DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY & EARTH RESOURCES

OPEN FILE REPORT
OF 78-5

R1E R2E R3E R4E R5E

T36N T35N T34N T33N T32N

WHATCOM COUNTY

SAMISH BAY

PADILLA BAY

ANACORTES

FIDALGO ISLAND

ISLAND COUNTY

SKAGIT BAY

ALGER

SAMISH RIVER

COKEDALE

SKAGIT RIVER

CLEAR LAKE

MOUNT VERNON

BIG LAKE

BLUMONT

McMURRAY

SNOHOMISH COUNTY

N

EXPLANATION

Department of Natural Resources administered land

Approximate limit of coal bearing rocks (Queried where doubtful)

—COKEDALE

Areas of established coal reserves (showing name of field)

National Forest Boundary

(This data is preliminary and has not been reviewed for conformity with Division of Geology and Earth Resources' standards and nomenclature.)

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Compiled by Ellis F. Vonheeder, December 1978

SKAGIT COUNTY
WASHINGTON

COAL RESERVES

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SCALE 0 1 2 3 MILES

SHEET 1 OF 3 SHEETS

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY & EARTH RESOURCES

OPEN FILE REPORT
OF 78-5

R6E R7E R8E R9E R10E

WHATCOM COUNTY

MOUNT BAKER NATIONAL FOREST

SOUTH FORK NOOKSACK RIVER

MOUNT BAKER NATIONAL FOREST

LAKE SHANNON

BAKER DAM

T36N

SKAGIT RIVER

CUMBERLAND CREEK

CONNER

T35N

MOUNT BAKER NATIONAL FOREST

SAUK RIVER

SKAGIT RIVER

DAY CREEK

Day Creek

Day Lake

DEFOREST CREEK

T34N

MOUNT BAKER NATIONAL FOREST

RICK CREEK

Rick Creek

STILLAGUAMISH RIVER

NORTH FORK

SUIATTLE RIVER

SUIATTLE RIVER

CAVANAUGH LAKE

T33N

SNOHOMISH COUNTY

N

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COAL RESERVES

SCALE 0 1 2 3 MILES

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SHEET 2 OF 3 SHEETS

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R6E R7E R8E R9E R10E

UNDERGROUND COAL RESERVES,
SKAGIT COUNTY, WASHINGTON

Township and range	Measured and indicated				Inferred				All categories			
	14 to 28 inches	28 to 42 inches	42 or more inches	Total	14 to 28 inches	28 to 42 inches	42 or more inches	Total	14 to 28 inches	28 to 42 inches	42 or more inches	Total
33 N., 4 E.	------	------	------	------	------	0.37	------	0.37	------	0.37	------	0.37
33 N., 5 E.	------	------	------	------	------	.33	------	.33	------	.33	------	.33
34 N., 5 E.	------	------	------	------	0.78	------	------	.78	0.78	------	------	.78
34 N., 6 E.	------	------	11.06	11.06	19.64	------	59.65	79.29	19.64	------	70.71	90.35
34 N., 7 E.	------	------	------	------	30.85	------	93.71	124.56	30.85	------	93.71	124.56
35 N., 4 E.	------	------	------	------	.40	.16	.34	.90	.40	.16	.34	.90
35 N., 5 E.	24.94	10.33	21.38	56.65	34.15	14.15	29.27	77.57	59.09	24.48	50.65	134.22
35 N., 6 E.	1.15	------	21.63	22.78	1.77	------	53.78	55.55	2.92	------	75.41	78.33
36 N., 4 E.	------	------	------	------	23.64	9.79	20.26	53.69	23.64	9.79	20.26	53.69
36 N., 5 E.	------	------	------	------	10.32	4.27	8.84	23.43	10.32	4.27	8.84	23.43
Total	26.09	10.33	54.07	90.49	121.55	29.07	265.85	416.47	147.64	39.40	319.92	506.96

(after Beikman, 1961)

SELECTED ANALYSES OF COAL SAMPLES, SKAGIT COUNTY, WASHINGTON

(M - Moisture; VM - Volatile Matter; FC - Fixed Carbon; Btu - British Thermal Units per pound)

