
McBean Mine 11
McBean Seam 11
McEwan Mining Co. 22
McGillivray Creek Mine
Mine No. 204 30
McLeod River Hard 32
McMann, V. C. Ltd. 23
McMillan, Alex. 43
Medicine Hat 43
Mercoal 32
Mercury 43
Michel Colliery 51
Midland Coal Mining Co. Ltd. 43
Midlandvale 43
Miller, Henry 43
Mills 22
Mills D. W. & R. A. Ltd. 22
Mine No. 2
Canmore Mines Ltd. 29
Mine No. 87
Bellevue Mine 31
Mine No. 129
Edmonton Area 48

PAGE

M—Cont.

Mine No. 194
Carbon Area..... 43
Mine No. 204
McGillivray Creek Mine..... 30
Mine No. 215
Tofield Area..... 42
Mine No. 367
Drumheller Area..... 43
Mine No. 396
Greenhill Mine..... 31
Mine No. 402
Drumheller Area..... 45
Mine No. 419
Pembina Area..... 34
Mine No. 846
Coalspur Area..... 32
Mine No. 443
Sheerness Area..... 49
Mine No. 710
Carbon Area..... 39
Mine No. 724
Camrose Area..... 37
Mine No. 772
Redcliffe Area..... 43
Mine No. 809
Ardley Area..... 35
Mine No. 817
Carbon Area..... 45
Mine No. 902
Castor Area..... 45
Mine No. 1046
Castor Area..... 36
Mine No. 1055
Camrose Area..... 41
Mine No. 1060
Carbon Area..... 39
Mine No. 1107
Tofield Area..... 37
Mine No. 1263
Lethbridge Area..... 33
Mine No. 1266
Edmonton Area..... 36
Mine No. 1316
Edmonton Area..... 46
Mine No. 1421
Drumheller Area..... 40
Mine No. 1431
Gleichen Area..... 39
Mine No. 1491
Drumheller Area..... 44
Mine No. 1509
Champion Area..... 39
Mine No. 1516
Pekisko Area..... 33
Mine No. 1521
Gleichen Area..... 43
Mine No. 1562
Westlock Area..... 45
Mine No. 1570
Drumheller Area..... 49
Mine No. 1573
Drumheller Area..... 35
Mine No. 1578
Castor Area..... 41
Mine No. 1581
Lethbridge Area..... 33
Mine No. 1582
Edmonton Area..... 40

PAGE

M—Conc.

Mine No. 1597
Sheerness Area..... 49
Mine No. 1603
Camrose Area..... 38
Mine No. 1604
Taber Area..... 34
Mine No. 1614
Castor Area..... 47
Mine No. 1626
Edmonton Area..... 46
Mine No. 1635
Edmonton Area..... 44
Mine No. 1644
Pembina Area..... 47
Mine No. 1666
Drumheller Area..... 47
Mine No. 1669
Drunheller Area..... 42
Mine No. 1670
Pembina Area..... 48
Mine No. 1727
Edmonton Area..... 50
Mine No. 1734
Ardley Area..... 42
Mine No. 1742
Drumheller Area..... 38
Mine No. 1747
Vicary Creek Mine..... 30
Minto Area.....21, 22, 23, 24
Miramichi Lumber Co. Ltd..... 23
Morinville..... 40, 44
Morinville Colliery Ltd..... 44
Murray Collieries Ltd..... 44

N

Namao..... 36, 46
New Brunswick..... 21–24
Newcastle Bridge..... 24
Newcastle Coal Co. Ltd..... 24
New Murray..... 44
New Rosedale..... 43
New Star..... 35
New Wildfire..... 38
No. 27 Shaft (Miramichi Lumber Co. Ltd)..... 23
No. 28 Shaft (Miramichi Lumber Co. Ltd.)..... 23
North Minto Area..... 23
North Point Coal Co. Ltd..... 45
North West Coal Co. Ltd..... 26
Nova Scotia..... 11–20

O

Old Ghost Pine..... 43
Old Mac Coal Ltd..... 27
Old Sydney Collieries Ltd..... 18
Orkney..... 45

P

Pekisko Area
Mine No. 1516..... 33
Pembina Area
Mine No. 419..... 34
" 1644..... 47
" 1670..... 48

PAGE

P—Conc.

Phalen Seam
Dominion No. 4 Mine 12
" No. 16 " 13
Pickering, B. and Sons 45
Pictou County 11, 15, 17
Pinter 48
Plus Value 26
Port Hood 20
Priddis 33
Princess Mine 18
Princess and Florence Mines 18
Purity Hard 40

R

Redcliffe Area 43
Red Deer Valley Coal Co. Ltd. 45
Red Flame 42
Red Hot 50
Reliable 39
Remillard, O. V. 45
Renown 45
River Hebert 12
Roche Percée (Area) 27
Rosebank No. 3 Mine
34-in. Seam 19
Rosebud 39, 43
Rosedale 47
Roselyn 49
Rothwell 21, 23, 24
Round Hill 41

S

Samis Collieries 46
Saskatchewan 25–27
Sasko 26
Scotia 18
Scott Seam or Second
Drummond No. 2 Mine 16
Second, or Scott Seam
Drummond No. 2 Mine 16
Semianthracite 29
Sheerness 49
Sheerness Area, Mines No. 443 and
No. 1597 49
Silkstone 25
Soo 25
Southalta 34
South Minto Area 22
Sovereign 49
Spitfire 44
St. Albert 46
St. Rose 19
Star-Key Mines Ltd. 46
Stettler Coal Co. Ltd. 47

PAGE

S—Conc.

Strawberry Creek Coal Co. Ltd. 47
Subway Coal Co. 47
Suncole 48
Sundance Coal Ltd. 48
Supreme of the Valley 43
Sydney Mines 17, 18

T

Taber 34
Taylorton
Bienfait Area 26
Estevan Area 27
Ten-five ("10–5") 45
Thorburn 11
Thorhild 45
Tofield Area
Mine No. 215 42
" 1107 37
Tomson Mine 17
Upper Jubilee Seam 17
Tracey Seam 12, 16
Tro-Alta 39
Trochu 39
T'Sable River Mine 52

U

Upper Jubilee Seam
Greener Mine 17
Tomson Mine 17

V

Vancouver Island District 52
Vesta 36
Vicary Creek Mine 30
Mine No. 1747 30
Victory 34
Volcano 49

W

Wabamun 34
Warburg 47, 48
Warburg Coal Co. Ltd. 48
Wasson, A. W. 24
Wasson, (Mrs.) W. M. 24
Wasson's (Mrs. W. M. Wasson) 24
Wayne 49
Wayne Coals Ltd. 49
West Canadian Collieries Ltd. 31
Western Dominion Coal Mines Ltd. .. 26, 49
Western Monarch 35
Westlock Area 45
Mine No. 1562 45
Westville 15
Whitemud Creek Coal Ltd. 50