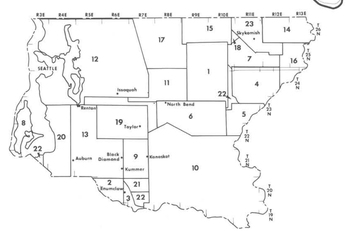
GEOLOGIC MAP OF KING COUNTY WASHINGTON

COMPILED BY
VAUGHN E. LIVINGSTON JR.
1970

0 1 2 3 4 5 6 12 MILES

INDEX MAP OF KING COUNTY
Showing Sources of Geologic Data



Sources of data used in compiling geologic map of King County.
(Numbers correspond to those shown on index map. Complete references are given in bibliography.)

1. Bethel, 1951
2. Crandell, 1963
3. Crandell and Waldron, 1956
4. Ellis, 1939
5. Foster, 1960
6. Fuller, 1925
7. Galster, 1956
8. Gosling, Molenaar, and others, 1965
9. Gower and Wanek, 1963
10. Hammond, 1963
11. Kremer, 1959
12. Liesch, Price, and Walters, 1963
13. Mullineaux, 1965, a, b, c
14. Otes, 1956
15. Plummer, 1964
16. Pratt, 1958
17. Richardson, Bingham, and Madison, 1968
18. Stockwell, 1961
19. Vine, 1962a
20. Waldron, 1961 and 1962
21. Warren and others, 1945
22. Washington Div. of Mines and Geol. files
23. Yeats, 1958

EXPLANATION

MAP SYMBOLS

Contact
Known, approximate and inferred or undifferentiated.

Scratch boundary
Contact uncertain or edge of mapped area.

Fault
Character not designated; dashed where approximate.

Thrust fault
Serrations on upper plate.

CENOZOIC

QUATERNARY

RECENT

Alluvium (Qa)
Mostly unconsolidated silt, sand, and gravel valley fill with some clay. Includes artificial fill and peat locally.

Landslide deposits (Qls)
Deformed deposits and debris of mass flowage and block slides.

Osceola Mudflow (Qm)
Unsorted till-like mixture of granule – to – cobble – sized rock fragments in clay, silt, and sand matrix.

Peat (Qp)
Chiefly decomposed vegetal matter. Some bogs contain thin clay, diatomite, and pumice beds.

Vashon till (Qt)
Hard, blue-gray to gray concrete-like mixture of clay, silt, sand, and gravel.

Vashon outwash (Qo)
Advance and recessional outwash, stratified drift and associated deposits. Made up primarily of silt, sand, and gravel with some clay.

Glacial and alluvium deposits undifferentiated (Qu)
Unconsolidated alluvial silt, sand, and gravel; stratified outwash gravel, sand, silt, and clay; till composed of unsorted clay, sand, cobbles, and boulders.

Pre-Vashon deposits undifferentiated (Q)
Till, outwash, and associated interglacial deposits; sorted and unsorted gravel, sand, silt, and clay.

PLEISTOCENE

MIOCENE

Miocene continental sedimentary rocks (M)
Clayey sands and quartzose sands with some conglomerate in the Green River area. Includes volcanic ash beds and woody lignite, in the southeastern part of the county the deposits are conglomerate sandstone with an associated andesite flow.

Snoqualmie Granodiorite (Tg)
Principal rock type is granodiorite but locally includes granite and quartz diorite.

OLIGOCENE

Oligocene sedimentary rocks (R)
Well cemented dark gray marine siltstone and light gray mudstone with some graywacke sandstone and conglomerate beds.

Tertiary volcanic rocks (Tv)
Mostly andesite breccia, and andesite flows. Basalt, rhyolite, and tuffs also present.

Tertiary intrusives (Ti)
Includes dikes, plugs, stocks, and sills of rhyolite, lamprophyre, andesite, andesite porphyry, and granitoid rocks.

TERTIARY

EOCENE

Renton Formation (Tr)
Nonmarine arkosic sandstone, quartzose sandstone, siltstone, mudstone, and shale. Macerated wood fragments are abundant. Contains many coal beds in the Renton-Newcastle area.

Tukwila Formation (Tt)
Andesitic volcanic sandstone, tuffaceous siltstone, tuff breccia, volcanic conglomerate, and locally interbedded lava flows.

Puget Group (Tp)
Arkosic and feldspathic micaceous sandstone, siltstone, claystone, shale, and conglomerate. Contains the coal seams of King County.

Tiger Mountain Formation (Ttm)
Nonmarine arkosic sandstone, carbonaceous siltstone, claystone, and coal.

Eocene sedimentary rocks (E)
Nonmarine sandstone with interbedded basalt, shale, sandstone, and conglomerate.

Raging River Formation (Tr)
Epiclastic volcanic sandstone and siltstone, locally conglomeratic. Contains marine fossils locally.

Bedrock undifferentiated. (U)

PALEOCENE

Swauk Formation (Ts)
Nonmarine arkosic sandstone, pebble to cobble conglomerate, and shale.

MESOZOIC

Mesozoic-early Cenozoic sedimentary rocks (MTs)
Graywacke, argillite, and siltstone with some slate and phyllite; includes graywacke breccia and ribbon chert.

Mesozoic-early Cenozoic volcanic rocks (MTs)
Includes andesite and basalt flows with some interbedded sandstone and chert beds.

Pre-Tertiary metamorphic rocks (pT)
Graywacke, argillite, phyllite, and chert.

Mount Stuart Granodiorite (Mg)
Mainly granodiorite but ranges from alaskite to gabbro.

Pre-Jurassic phyllite (pJp)
Phyllite; includes small areas of schist.

Pre-Jurassic schist (pJs)
Schist and amphibolite; includes small areas of phyllite and gneiss.

