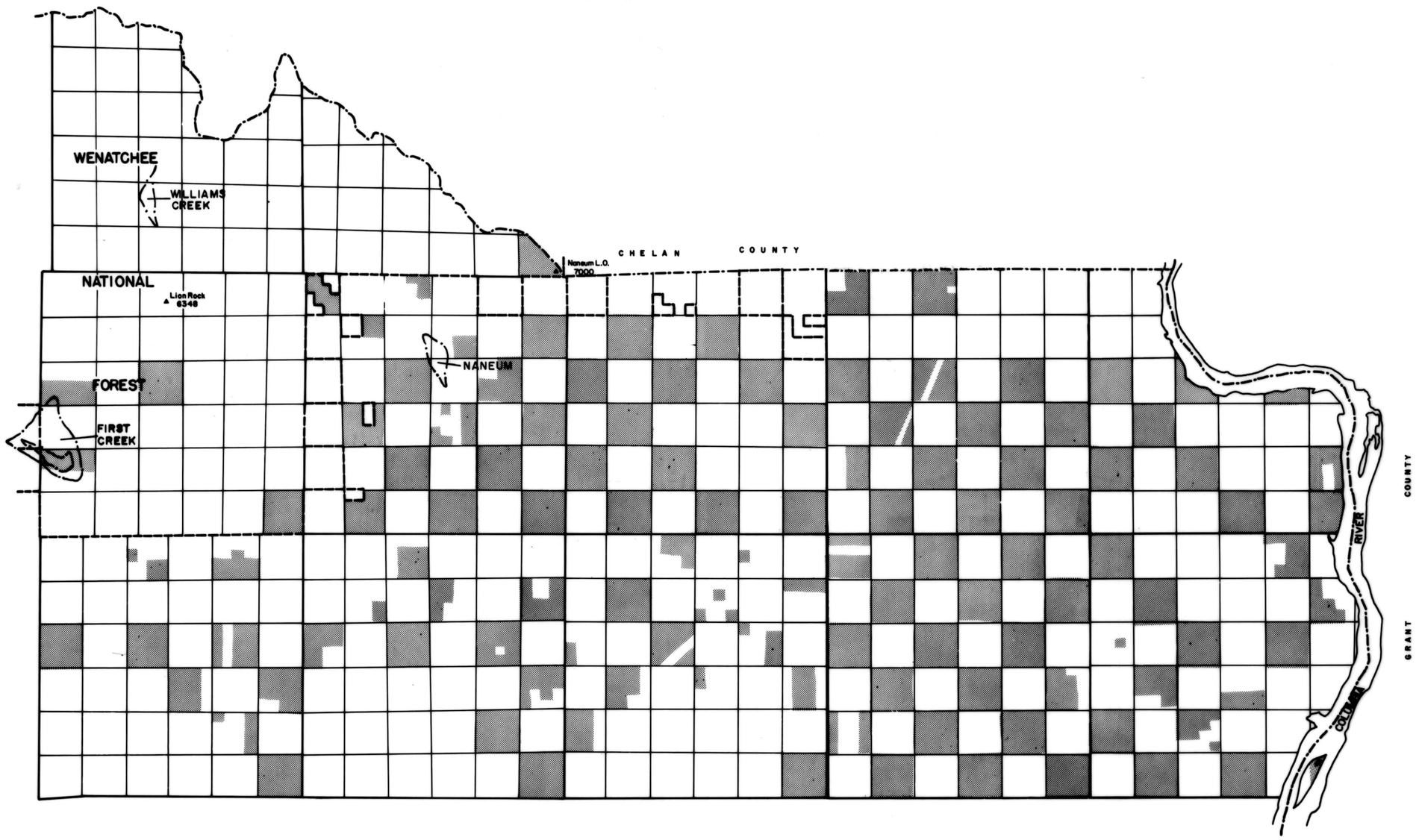



See sheet 4 for legend

SHEET INDEX

N

(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, February, 1978.*

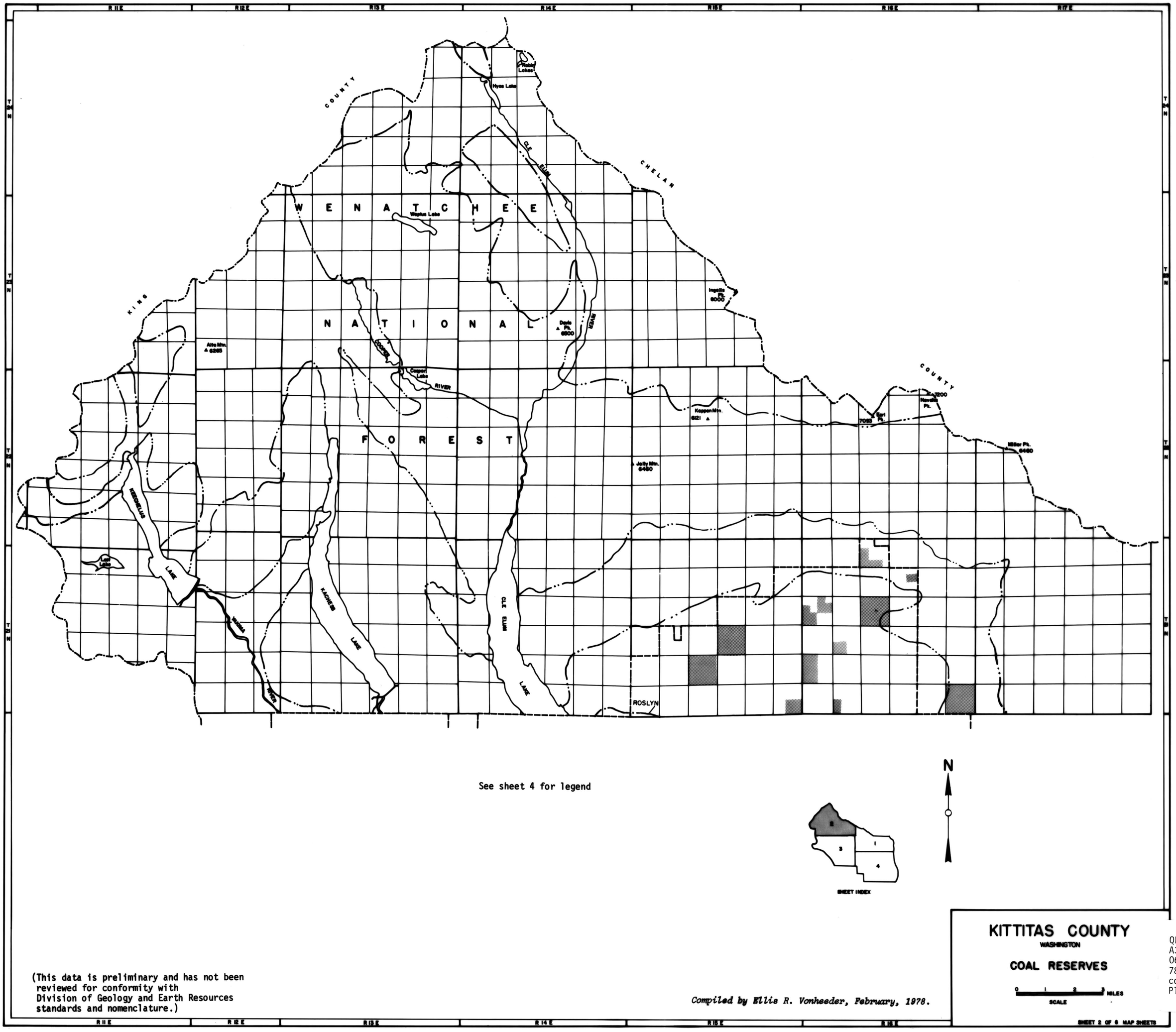
# KITTITAS COUNTY
WASHINGTON

## COAL RESERVES

0 1 2 3 MILES
SCALE

SHEET 1 OF 6 MAP SHEETS

QE175
A3
06
78-1
copy 3
Plate 1




See sheet 4 for legend

(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, February, 1978.*

