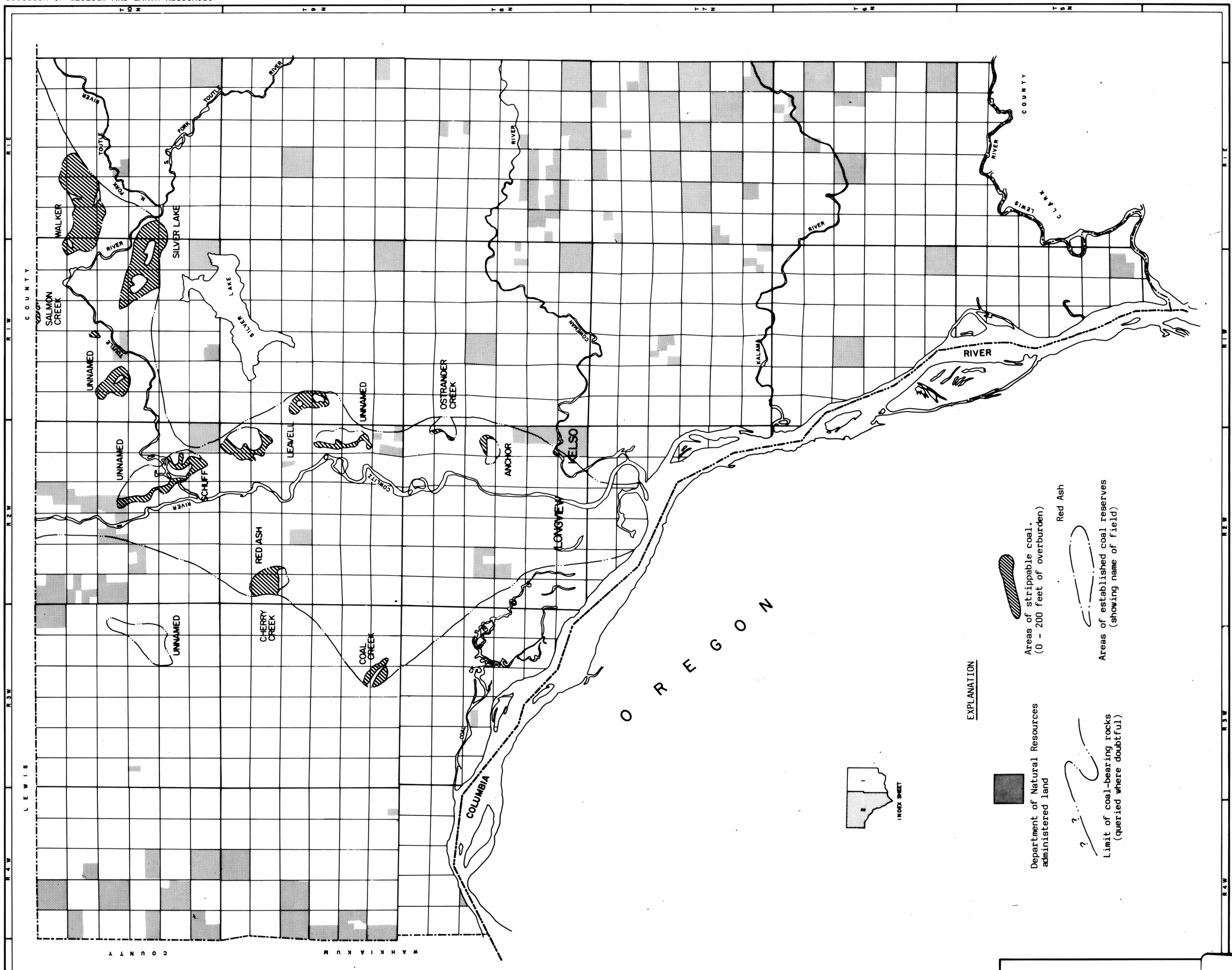
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND EARTH RESOURCES

OPEN FILE REPORT
OF 77-5



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

Compiled by Ellis R. Vonheeder, December, 1977.