Pre-Jurassic gneiss (pJg)
Gneiss; includes small areas of schist and amphibolite.

PALEOZOIC

Paleozoic rocks (P)
Quartzite, greenstone, argillite, ribbon chert, hornfels, phyllite, and marble.

NONMETALLIC MINERAL DEPOSITS IN WESTERN KING COUNTY, WASHINGTON

Newcastle - Grand Ridge Coal Field

Renton Coal Field

Cedar Mountain Coal Field

Tiger Mountain Coal Field

Niblock Coal Field

Taylor Coal Field

Green River Coal Fields

Konasket

0 1 2 3 4 5 6 MILES

EXPLANATION

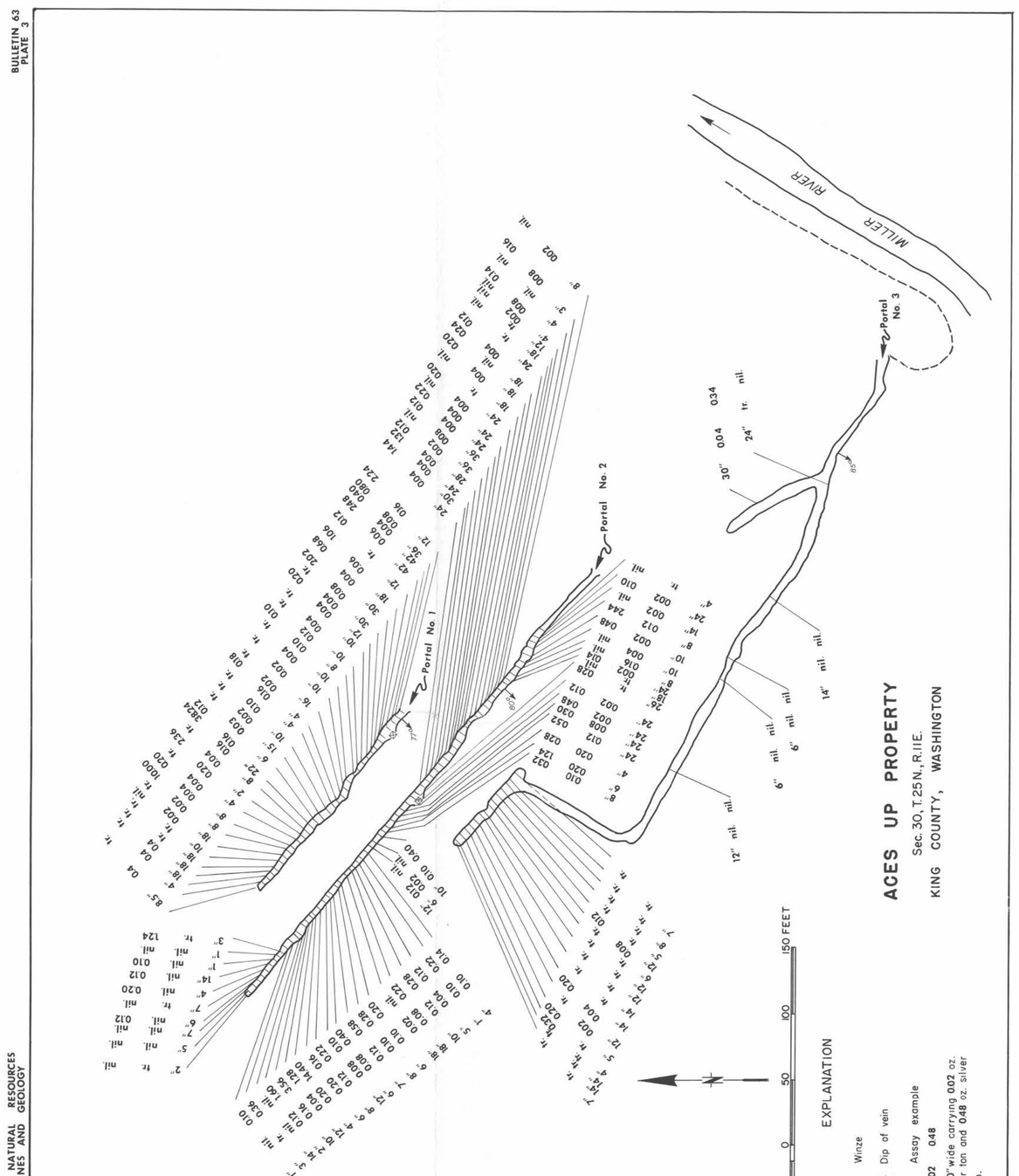
- Mined out coal seams
- Fault
- Coal seam showing dip
- 23 Peat bog
- ■ Producing peat bog in 1969
  - 1 Acme American Peat Moss
  - 2 Arbor Lake Garden Supply
  - 3 Arbor Lake Humus Co.
  - 4 Bow Lake Humus Co.
  - 5 Carlson Peat and Wood
  - 6 Puget Peat Producers
  - 7 Tri Lakes Humus
- ▲w2 Clay deposit and sample No.
- ⊙2 Clay pit producing in 1969
  - 1 Palmer
  - 2 Elk
  - 3 Blum
  - 4 Harris
  - 5 Section 31
  - 6 Newcastle
  - 7 Renton
  - 8 Lone Star
- ● Sand and gravel pits
- ⊙3 Sand & gravel pit producing in 1969
  - 1 Alberg & Associates Inc.
  - 2 Black River Quarry Inc.
  - 3 Cadman Gravel Co.
  - 4 Churchill Sand & Gravel
  - 5 Cottage Lake Gravel Co., Inc.
  - 6 Kirkland Sand & Gravel Inc.
  - 7 Lakeside Gravel Co., Inc.
  - 8 Miles Sand & Gravel Co.
  - 9 Reid Sand & Gravel, Inc.
  - 10 Rock & Sand, Inc.
  - 11 Stergion Concrete Products
  - 12 Stoneway Concrete, Inc.
  - 13 Tougaw & Olson, Inc.
  - 14 Western Sand & Gravel Co.