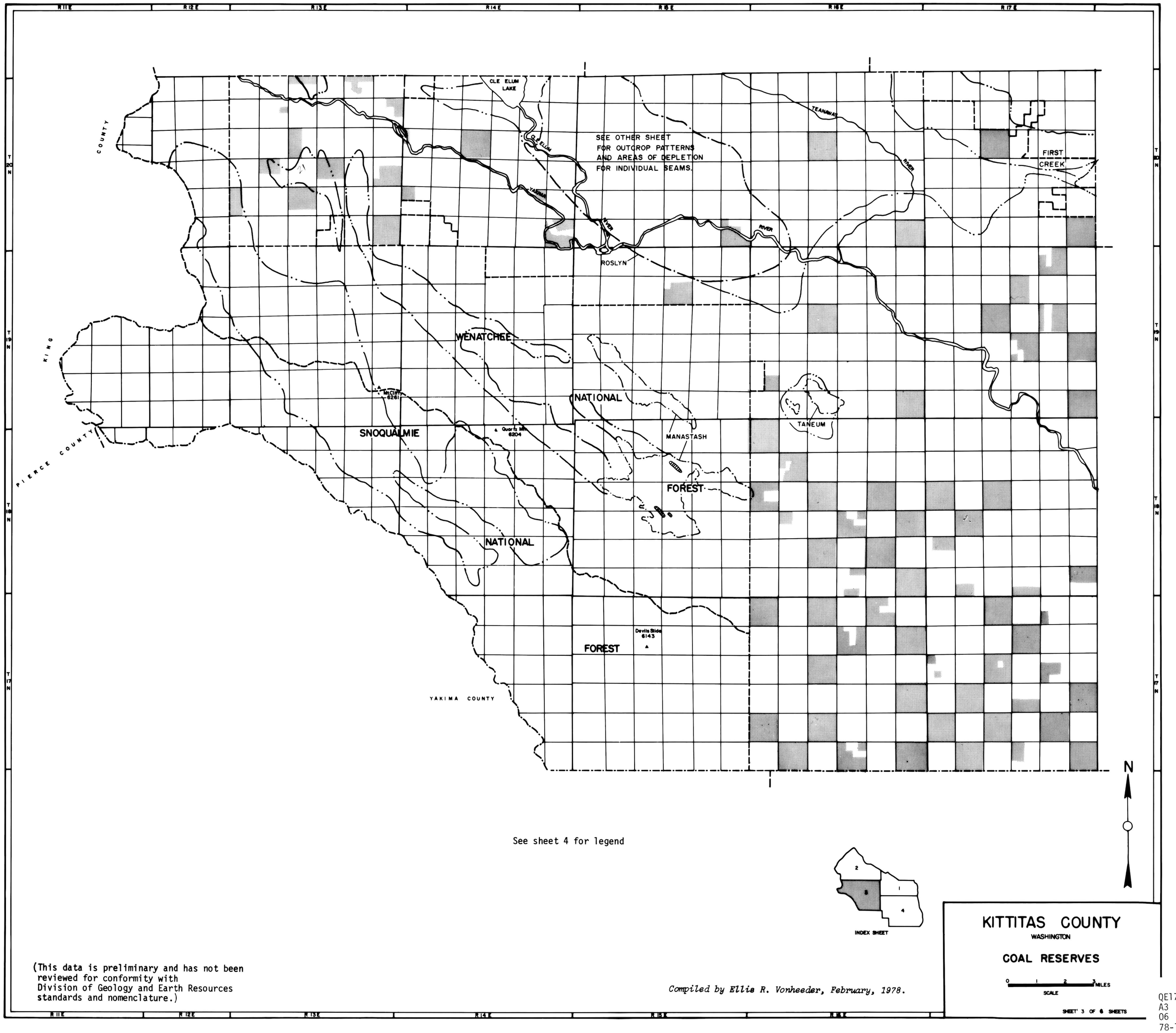
# KITTITAS COUNTY
WASHINGTON

## COAL RESERVES

0 1 2 3 MILES
SCALE

SHEET 2 OF 6 MAP SHEETS

QE175
A3
O6
78-1
copy 3
Plate 2




See sheet 4 for legend

# KITTITAS COUNTY
WASHINGTON

## COAL RESERVES

0 1 2 3 MILES
SCALE

SHEET 3 OF 6 SHEETS

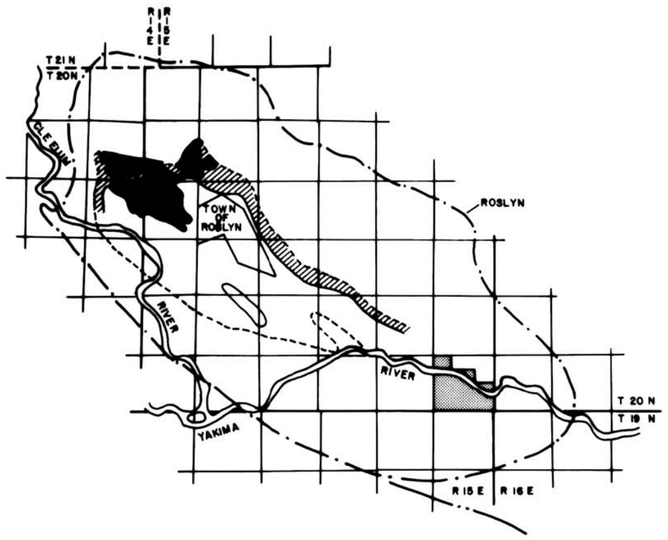
(This data is preliminary and has not been reviewed for conformity with Division of Geology and Earth Resources standards and nomenclature.)