COWLITZ COUNTY
WASHINGTON

COAL RESERVES

SCALE 0 1 2 3 MILES

OFR
77-5
Plate 1

SHEET 1 OF 2 MAP SHEETS

COAL RESERVES, COWLITZ COUNTY, WASHINGTON

(Overburden thickness less than 1000 feet)

Reserves, in millions of short tons, in beds of thickness shown

Township	Range	Coal bed or coal zone	Measured and indicated: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	Inferred: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	All categories: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total
10N	1W	Silver Lake	-------	14.44	-------	14.44	-------	-------	-------	-------	-------	14.44	-------	14.44
		Walker	-------	1.69	-------	1.69	-------	1.78	-------	1.78	-------	3.47	-------	3.47
		Unnamed	-------	-------	10.88	10.88	-------	-------	-------	-------	-------	-------	10.88	10.88
		Unnamed	-------	-------	2.13	2.13	-------	-------	-------	-------	-------	-------	2.13	2.13
	Township Total			16.13	13.01	29.14		1.78		1.78		17.91	13.01	30.92
10N	1E	Silver Lake	-------	2.52	-------	2.52	-------	-------	-------	-------	-------	2.52	-------	2.52
		Walker	-------	9.80	-------	9.80	-------	10.25	-------	10.25	-------	20.05	-------	20.05
	Township Total			12.32		12.32		10.25		10.25		22.57		22.57
9N	3W	Unnamed	-------	-------	-------		-------	2.13	-------	2.13	-------	2.13	-------	2.13
	Township Total							2.13		2.13		2.13		2.13
9N	2W	Leavell	1.07	-------	-------	1.07	2.02	-------	-------	2.02	3.09	-------	-------	3.09
		Cherry Creek	-------	-------	-------	-------	4.48	-------	-------	4.48	4.48	-------	-------	4.48
		Red Ash	-------	-------	-------	-------	-------	1.98	-------	1.98	-------	1.98	-------	1.98
		Unnamed	.17	-------	-------	.17	4.11	-------	-------	4.11	4.28	-------	-------	4.28
	Township Total		1.24			1.24	10.61	1.98		12.59	11.85	1.98		13.83
9N	1W	Leavell	.25	-------	-------	.25	2.59	-------	-------	2.59	2.84	-------	-------	2.84
	Township Total		.25			.25	2.59			2.59	2.84			2.84
8N	2W	Unnamed	-------	-------	-------	-------	-------	3.46	-------	3.46	-------	3.46	-------	3.46
		Unnamed	-------	-------	-------	-------	1.52	-------	-------	1.52	1.52	-------	-------	1.52
	Township Total						1.52	3.46		4.98	1.52	3.46		4.98
8N	1W	Unnamed	-------	-------	-------	-------	.77	-------	-------	.77	.77	-------	-------	.77
	Township Total						.77			.77	.77			.77
	Grand Total, All Townships		1.49	28.45	13.01	42.95	15.49	19.60		35.09	16.98	48.05	13.01	78.04

(After Beikman, 1961)

SELECTED ANALYSES OF COAL SAMPLES, COWLITZ COUNTY, WASHINGTON

(As-received basis)

(M—Moisture; VM—Volatile matter; FC—Fixed carbon; Btu—British Thermal Units per pound)

Location: Section	T.	R.	Mine or prospect	Coal seam	Proximate (percent): M	VM	FC	Ash	Sulfur (percent)	Btu	Source of analysis	Remarks
27	10N	2W	Schuff	Schuff	22.3	32.0	35.7	10.0	2.5	8,140	3	Lignite
22	10N	2W	Fuller	Unnamed	19.9	19.8	32.5	27.8	.6	7,250	3	Lignite
12	10N	1W	Walker	Walker	38.2	24.9	29.8	7.1	.2	6,810	3	Lignite
30	10N	1E	Silver Lake	Silver Lake	32.0	22.7	17.1	28.2	.9	4,520	3	Lignite
18	10N	1E	Reed and Simpson	Walker(?)	23.8	24.9	17.2	34.1	-----	---------	3	Lignite
27	9N	3W	Coal Creek	Coal Creek	16.3	36.3	30.1	17.4	4.6	---------	2	Subbituminous
Do	do	do	do	do	22.2	33.3	27.1	17.4	4.0	---------	2	Subbituminous
11	9N	2W	Idleman	Leavell	39.4	26.4	28.3	5.9	.7	6,160	3	Lignite
7	9N	2W	Cherry Creek	Cherry Creek	24.1	30.8	33.2	11.9	1.0	7,850	1	Subbituminous
18	9N	1W	Chapin	Leavell	25.0	32.0	35.9	7.1	.4	8,240	3	Lignite

STRIPPABLE COAL RESERVES (BY SECTION)
DEPARTMENT OF NATURAL RESOURCES ADMINISTERED LANDS
COWLITZ COUNTY, WASHINGTON

Reserves, in millions of short tons, in beds of thickness shown

Township	Range	Section	Coal bed or coal zone	Overburden (in feet)	Measured and indicated: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	Inferred: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	All categories: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total
10N	2W	15	Schuff	0-200	.34	------	------	.34	-------	------	------	------	.34	-------	.34	.34
Township Total, Grand Total					.34			.34					.34		.34	.34