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINES AND GEOLOGY

ACES UP PROPERTY

Sec. 30, T. 25 N., R. 11 E.

KING COUNTY, WASHINGTON



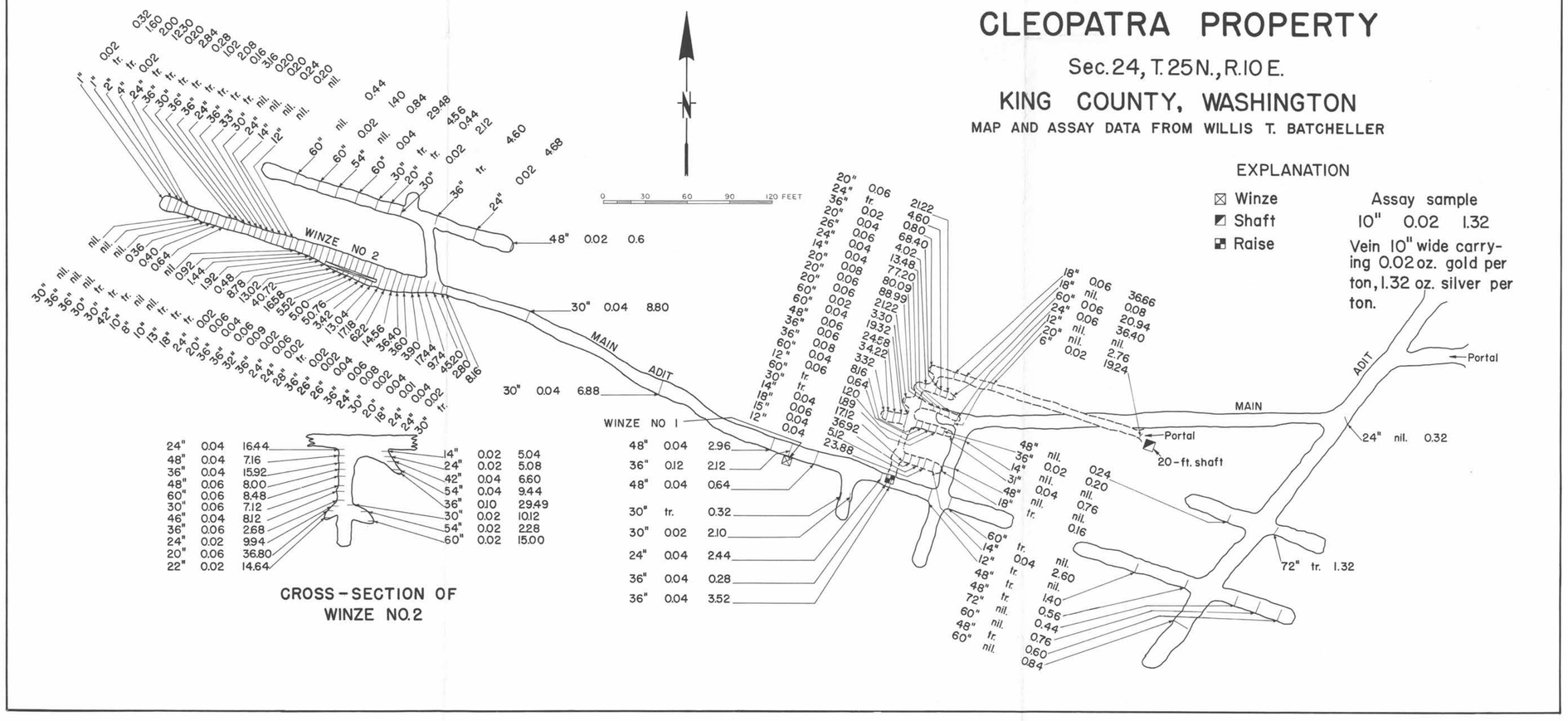
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINES AND GEOLOGY

CLEOPATRA PROPERTY

Sec. 24, T. 25 N., R. 10 E.