*Compiled by Ellis R. Vonheeder, February, 1978.*

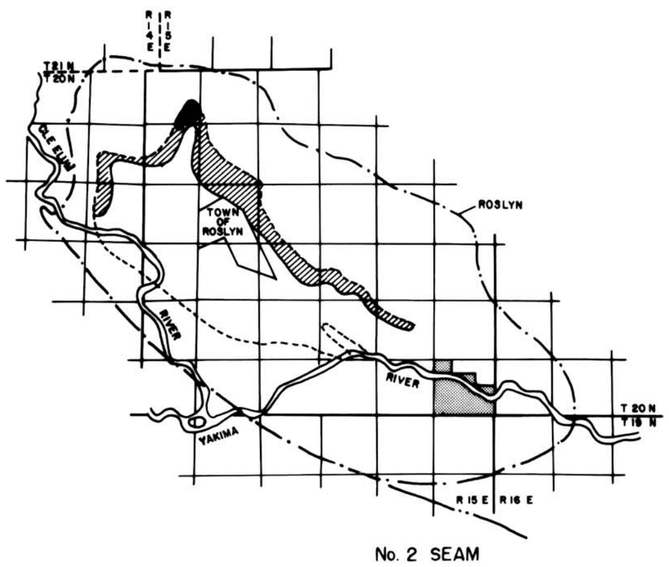
QE175
A3
O6
78-1
copy 3
Plate 3

**Roslyn Coal Field**
Showing Potentially Strippable Coal
(0-200' Overburden) Mined-Out Areas and Outcrop Limits
For Individual Seams

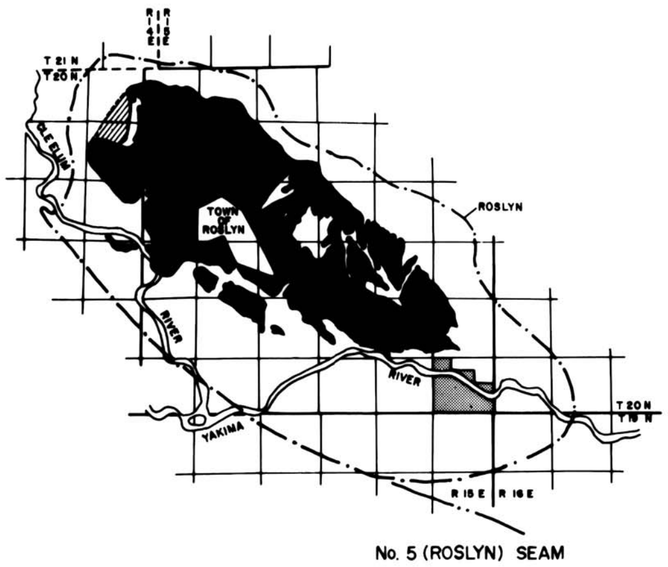
(This data is preliminary and has not been reviewed for conformity with Division of Geology and Earth Resources standards and nomenclature).