Location			Mine or prospect	Coal seam	Proximate (percent)				Sulfer (percent)	Btu	No. of analyses used in obtaining average	Type of analysis	Source of analysis	Remarks
Township	R.	S.			M	VM	FC	Ash						
35N	5E	4	Cokedale	Klondike (?)	1.0	30.8	59.3	8.9	.67	13,850	1	As-received	Private report	
"	"	"	" "	"	- - -	31.1	59.9	9.0	- - - - -	- - - -	1	Moisture free	" "	
"	"	"	" "	"	- - - - - -		65.8	34.2	- - - - -	- - - -	1	Mineral matter, moisture free	" "	
35N	6E	26	Conner	Unnamed	.5	18.7	70.2	9.6	1.8	- - - -	1	As-received	1	
"	"	"	" "	"	.5	12.1	80.2	7.3	- - - - -	- - - -	1	" "	" "	
35N	6E	23	Cumberland Creek	Unnamed	.3	9.0	79.7	11.0	.4	- - - -	1	" "	" "	
"	"	"	" "	"	.5	19.4	68.3	- -	.6	- - - -	1	" "	" "	
"	"	"	" "	"	.5	19.3	68.4	11.9	- - - - -	- - - -	1	" "	" "	
"	"	"	" "	"	1.2	18.8	71.7	8.4	- - - - -	- - - -	1	" "	" "	
35N	5E	4	Cokedale	"	3.0	35.0	60.0	2.0	.2	- - - -	1	" "	" "	
"	"	"	" "	"	.5	26.7	64.5	8.3	- - - - -	- - - -	1	" "	" "	
"	"	"	" "	"	1.0	30.8	59.3	8.9	- - - - -	- - - -	1	" "	" "	
34N	6E	13	Day Creek	"	2.0	33.0	63.3	1.8	- - - - -	- - - -	1	" "	" "	
"	"	"	" "	"	2.3	40.5	56.3	2.0	- - - - -	- - - -	1	" "	" "	
34N	5E	33	Blumont	"	4.0	42.7	35.6	17.7	- - - - -	9,830	1	" "	" "	
"	"	"	" "	" (?)	1.0	30.8	59.3	8.9	- - - - -	13,850	1	" "	" "	
35N	6E	23	Cumberland Creek	Cumberland#1	5.4	1.8	59.1	33.7	.9	9,123	1	" "	2	
35N	5E	4	Cokedale	Klondike	3.5	19.0	37.0	40.5	.7	8,338	1	" "	" "	FSI=4.5
35N	6E	23	Cumberland Creek	Cumberland#2	2.3	15.7	42.1	39.9	.8	8,673	1	" "	USGS, Denver	FSI=3.5
"	"	"	" "	Cumberland#1	7.6	16.7	35.1	40.6	.7	7,366	1	" "	USGS, Denver	FSI=1.5
33N	4E	SE¼	McMurray	Unnamed	8.4 to 14.1	30.4 to 43.11	36.3 to 47.8	4.6 to 32.1	- - - - -	8,710 to 11,375	5	" "	3	

SOURCES OF COAL ANALYSES AND SELECTED REFERENCES,
SKAGIT COUNTY, WASHINGTON

[1]Beikman, H. M.; Gower, H. D.; Dana, T. A. M., 1961, Coal reserves of Washington: Washington Division of Mines and Geology Bulletin 47, 115 p.

[2]Core Laboratories, Casper, Wyoming.

[3]Evans, George Watkin, undated, Preliminary report on the McMurray Coal Company property, Skagit County, Washington, 7 p.

Glaeser, O. A1, 1958, Geological survey of coal deposits in western Whatcom, Skagit and King counties, Washington: Report prepared for the Puget Sound Power and Light company by the United States Smelting, Refining, and Mining Company, USSRAM Division, 85 p. plus 52-page appendix.

Jenkins, O. P., 1924, Geological investigation of the coal fields of Skagit county, Washington: Washington Division of Geology Bulletin #29, 63 p.

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SKAGIT COUNTY
WASHINGTON
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