KING COUNTY, WASHINGTON

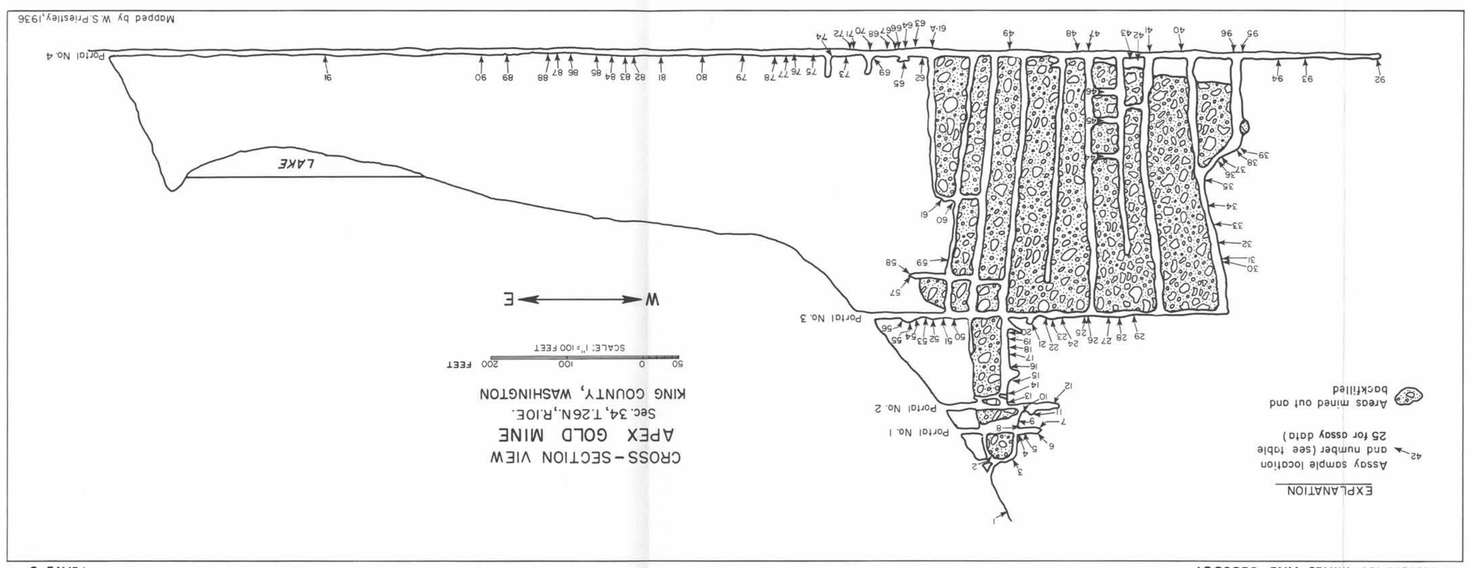
MAP AND ASSAY DATA FROM WILLIS T. BATCHELLER



CROSS-SECTION OF WINZE NO. 2

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINES AND GEOLOGY

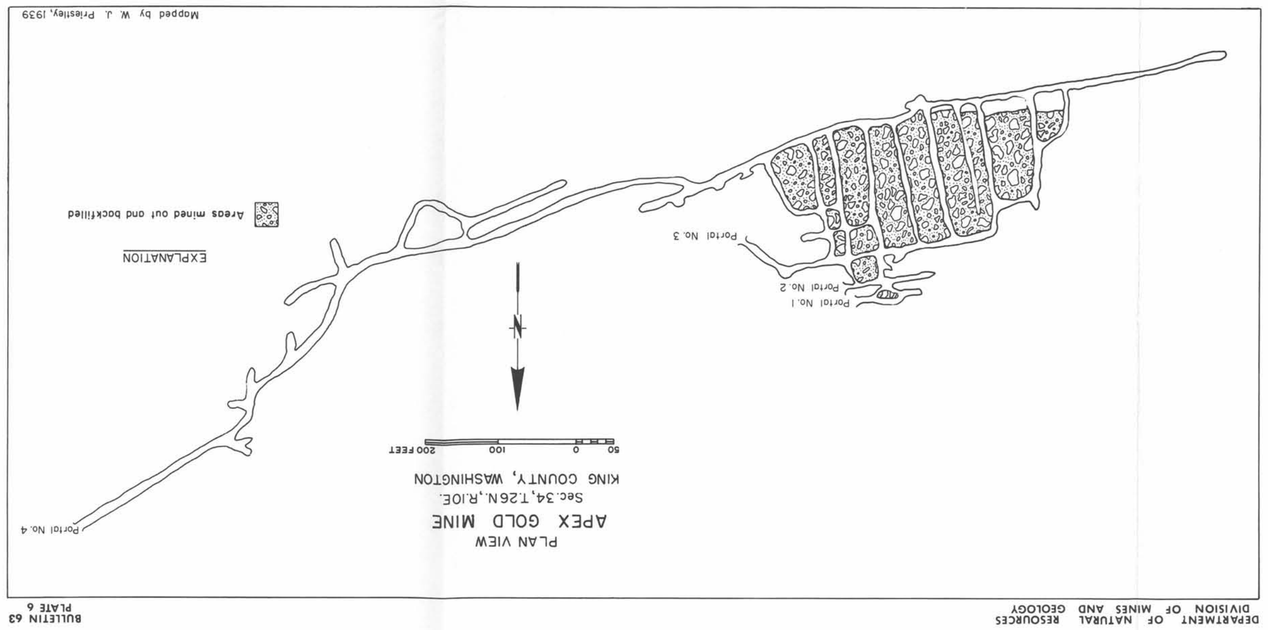
CROSS-SECTION VIEW
APEX GOLD MINE
Sec. 34, T. 26 N., R. 10 E.
KING COUNTY, WASHINGTON



Mapped by W. S. Priestley, 1936

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINES AND GEOLOGY

PLAN VIEW
APEX GOLD MINE
Sec. 34, T. 26 N., R. 10 E.
KING COUNTY, WASHINGTON



Mapped by W. J. Priestley, 1939

TABLE 3.—Generalized description of engineering properties of geologic map units shown on Plate 1

[Modified from Waldron and others, 1962.]