No. 1 (BIG) SEAM




No. 2 SEAM




No. 5 (ROSLYN) SEAM

EXPLANATION

Department of Natural Resources administered land

Approximate limit of coal bearing rocks (Queried where doubtful)

Areas of established coal reserves (showing name of field)

ROSLYN

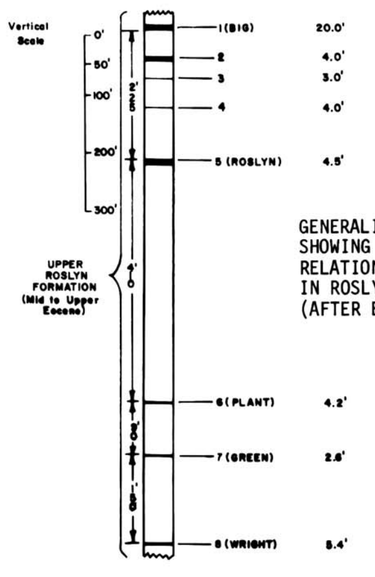
Line of projected outcrop

Areas of strippable coal. (0-200 feet of overburden)

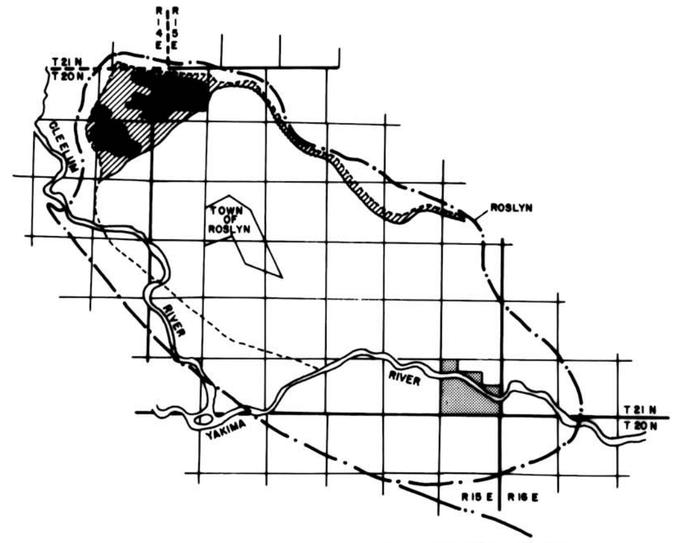
Mined-out areas

National Forest Boundary

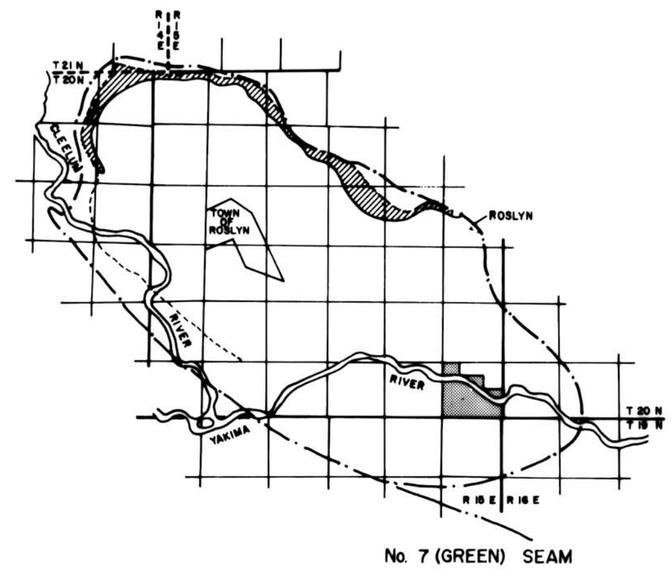
N



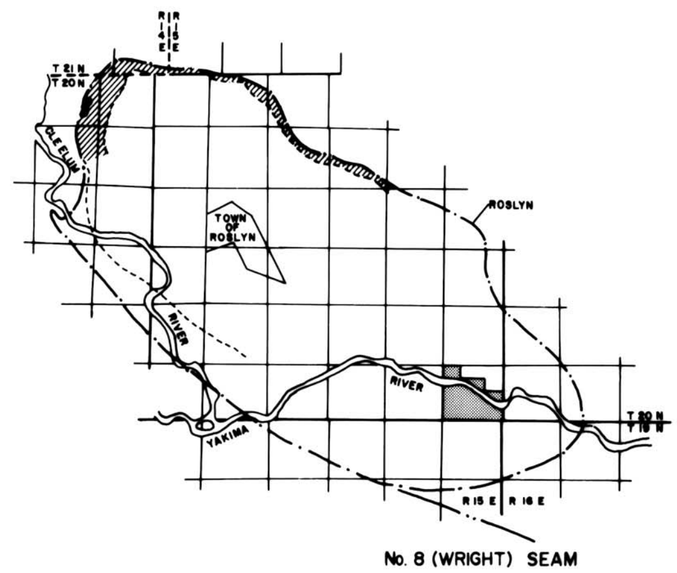

GENERALIZED SECTION SHOWING STRATIGRAPHIC RELATIONSHIP OF BEDS IN ROSLYN COAL FIELD (AFTER BEIKMAN, 1961)




No. 6 (PLANT) SEAM




No. 7 (GREEN) SEAM




No. 8 (WRIGHT) SEAM

*Compiled by Ellis R. Vonheeder, February, 1978*

**KITTITAS COUNTY**
**WASHINGTON**
**COAL RESERVES**
SHEET 4 OF 8 SHEETS

QE175
A3
O6
78-1
copy 3
Plate 4

## SELECTED ANALYSES OF COAL SAMPLES, KITTITAS COUNTY, WASHINGTON

(As-received Basis)