STRIPPABLE COAL RESERVES, COWLITZ COUNTY, WASHINGTON

(Overburden thickness 200 feet or less)

Reserves, in millions of short tons, in beds of thickness shown

Township	Range	Coal bed or coal zone	Measured and indicated: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	Inferred: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total	All categories: 2.0 to 5.0 feet	5.0 to 10.0 feet	10.0 or more feet	Total
10N	2W	Unnamed	2.79	-------	-------	2.79	-------	-------	-------	-------	2.79	-------	-------	2.79
		Schuff	2.69	-------	-------	2.69	-------	-------	-------	-------	2.69	-------	-------	2.69
	Township Total		5.48			5.48					5.48			5.48
10N	1W	Unnamed	-------	5.27	-------	5.27	-------	-------	-------	-------	-------	5.27	-------	5.27
		Unnamed	-------	.27	-------	.27	-------	-------	-------	-------	-------	.27	-------	.27
		Salmon Creek	-------	.15	-------	.15	-------	-------	-------	-------	-------	.15	-------	.15
		Walker	-------	4.15	-------	4.15	-------	-------	-------	-------	-------	4.15	-------	4.15
		Silver Lake	-------	9.09	-------	9.09	-------	-------	-------	-------	-------	9.09	-------	9.09
	Township Total			18.93		18.93						18.93		18.93
10N	1E	Walker	-------	8.74	-------	8.74	-------	-------	4.45	4.45	-------	8.74	4.45	13.19
		Silver Lake	1.78	-------	-------	1.78	-------	-------	-------	-------	1.78	-------	-------	1.78
	Township Total		1.78	8.74		10.52			4.45	4.45	1.78	8.74	4.45	14.97
9N	3W	Coal Creek	-------	.97	-------	.97	-------	.24	-------	.24	-------	1.21	-------	1.21
	Township Total			.97		.97		.24		.24		1.21		1.21
9N	2W	Cherry Creek	-------	-------	-------	-------	-------	2.97	-------	2.97	-------	2.97	-------	2.97
		Red Ash	-------	-------	-------	-------	-------	.22	-------	.22	-------	.22	-------	.22
		Leavell	.53	-------	-------	.53	.71	-------	-------	.71	1.24	-------	-------	1.24
		Unnamed	.09	-------	-------	.09	2.76	-------	-------	2.76	2.85	-------	-------	2.85
	Township Total		.62			.62	3.47	3.19		6.66	4.09	3.19		7.28
9N	1W	Leavell	.11	------	-------	.11	1.01	-------	-------	1.01	1.12	-------	-------	1.12
	Township Total		.11			.11	1.01			1.01	1.12			1.12
8N	2W	Anchor	-------	-------	-------	-------	-------	1.73	-------	1.73	-------	1.73	------	1.73
		Ostrander Creek	-------	-------	-------	-------	.10	-------	-------	.10	.10	-------	-------	.10
	Township Total						.10	1.73		1.83	.10	1.73		1.83
8N	1W	Ostrander Creek	-------	-------	-------	-------	.16	-------	-------	.16	.16	-------	-------	.16
	Township Total						.16			.16	.16			.16
	Grand Total, All Townships		7.99	28.64		36.63	4.74	5.16	4.45	14.35	12.73	33.80	4.45	50.98

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

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

Beikman, H. M; and others, 1961, Coal reserves of Washington: Washington Division of Mines and Geology Bulletin 47, 115 p.

Culver, H. E., 1919, The coal fields of southwest Washington: Washington Geological Survey Bulletin 19, 155 p.

[1]Fieldner, A. C.; Cooper, H. M.; Osgood, F. D., 1931, Analyses of mine samples. In Analyses of Washington coals: U.S. Bureau of Mines Technical Paper 491, 203 p.

[2]Livingston, V. E., Jr., 1966, Geology and mineral resources of the Kelso-Cathlamet area, Cowlitz and Wahkiakum Counties, Washington: Washington Division of Mines and Geology Bulletin 54, 110 p.

[3]Roberts, A. E., 1958, Geology and coal resources of the Toledo-Castle Rock coal district, Cowlitz and Lewis Counties, Washington: U.S. Geological Survey Bulletin 1053, 159 p.

Smith, E. E., 1911, Coals of the State of Washington: U.S. Geological Survey Bulletin 474, 206 p.

Compiled by Ellis R. Vonheeder, December, 1977.

COWLITZ COUNTY
WASHINGTON

COAL RESERVES

OFR
77-5
Plate 2