MAP UNIT	DESCRIPTION	SPECIAL FEATURES	DRAINAGE	GROUND WATER	EASE OF EXCAVATION	FOUNDATION STABILITY	SLOPE STABILITY	SEISMIC STABILITY	REPORTED OR POSSIBLE USE
Alluvium Qa	Mostly unconsolidated silt, sand, and gravel. Valley fill with some clay. Includes artificial fill and peat locally.	Includes beach sand and artificial fill. Contains interbedded peat and muck locally.	Runoff variable but generally poor because of low slopes. Infiltration moderate to very slow. Subject to flooding along many rivers and creeks in western lowland part of county.	Water table near surface. Permeability variable.	Generally easy to excavate with hand or power equipment. Can generally be dredged.	Fair; may settle excessively and irregularly because of layers of compressible organic material.	Generally poor because of saturation. May stand in steep cuts for short periods where above water table.	Very poor. Maximum destruction during April 1949 earthquake occurred on alluvium and artificial fill.	Fill, topsoil for lawns and gardens, concrete and asphalt aggregate. Alluvium in Duwamish Valley contains glassy volcanic material, probably reactive in high-alkali concrete.
Landslide Qls	Deformed deposits and debris of mass flowage and block slides.	Includes intimately mixed material from various units, and discrete blocks of various units.	Runoff poor. Slide movement produces depressions that catch and hold water. Infiltration slow in slides of glacial material. Springs commonly associated with slides.	Water table generally close to surface. Permeability generally low.	Generally easy to excavate with hand or power equipment.	Mostly unsuitable. Correction measures needed.	Both natural and cut slopes generally unstable.	Very poor.	
Oceola mudflow Qm	Unsorted till-like mixture of granule-to-cobble-sized rock fragments in clay, silt, and sand matrix.	Unsorted till-like mixture of granule-to-cobble-sized rock fragments in clay, silt, and sand matrix.	Runoff poor because of flat topography and high clay content. Infiltration slow.	Usually saturated, but not a source of ground water because of low permeability. Organic debris and pyrite may affect quality of ground water.	Difficult to excavate with hand or light power equipment. Fairly compact, lacks bedding.	Generally good, no settling expected.	Stands in steep natural and cut slopes. Ravels and spalls with wetting and drying, and freezing and thawing.	Good.	Fill.
Peat Qp	Chiefly decomposed vegetal matter. Some bogs contain thin clay, diatomite, and pumice beds.	Highly mobile; low shear strength. Water content may be as much as 10 times dry weight. Generally is acidic. Includes inorganic clay and silt.	Runoff poor, material usually accumulates in closed depressions. Infiltration moderate when dry, but generally saturated. Seasonal flooding common.	Water table at or near surface. Permeability variable.	Generally easy to excavate with hand or power equipment. Can generally be dredged. May contain large logs.	Very poor; will settle excessively under load. Low bearing capacity.	Not generally found on natural slopes. Cut slopes variable. Peat in upper few feet of deposit will stand in steep cuts; lower peat may run freely when wet.	Very poor.	Source of organic material for top soil beneficiation.
Vashon outwash Qo	Advance and recessional outwash, stratified drift and associated deposits. Made up primarily of silt, sand, and gravel. Some clay is present.	Usually poorly sorted, ungraded, and uncemented. Where unit overlies impermeable material, springs near base cause erosion and sliding of sandy phases.	Runoff poor to fair on natural surfaces; poor where vegetation and soil have been removed. Infiltration moderate on slopes with natural soil and vegetation cover, but fast where these have been removed. Springs common near base.	Presence depends on topography and underlying material. Contains perched ground water in lower part in many areas. High permeability.	May be excavated with hand or light power equipment. May be poorly cemented locally.	Fair to excellent, but may be poor on slopes that approach the angle of repose. Little settling may occur locally.	Generally unstable on slopes steeper than 30° except where silt or clay binder is present. Slope failures usually extend to a depth of only a few feet. May stand in steep cuts for short periods.	Good.	Road metal, concrete and asphalt aggregate, drain field gravel, fill.
Vashon till Qt	Hard, blue-gray to gray concrete-like mixture of clay, silt, sand, and gravel.	Unsorted mixture of clay, sand, and gravel sized material. May contain local lenses of sand and gravel. In some areas till is thin and consists of loose silty sand and gravel, but elsewhere is thick and compact.	Runoff variable. Undrained and poorly drained depressions common. Runoff good on steep slopes. Infiltration very slow.	Height of water table depends on topography. Permeability very low except in contained lenses of sand and gravel.	Very difficult to excavate with hand or light power equipment. Dense, tough, and cohesive. Generally lacks bedding or extensive fracturing.	Excellent. No settling expected.	Stands in steep natural and cut slopes for long periods. May ravel and spall by wetting and drying, and freezing and thawing.	Good.	Fill.
Pre-Vashon deposits undifferentiated Q	Till, outwash, and associated interglacial deposits; sorted and unsorted gravel, sand, silt, and clay.	Much vertical and lateral variation of physical properties. Interbedding of materials having different size range and engineering properties to be expected.	Runoff variable. Infiltration slow. Springs and seeps common.	Generally contains water, much of which is under high hydrostatic head. Permeability low to high, depending on texture.	Variable, but generally difficult to excavate with hand or light power equipment. Compact and cohesive. Locally cemented. Till lacks bedding or fractures.	Fair to excellent, depending on local conditions of slope and ground water conditions.	Highly variable. Till, silt, and clay may stand in steep cuts. Gravels may stand in steep cuts for short periods. Abundant silt and clay, together with contained water under high hydrostatic head, results in low natural slopes. Shear strength of clay and silt obtained by laboratory tests may not be applicable in field because of fracturing. Subject to landsliding. Rebound reported in clay and silt.	Good.	Fill, common brick and other clay products. Some interbedded sands contain minerals, probably reactive with high-alkali cement.