(M—moisture; VM—volatile matter; FC—fixed carbon; Btu—British thermal units per pound)

| Location | | | | | Proximate (percent) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T. | R. | Sec. | Sample | Coal seam | M | VM | FC | Ash | Sulfur (percent) | Btu | Source of analysis | Remarks | Number of analyses used to obtain average |
| | | | | | | Roslyn Field | | | | | | | |
| 20 N. | 15 E. | SE¼SW¼ 17 | Drill-hole sample | Big Dirty (No. 1) | 4.4 | 30.9 | 30.1 | 24.2 | 0.4 | 10,090 | 5 | Upper and lower bench | 2 |
| 20 N. | 15 E. | SE¼SE¼ 18 | Drill-hole sample | Big Dirty (No. 1) | 8.9 | 29.2 | 33.5 | 28.4 | 0.3 | 9,790 | 5 | | 1 |
| | Sample locations vary | | Prospects | Big Dirty (No. 1) | 3.6 | 35.8 | 45.9 | 14.6 | 0.3 | 12,097 | 1 | | 6 |
| 20 N. | 15 E. | NW¼SW¼ 7<br>SE¼SE¼ 17<br>SE¼SE¼ 18 | Drill-hole samples | No. 2 | 5.2 | 31.2 | 40.5 | 23.2 | 0.5 | 10,380 | 5 | | 3 |
| | Sample locations vary | | Mines and prospects | No. 3 | 3.7 | 34.0 | 48.8 | 13.4 | 0.5 | 12,250 | 1 | | 6 |
| | Sample locations vary | | | Roslyn (No. 5) | 4.5 | 36.5 | 47.0 | 12.0 | 0.4 | 12,078 | 1 | | 88 |
| 20 N. | 15 E. | SE¼SW¼ 17 | Drill-hole sample | Plant (No. 6) | 3.8 | 35.7 | 43.2 | 17.4 | 0.4 | 11,755 | 5 | Upper and lower bench | 2 |
| | Sample locations vary | | Drill-hole sample | Plant (No. 6) | 4.2 | 34.1 | 46.1 | 15.6 | 0.3 | 11,960 | 1 | | 6 |
| 20 N. | 15 E. | SE¼SW¼ 17<br>SE¼SW¼ 23<br>NE¼NE¼ 21 | Drill-hole samples | Green (No. 7) | 4.7 | 33.6 | 37.5 | 24.2 | 0.3 | 10,500 | 5 | | 5 |
| | Sample locations vary | NE¼SE¼ 8<br>SE¼SE¼ 18 | Mines and prospects | Green (No. 7) | 3.8 | 32.8 | 46.6 | 16.7 | 0.3 | 12,035 | 1 | | 2 |
| 20 N. | 15 E. | SE¼NW¼ 17<br>NE¼NE¼ 21<br>SE¼SE¼ 18 | Drill-hole samples | Wright (No. 8) | 4.8 | 32.2 | 41.2 | 21.8 | 0.4 | 10,903 | 5 | | 4 |
| | Sample locations vary | NW¼SW¼ 7 | Prospects | Wright (No. 8) | 4.5 | 31.8 | 47.0 | 17.6 | 0.4 | 11,840 | 1 | | 2 |
| | | | | | | Manastash Field | | | | | | | |
| 18 N. | 15 E. | NE¼NE¼ 22 | No. 7 tunnel | Unnamed | 10.4 | 30.3 | 36.4 | 22.8 | 1.1 | 8,978 | 4 | Bituminous | 1 |
| 18 N. | 15 E. | NE¼NE¼ 22 | No. 9c tunnel | Unnamed | 7.5 | 37.5 | 47.9 | 7.2 | 0.6 | 12,062 | 4 | Bituminous | 1 |
| 18 N. | 15 E. | NE¼NE¼ 16 | No. 10d tunnel | Unnamed | 5.1 | 31.9 | 40.4 | 22.6 | 1.1 | 10,350 | 3 | Bituminous | 1 |
| | | | | | | Taneum Field | | | | | | | |
| 19 N. | 16 E. | NW¼NE¼ 33 | Wilson mine | Unnamed | 7.7 | 39.6 | 36.51 | 16.2 | 0.4 | 9,985 | 3 | Bituminous | 1 |
| 19 N. | 16 E. | NW¼NE¼ 33 | Wilson mine | Unnamed | 6.2 | 44.8 | 44.6 | 4.3 | | 12,220 | 2 | Bituminous | 1 |

## SOURCES OF COAL ANALYSES AND SELECTED REFERENCES

### KITTITAS COUNTY, WASHINGTON

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

[2] Cooper, H.M.; Abernethy, R.F., 1941, Analyses of mine samples. In Analyses of Washington coals; Supplement to Technical Paper 491: U.S. Bureau of Mines Technical Paper 618, 81 p.

Foster, R.J., 1960, Tertiary geology of a portion of the central Cascade Mountains, Washington: Geological Society of America Bulletin, v. 71, N. 2, p. 99-126.

[3] 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, 204 p.

Geer, M.R.; Daniels, Joseph,; Yancey, H.F.; Abernethy, R.F.; Aresco, S.J.; Hartner, F.E., 1958, Analyses of Washington coals; Supplement to Technical Papers 491 and 618: U.S. Bureau of Mines Bulletin 572, 92 p.

[4] Saunders, E.J., 1914, The coal fields of Kittitas County, Washington: Washington Geological Survey Bulletin 9, 204 p.

[5] Tuck, Ralph; Boyd, G. A., 1966, 1966 drilling program, Roslyn-Cle Elum coalfield, Kittitas County, Washington, consultant report, 3 vol., 10 pl., 42 p.