Glacial and alluvial deposits undifferentiated Qu	Unconsolidated alluvial silt. Sand, and gravel; stratified outwash gravel, sand, silt, and clay; till composed of unsorted clay, sand, cobbles, and boulders.	Unconsolidated silt, clay, sand, and gravel; may contain some peat. Well stratified to unstratified. Wide variation in physical and engineering properties.	Runoff varies from poor to good, depending on surface topography, makeup of subsurface material, and vegetal cover. Infiltration highly variable.	Presence and quality of water depends on subsurface material and topography. Permeability variable depending on subsurface material.	Variable. Poorly compacted material may be excavated with hand or light power equipment. Compact cohesive material is tough and is generally hard to excavate with hand or light power equipment.	Variable—poor to good depending on the subsurface material. Settling may occur in some areas because of compressible layers. Slope and ground water may be factor, also.	Highly variable. May stand in cuts and steep natural slopes. Slopes steeper than 30° may cause trouble, and in some areas flatter slopes will be unstable.	Poor to good, depending on the underlying material.	Locally same as Qa, Qo, and Q.
ALL FORMATIONS BELOW ARE BEDROCK									
Miocene continental deposits M	Clayey sands and quartzose sands and some conglomerate, conglomerate sandstone, and andesite flows.	Friable clayey sandstone, poorly cemented.	Runoff excellent; infiltration slow.	Permeability low, probably contains very little water.	Heavy equipment needed. Ripper or power shovel usually adequate.	Excellent, but subject to limitations of slope.	Stands for long periods in steep cuts and slopes.	Good.	Source of kaolinite clay and glass sand.
Oligocene sedimentary rocks ϕ	Well-cemented dark-gray marine siltstone and light-gray mudstone and some graywacke sandstone and conglomerate beds.	Partly cemented, but may be weathered near surface. Contains some opal cement.	Runoff excellent; infiltration slow. Few springs.	Permeability low.	Blasting and heavy power equipment required for excavation.	Excellent, but subject to slope limitations. No settling expected.	Stands for long periods in steep natural banks and cuts. Dip of beds may affect slope stability.	Good.	Fill.
Renton Formation Tr	Nonmarine arkosic sandstone, quartzose sandstone, siltstone, mudstone, and shale. Contains coal beds.	Partly cemented, but contains uncemented beds.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill, coal, common clay, foundry sand.
Tukwila Formation Tt	Andesitic volcanic sandstone, tuffaceous siltstone, tuff breccia, volcanic conglomerate, and local lava flows.	Partly cemented. May be weathered at surface; contains volcanic tuff beds.	Same as above.	Same as above.	Same as above	Same as above.	Same as above.	Good.	Fill.
Tiger Mountain Formation Ttm	Nonmarine arkosic sandstone, carbonaceous siltstone, claystone, and coal.	Clay cemented, weathered at surface. Locally may be hydrothermally altered.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Raging River Formation Trr	Epiclastic volcanic sandstone and siltstone, locally conglomeratic.	Partly cemented; some beds are friable.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Puget Group Tp	Arkosic and feldspathic micaceous sandstone, siltstone, shale, and conglomerate.	Partly cemented; may be deeply weathered at surface.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill, coal, glass sand, clay.
Eocene sedimentary rocks E	Nonmarine sandstone and interbedded basalt, shale, sandstone, and conglomerate.	Interbedded with volcanics. Mostly well cemented and hard.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill, riprap.
Swauk Formation Ts	Nonmarine arkosic sandstone, pebble to cobble conglomerate, and shale.	Well cemented, jointed. Altered in some places.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Mesozoic-early Cenozoic sedimentary rocks MTs	Graywacke, argillite, and siltstone and some slate and phyllite; includes graywacke breccia and ribbon chert.	Mostly well cemented, fairly highly jointed. Locally hydrothermally altered and soft.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Snoqualmie Granodiorite Tg	Granodiorite, granite, and quartz diorite.	Hard, firm rock. Altered locally. Jointing well developed.	Same as above.	Same as above. Ground water only in joints.	Same as above. Breaks along joints.	Excellent.	Stands for long periods in steep natural banks and cuts.	Good.	Fill, riprap, chicken grit, landscape stone, ballast, crushed rock.
Tertiary volcanic rocks Tv	Mostly andesite breccia, and andesite flows. Basalt, rhyolite, and tuffs also present.	Medium hard rock, locally soft. Commonly jointed. In places contains much altered tuff.	Same as above.	Low permeability.	Blasting and heavy power equipment required for excavation.	Excellent, but subject to slope limitations.	Same as above.	Good.	Fill, riprap, landscape stone.
Tertiary intrusives Ti	Dikes, plugs, stocks, and sills of rhyolite, lamprophyre, andesite, andesite porphyry, and granitoid rocks.	Mostly hard tough rock. Contains zones of alteration.	Same as above.	Same as above. Ground water only in joints.	Same as above. Breaks along joints.	Excellent.	Same as above.	Good.	Fill, riprap, ballast, crushed rock, aggregate, landscape stone.
Mesozoic-early Cenozoic volcanic rocks MTv	Andesite and basalt flows including some interbedded sandstone and chert beds.	Highly jointed, contains sedimentary rock interbeds.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill, riprap.
Pre-Tertiary metamorphics pT	Graywacke, argillite, phyllite, and chert.	Highly jointed. Compact, hard.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Mount Stuart Granodiorite Mg	Mainly granodiorite, but ranges from alaskite to gabbro.	Hard, firm rock, jointing well developed.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill, riprap, ballast, crushed rock, aggregate.
Pre-Jurassic phyllite pJp	Mainly phyllite, but includes small areas of schist.	Fairly soft, easily weathered and eroded.	Same as above.	Same as above.	Same as above. Is most easily broken along rock cleavage planes.	Same as above.	Same as above.	Good.	Fill.
Pre-Jurassic schist pJs	Schist and amphibolites; includes small areas of phyllite and gneiss.	Fairly soft. Banded and contorted.	Same as above.	Same as above.	Same as above.	Same as above.	Same as above.	Good.	Fill.
Pre-Jurassic gneiss pJg	Gneiss; includes small areas of schist and amphibolite.	Hard, dense, firm rock. Jointing sometimes well developed.	Same as above.	Same as above.	Same as above. Breaks up along joint systems.	Same as above.	Same as above.	Good.	Fill, riprap.
Paleozoic rocks P	Quartz, greenstone, argillite, ribbon chert, hornfels, phyllite, and marble.	Composition highly variable.	Same as above.	Same as above.	Same as above. Rock type controls ease of excavation.	Same as above.	Same as above.	Good.	Fill, riprap, cement, agricultural limestone.

TABLE 11– Summary of coal production in King County, Washington, by mine and year from 1888 through 1967

COMPANY	MINE	NEAREST TOWN	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
ACME COAL CO.	NO.1	KANGLEY																																															598																																		
ALTA COAL & COKE CO.	NO.1	KANGLEY																																											300	2,275	2,483	2,214																																				
ANDERSON COAL MINES	NO.1	RAVENSDALE																																																								2,267	11,562																									
	NO.7	RAVENSDALE																																																										13,229	8,684	7,855																						
	STRIP	RAVENSDALE																																																													4,108																					
ATLANTIC-PACIFIC COAL CO.	NO.1	CUMBERLAND																																								71													97																											
BEACON COAL CO.	NO.1	RENTON																																																																																
BIANCO COAL CO.	QUEEN NO.1	ISSAQUAH																																											2,073	27,511	39,110	24,423	26,171	39,840	43,319	22,991	21,685	19,668	34,632	67,631	52,135	37,886	41,681	31,350	33,031	33,927	29,795	28,348	17,858	12,535	11,184	1,542													
BIG FOUR COAL CO.	NO.1 ELK	PALMER																																									3,429	14,618	37,947	39,080	43,503	28,537	25,953	28,689	26,654	23,857	31,079	26,230	28,074	28,892	20,662	16,834	32,264	29,916	34,046	14,586	8,670	19,220	19,720	15,137	6,818														
BIRDSEYE COAL CO.	BIRDSEYE	RAVENSDALE																																				122																																															
BLUE BLAZE COAL CO.	NO.1	ENUMCLAW																																																				415	85																											
BLACK BEAUTY COAL CO.	NO.1	BLACK DIAMOND																																														269	744	493	682	32	136	221	23																											
BLACK DIAMOND COAL CO. (BECAME PACIFIC COAST COAL CO. IN 1908)	BLACK DIAMOND	BLACK DIAMOND	30,880	105,255	NO RPT.	111,422	89,935	127,442	120,694	115,028	100,337	99,956	109,000	227,538	220,346	227,000	258,996	278,922																																																																				
	NO.14	BLACK DIAMOND																	107,763	110,624	97,593	93,633																																																																
	MORGAN SLOPE	BLACK DIAMOND																	162,892	201,666	269,875	231,984																																																																
	CEDAR MOUNTAIN	RENTON	10,878	23,120	NO RPT.	15,866	12,573			500	20,000	12,000	8,500	11,500	6,000	13,500			14,500	35,000	17,500																																																																	
BLACK NUGGET COAL CO.	BLK. NUG. NO.107	ISSAQUAH																																																	853	3,509	3,404	1,747	1,240			194	2,109	2,063	542																				
BLACK RIVER COAL CO.	BLK. RIVER NO.1	RENTON																											265		99	600	4,134	6,215													636																																						
BOJACK COAL CO.	NO.1	RENTON																																																	411																															
B.P.D. COAL CO.	NO.1	ISSAQUAH																																																										2391	4,378	5,043	852																		
B & R COAL CO.	NEWCASTLE	NEWCASTLE																																												16,271	26,431	21,475	25,157	24,442	18,099	7,142	9,144	9,921	16,699	30,340	26,516	22,323	31,025	24,009	16,998	18,310	22,326	24,899	26,333	26,282	20,866	18800	25,462	21,304	13,381										
	GRAND RIDGE	ISSAQUAH																																																	3,171	11,790	16,908	12,425	13,000	16,812																									
	ISSAQUAH	ISSAQUAH																																																						4,901	17,791	19,756	20,630	12,911	7,868	13,909	12,427	8,853	832																
	BAGLEY	NEWCASTLE																																																																						8,954	8,992	6,756	4,252	3,835					
CALIF-ALASKA COAL CO.	NO.1	SNOQUALMIE																																						2,492	6,429	437																																									
CARBON COAL & CLAY CO.	AMERICAN	CUMBERLAND								3,500	8,500																																																																									
	CARBON (DALY)	CUMBERLAND																235	15,000	20,500	22,300	21,177	26,934	31,816	11,926	41,291	43,610	63,999	79,847	44,425	51,806	68,727	72,096	64,627	17,831	15,587	15,555	1,398	2,300	3,485	3,340	2,159	2,377		10,521	21,522	24,740	32,245	19,275	16,592	11,247	16,749	14,754	16,660	17,840	20,877	17,148	16,304	6903	11,761	13,242	17,434	20,283	17,453	4,795																	
CAROLINE COAL CO.	CAROLINE NO.1	ISSAQUAH																																						133	4,638	6,069	7,010	5,603	2,370																																					
CARR COAL MINES	TIGER MTN.	ISSAQUAH																																												941																																			
CASH M COAL CO.	NO.1	DANVILLE																																								245																																										
CASSIDY COAL CO.	EUREKA	CUMBERLAND																											4,500																																																							
CAVANAUGH COAL CO.	CAVANAUGH	RENTON																																									198																																									
CEDAR MTN. COAL CO.	CEDAR MTN.	RENTON																																																	52,023	42,350	39,602																													
CENTRAL COAL CO. (OPERATED BY ANDREW KENNEDY IN 1916)	GRAND RIDGE	ISSAQUAH						591																6,913	39,484	40,411	53,709	63,685	21,465		24,097		81,929	45,849	78,565	20,790																																																		
	RAVENSDALE	RAVENSDALE																																	7,764	10,375																																																		
CITY COAL MINES	NO.1	RAVENSDALE																																																				367	36																											
C & M COAL CO.	NO.1	ISSAQUAH																																																													1,206	1,582	2,575	2,672	2,204	203																
COLGATE COAL CO.	OCCIDENTAL	PALMER																																					8,607	5,982																																											