Yancey, H.F.; Daniels, Joseph; McMillan, E.R.; Geer, M.R., 1943, Byproduct coke-oven tests of Washington coals: U.S. Bureau of Mines Report of Investigations 3717, 46 p.

(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, February, 1978.*

# KITTITAS COUNTY
WASHINGTON

## COAL RESERVES

QE175
A3
06
78-1
copy 3
Plate 5

POTENTIALLY STRIPPABLE COAL RESERVES
KITTITAS COUNTY, WASHINGTON

Overburden thickness 200 feet or less

| | | | Reserves, in millions of short tons, in beds of thickness shown | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Measured and indicated | | | | Inferred | | | | All Categories | | | |
| Township | Range | Coal Seam | 2.5 to 5.0 feet | 5.0 to 10.0 feet | 10.0 or more feet | Total | 2.5 to 5.0 feet | 5.0 to 10.0 feet | 10.0 or more feet | Total | 2.5 to 5.0 feet | 5.0 to 10.0 feet | 10.0 or more feet | Total |
| | | | | | | ROSLYN FIELD | | | | | | | | |
| 21N | 15E | #8(Wright) | .11 | ------ | ------ | .11 | ------ | ------ | ------ | ------ | .11 | ------ | ------ | .11 |
| | Township Total | | .11 | ------ | ------ | .11 | ------ | ------ | ------ | ------ | .11 | ------ | ------ | .11 |
| 21N | 14E | #5(Roslyn) | 2.76 | ------ | ------ | 2.76 | ------ | ------ | ------ | ------ | 2.76 | ------ | ------ | 2.76 |
| | | #6(Plant) | .11 | ------ | ------ | .11 | ------ | ------ | ------ | ------ | .11 | ------ | ------ | .11 |
| | | #7(Green) | .25 | ------ | ------ | .25 | ------ | ------ | ------ | ------ | .25 | ------ | ------ | .25 |
| | | #8 | .70 | ------ | ------ | .70 | ------ | ------ | ------ | ------ | .70 | ------ | ------ | .70 |
| | Township Total | | 3.92 | | | 3.92 | | | | | 3.92 | | | 3.92 |
| 20N | 15E | #1(Big) | 1.44 | 4.41 | 6.40 | 12.25 | ------ | ------ | ------ | ------ | 1.44 | 4.41 | 6.40 | 12.25 |
| | | #2 | 5.58 | ------ | ------ | 5.58 | ------ | ------ | ------ | ------ | 5.58 | ------ | ------ | 5.58 |
| | | #6 | 1.75 | 4.56 | ------ | 6.31 | ------ | ------ | ------ | ------ | 1.75 | 4.56 | ------ | 6.31 |
| | | #7 | 3.14 | ------ | ------ | 3.14 | ------ | ------ | ------ | ------ | 3.14 | ------ | ------ | 3.14 |
| | | #8 | .80 | ------ | ------ | .80 | ------ | ------ | ------ | ------ | .80 | ------ | ------ | .80 |
| | Township Total | | 12.71 | 8.97 | 6.40 | 18.08 | ------ | ------ | ------ | ------ | 12.71 | 8.97 | 6.40 | 28.08 |
| 20N | 14E | #1 | .43 | ------ | 1.20 | 1.63 | ------ | ------ | ------ | ------ | .43 | ------ | 1.20 | 1.63 |
| | | #2 | .69 | ------ | ------ | .69 | ------ | ------ | ------ | ------ | .69 | ------ | ------ | .69 |
| | | #6 | 3.29 | ------ | ------ | 3.29 | ------ | ------ | ------ | ------ | 3.29 | ------ | ------ | 3.29 |
| | | #7 | 1.07 | ------ | ------ | 1.07 | ------ | ------ | ------ | ------ | 1.07 | ------ | ------ | 1.07 |
| | | #8 | 1.48 | ------ | ------ | 1.48 | ------ | ------ | ------ | ------ | 1.48 | ------ | ------ | 1.48 |
| | Township Total | | 6.96 | | 1.20 | 8.16 | | | | | 6.96 | | 1.20 | 8.16 |
| | Total, Roslyn Field | | 23.70 | 8.97 | 7.60 | 40.27 | | | | | 23.70 | 8.97 | 7.60 | 40.27 |
| | | | | | | Manastash Field | | | | | | | | |
| 18N | 15E | Unnamed | | 1.18 | | 1.18 | | | | | | 1.18 | | 1.18 |
| | Total, Manastash Field | | | 1.18 | | 1.18 | | | | | | 1.18 | | 1.18 |
| | | | | | | Taneum Field | | | | | | | | |
| 19N | 16E | Unnamed | | .03 | | .03 | | | | | | .03 | | .03 |
| | Total, Taneum Field | | | .03 | | .03 | | | | | | .03 | | .03 |
| | GRAND TOTAL, ALL TOWNSHIPS | | 23.70 | 10.18 | 7.60 | 41.48 | | | | | 23.70 | 10.18 | 7.60 | 41.48 |

## METHODS OF ESTIMATING RESERVES

Classification and estimation of coal reserves in this report conforms to those standards used by both U.S. Bureau of Mines and U.S. Geological Survey in similar calculations. Tonnage estimates of coal are those given by Beikman (1961) on a township basis. Data from Tuck and Boyd (1966) were used to calculate potentially strippable coal.

In calculation of potentially strippable reserves for a given parcel of land, the coal seam was treated as a three-dimensional tabular body which covered a specific acreage. The area of coverage was estimated by enlarging a 640 acre section to 1:24,000 scale and placing a 100-grid transparency over the enlargement. Areas of the seam between outcrop line and 200' overburden depth covered by each 6.4 acre grid (or fraction thereof) were totaled and the average thickness of the seam in the section noted. In the case of a gently dipping seam, area X thickness X weight of coal per acre-foot = tonnage. In the case of seams that dip over 18°, the estimated area was multiplied by the scant of the average dip angle to reflect true area.

1800 tons per acre-foot has been accepted for calculations involving Kittitas County bituminous coal.

Example

A 7.3' seam of bituminous coal dipping 25° and covering 43 acres represents approximately 621,520 tons of coal in place. (7.3' seam thickness X 43 acres X 1.10 X 1800 tons per acre-foot).

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

## COAL RESERVES, KITTITAS COUNTY, WASHINGTON

| | | Reserves, in millions of short tons, in beds of thickness shown | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Measured and indicated | | | | Inferred | | | | All categories | | | |
| Coal bed | Overburden (in feet) | 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 |
| | | | | | T. 21 N., R. 14 E. | | | | | | | | |
| Plant (No. 6) | 0-1,000 | ------ | 0.21 | ------ | 0.21 | ------ | ------ | ------ | ------ | ------ | 0.21 | ------ | 0.21 |
| Green (No. 7) | 0-1,000 | ------ | ------ | ------ | ------ | 0.20 | ------ | ------ | 0.20 | 0.20 | ------ | ------ | 0.20 |
| Wright (No. 8) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | 0.58 | ------ | 0.58 | ------ | 0.58 | ------ | 0.58 |
| Township total | | ------ | 0.21 | ------ | 0.21 | 0.20 | 0.58 | ------ | 0.78 | 0.20 | 0.79 | ------ | 0.99 |
| | | | | | T. 20 N., R. 16 E. | | | | | | | | |
| Roslyn (No. 5) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | ------ | 1.05 | 1.05 | ------ | ------ | 1.05 | 1.05 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | ------ | .12 | .12 | ------ | ------ | .12 | .12 |
| Bed total | | ------ | ------ | ------ | ------ | ------ | ------ | 1.17 | 1.17 | ------ | ------ | 1.17 | 1.17 |
| Plant (No. 6) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | 0.05 | ------ | 0.05 | ------ | 0.05 | ------ | 0.05 |
| Township total | | ------ | ------ | ------ | ------ | ------ | 0.05 | 1.17 | 1.22 | ------ | 0.05 | 1.17 | 1.22 |
| | | | | | T. 20 N., R. 15 E. | | | | | | | | |
| Big Dirty (No. 1) | 0-1,000 | ------ | ------ | 38.87 | 38.87 | ------ | ------ | 12.15 | 12.15 | ------ | ------ | 51.02 | 51.02 |
| | 1,000-2,000 | ------ | ------ | 1.10 | 1.10 | ------ | ------ | 4.81 | 4.81 | ------ | ------ | 5.91 | 5.91 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | 5.62 | 5.62 | ------ | ------ | 5.62 | 5.62 |
| Bed total | | ------ | ------ | 39.97 | 39.97 | ------ | ------ | 22.58 | 22.58 | ------ | ------ | 62.55 | 62.55 |
| Roslyn (No. 5) | 0-1,000 | ------ | ------ | 8.43 | 8.43 | ------ | ------ | 1.78 | 1.78 | ------ | ------ | 10.21 | 10.21 |
| | 1,000-2,000 | ------ | ------ | 13.38 | 13.38 | ------ | ------ | 6.44 | 6.44 | ------ | ------ | 19.82 | 19.82 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | 5.18 | 5.18 | ------ | ------ | 5.18 | 5.18 |
| Bed total | | ------ | ------ | 21.81 | 21.81 | ------ | ------ | 13.40 | 13.40 | ------ | ------ | 35.21 | 35.21 |
| Plant (No. 6) | 0-1,000 | ------ | 3.82 | ------ | 3.82 | ------ | 39.97 | ------ | 39.97 | ------ | 43.79 | ------ | 43.79 |
| | 1,000-2,000 | ------ | .01 | ------ | .01 | ------ | 25.79 | ------ | 25.79 | ------ | 25.80 | ------ | 25.80 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | 6.44 | ------ | 6.44 | ------ | 6.44 | ------ | 6.44 |
| Bed total | | ------ | 3.83 | ------ | 3.83 | ------ | 72.20 | ------ | 72.20 | ------ | 76.03 | ------ | 76.03 |
| Green (No. 7) | 0-1,000 | ------ | ------ | ------ | ------ | 1.25 | ------ | ------ | 1.25 | 1.25 | ------ | ------ | 1.25 |
| Wright (No. 8) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | 1.75 | ------ | 1.75 | ------ | 1.75 | ------ | 1.75 |
| Township total | | ------ | 3.83 | 61.78 | 65.61 | 1.25 | 73.95 | 35.98 | 111.18 | 1.25 | 77.78 | 97.76 | 176.79 |
| | | | | | T. 20 N., R. 14 E. | | | | | | | | |
| Big Dirty (No. 1) | 0-1,000 | ------ | ------ | 3.42 | 3.42 | ------ | ------ | 0.57 | 0.57 | ------ | ------ | 3.99 | 3.99 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | ------ | 3.27 | 3.27 | ------ | ------ | 3.27 | 3.27 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | 1.63 | 1.63 | ------ | ------ | 1.63 | 1.63 |
| Bed total | | ------ | ------ | 3.42 | 3.42 | ------ | ------ | 5.47 | 5.47 | ------ | ------ | 8.89 | 8.89 |
| Roslyn (No. 5) | 0-1,000 | ------ | ------ | 3.07 | 3.07 | ------ | ------ | 1.76 | 1.76 | ------ | ------ | 4.83 | 4.83 |
| | 1,000-2,000 | ------ | ------ | .09 | .09 | ------ | ------ | 1.86 | 1.86 | ------ | ------ | 1.95 | 1.95 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | 2.49 | 2.49 | ------ | ------ | 2.49 | 2.49 |
| Bed total | | ------ | ------ | 3.16 | 3.16 | ------ | ------ | 6.11 | 6.11 | ------ | ------ | 9.27 | 9.27 |
| Plant (No. 6) | 0-1,000 | ------ | 4.72 | ------ | 4.72 | ------ | 2.21 | ------ | 2.21 | ------ | 6.93 | ------ | 6.93 |
| | 1,000-2,000 | ------ | .43 | ------ | .43 | ------ | 4.91 | ------ | 4.91 | ------ | 5.34 | ------ | 5.34 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | 2.30 | ------ | 2.30 | ------ | 2.30 | ------ | 2.30 |
| Bed total | | ------ | 5.15 | ------ | 5.15 | ------ | 9.42 | ------ | 9.42 | ------ | 14.57 | ------ | 14.57 |
| Green (No. 7) | 0-1,000 | 0.88 | ------ | ------ | 0.88 | 3.82 | ------ | ------ | 3.82 | 4.70 | ------ | ------ | 4.70 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | .92 | ------ | ------ | .92 | .92 | ------ | ------ | .92 |
| Bed total | | 0.88 | ------ | ------ | 0.88 | 4.74 | ------ | ------ | 4.74 | 5.62 | ------ | ------ | 5.62 |
| Wright (No. 8) | 0-1,000 | ------ | 1.85 | ------ | 1.85 | ------ | 5.65 | ------ | 5.65 | ------ | 7.50 | ------ | 7.50 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | 2.85 | ------ | 2.85 | ------ | 2.85 | ------ | 2.85 |
| Bed total | | ------ | 1.85 | ------ | 1.85 | ------ | 8.50 | ------ | 8.50 | ------ | 10.35 | ------ | 10.35 |
| Township total | | 0.88 | 7.00 | 6.58 | 14.46 | 4.74 | 17.92 | 11.58 | 34.24 | 5.62 | 24.92 | 18.16 | 48.70 |
| | | | | | T. 19 N., R. 16 E. | | | | | | | | |
| Roslyn (No. 5) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | ------ | 0.15 | 0.15 | ------ | ------ | 0.15 | 0.15 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | ------ | .28 | .28 | ------ | ------ | .28 | .28 |
| Bed total | | ------ | ------ | ------ | ------ | ------ | ------ | 0.43 | 0.43 | ------ | ------ | 0.43 | 0.43 |
| Unnamed | 0-1,000 | ------ | ------ | ------ | ------ | 1.10 | ------ | ------ | 1.10 | 1.10 | ------ | ------ | 1.10 |
| Township total | | ------ | ------ | ------ | ------ | 1.10 | ------ | 0.43 | 1.53 | 1.10 | ------ | 0.43 | 1.53 |
| | | | | | T. 19 N., R. 15 E. | | | | | | | | |
| Big Dirty (No. 1) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | ------ | 0.97 | 0.97 | ------ | ------ | 0.97 | 0.97 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | ------ | .97 | .97 | ------ | ------ | .97 | .97 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | .97 | .97 | ------ | ------ | .97 | .97 |
| Bed total | | ------ | ------ | ------ | ------ | ------ | ------ | 2.91 | 2.91 | ------ | ------ | 2.91 | 2.91 |
| Roslyn (No. 5) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | ------ | 1.58 | 1.58 | ------ | ------ | 1.58 | 1.58 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | ------ | 5.51 | 5.51 | ------ | ------ | 5.51 | 5.51 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | ------ | .95 | .95 | ------ | ------ | .95 | .95 |
| Bed total | | ------ | ------ | ------ | ------ | ------ | ------ | 8.04 | 8.04 | ------ | ------ | 8.04 | 8.04 |
| Plant (No. 6) | 0-1,000 | ------ | ------ | ------ | ------ | ------ | 0.75 | ------ | 0.75 | ------ | 0.75 | ------ | 0.75 |
| | 1,000-2,000 | ------ | ------ | ------ | ------ | ------ | .75 | ------ | .75 | ------ | .75 | ------ | .75 |
| | 2,000-3,000 | ------ | ------ | ------ | ------ | ------ | .75 | ------ | .75 | ------ | .75 | ------ | .75 |
| Bed total | | ------ | ------ | ------ | ------ | ------ | 2.25 | ------ | 2.25 | ------ | 2.25 | ------ | 2.25 |
| Township total | | ------ | ------ | ------ | ------ | ------ | 2.25 | 10.95 | 13.20 | ------ | 2.25 | 10.95 | 13.20 |
| | | | | | T. 18 N., R. 15 E. | | | | | | | | |
| Unnamed | 0-1,000 | 10.81 | ------ | ------ | 10.81 | 28.56 | ------ | ------ | 28.56 | 39.37 | ------ | ------ | 39.37 |
| Grand total | | 11.69 | 11.04 | 68.36 | 91.09 | 35.85 | 94.75 | 60.11 | 190.71 | 47.54 | 105.79 | 128.47 | 1/281.80 |

(after Beikman, 1961)

*Compiled by Ellis R. Vonheeder, February, 1978*

KITTITAS COUNTY
WASHINGTON

COAL RESERVES

SHEET 6 OF 6 SHEETS

QE175
A3
06
78-1
copy 3
Plate 6