COALFIELD COAL CO.	COALFIELD	RENTON																																																268	369																															
CONSOLIDATED COAL MINES	CEDAR MTN.	RENTON																																																				35,977	39,397	18,368	1,209	3,549																							
CONTINENTAL FUEL CO.	LISCO NO.1	RENTON																																					2,972	1,931	140																																										
CONTINENTAL COAL CO.	McKAY	RAVENSDALE																																																						114,224	82,553	63,498																							
CO-OPERATIVE COAL CO.	SUNSET	CUMBERLAND												2,276	4,719	9,000	8,600	6,700				23,556	1,693																																																																
CRANE VALLEY COAL CO.	JONES	ENUMCLAW																																742	292																																																			
CROW LAKE DEVEL. CO.	NAVY	CUMBERLAND																																									628	771																																								
CUMBERLAND CO MINING CO.	EUREKA	CUMBERLAND																														1,202	10,444	28,165	5,629	8,915	6,691	14,609	6,856																																														
DALE COAL CO.	DALE NO.1 & NO.2	RAVENSDALE																																				2,212	1308	4,050	8,316	38,669	53,586	51,181	38,023	36,245	57,346	63907	116,615	132,513	144,235	115,375	136,270	137,366	162,404																												
DANVILLE COAL CO.	NO.1	DANVILLE									500		1,000	1,500					1,447			7,720	2,547																				2,945	8,585	11,118																																							
	OCCIDENTAL	PALMER												15,000	13,427		3,225	16,024	16,786	18,242	31,834	38,038	20,984	29,711	34,562	10,467																																																													
DEEP CR. COAL MINE CO.	SUNSET	CUMBERLAND																									4,474																																																											
DENNY-RENTON CLAY & COAL CO. (PROBABLY KNOWN AS DENNY-RENTON COAL & COKE CO. PRIOR TO 1918)	DENNY-RENTON	RENTON																			12,364	16,556	8,619	16,837	30,945	19,784	6,950		9,950	9,822	7,480	3,311	5,143																																																			
	NO.1	TAYLOR																		15,500	15,109	21,891	47,365	47,652	68,309	85,045	33,588	13,937	34,639	21,280	20,882	55,344	64,639	38,945	45,200	4,440																																																	
	KUMMER	BLACK DIAMOND																																925																																																				
DESIMONE COAL CO.	LANDSBURG NO.1	DANVILLE																																													3,133	12,870	12,675	4,306																															
DIAMOND COAL CO.	DIAMOND NO.1	RENTON																																							120	698	1,434	3,839	195																																						
DRAGHI COAL CO.	NO.1	BLACK DIAMOND																																																															1,297	2,145	2,881	2,869	2,496													
	NO.3	BLACK DIAMOND																																																																				2,289	2,156	1,605	1,294	1,078							
	NO.4	BLACK DIAMOND																																																																									576	207	69				
DURHAM COLLIERY CO.	NO.1 & NO.2	DURHAM																											18,854	39,888	70,064	51,630	50,771	34,614																																																		
DURHAM COAL CO.	MORRIS	DURHAM																																												1,454																																			
EAGLE HILL COAL CO.	NO.1	KANGLEY																																												125																																			
ECHO LAKE COAL CO.	ECHO NO.1	RENTON																																													66	25																																	
ELK COAL CO.	ELK NO.1	DURHAM																																		5,253	49,207	65,274	35,745	19,579	19,031	37,420	14,499																																							
ENUMCLAW COAL CO.	NO.1	ENUMCLAW																																								412																																									
EUREKA NAVY COAL CO.	NO.1 & NO.2	CUMBERLAND																																										1,883	1,250				99				210	482	199																											
EVANS COLLIAS	NO.1	RAVENSDALE																																																			481																													
FIRE KING MINING CO.	NO.1	RENTON																																																									432	3,208	233	233																			
FOSTER COAL CO.	NO.1	TUKWILA																																												109	482	174	59																																
FRANKLIN GEM COAL CO.	NO.1	BLACK DIAMOND																																																						3,979	5,961	6,758	7,048	5,555	5,071	4,881	4,628	846																	
FRANKLIN QUEEN COAL CO.	NO.1	BLACK DIAMOND																																																							230	106																							
GEBO-DRAKE COAL CO.	LANDSBERG	LANDSBERG																																																64	645																														
GEM COAL CO.	GEM	BLACK DIAMOND																																																	1,469	1,037	2,798	1,968	387		890	756																							
GREEN RIVER COAL CO.	KRAIN NO.1	ENUMCLAW																																											377	799	909	745	1,909	1,243	409		903	256		445	446	2,001	2,235	2,150	141																					
	BAYNE	BAYNE																					30	17,225	48,171	26,022																																																													
GREEN R. GORGE COAL CO.	OKAY	BLACK DIAMOND																																														100	306	262	392	168	60																												
HARRIS COAL CO.	HARRIS NO.1	ISSAQUAH																																		1,488	9,554	8,279	6,372	9,064	9,180	11,092	9,396	9,092	7,517	7,257	11,490	14,210	13,051	17,405	22,843	23,863	17,501	9,248	4,989	2,570	1,574																									
HIAWATHA COAL CO.	HIAWATHA	DURHAM																																					2,596																																													
HI-GRADE COAL CO.	NO.1	RENTON																																																		2,135	2,601	1,816																											
HI-HEAT COAL CO.	NO.1	BLACK DIAMOND																																														173	1,161	1,656	1,885	1,620	1,311	1,505	1,583	659	113	978																							
	NO.10	BLACK DIAMOND																																																									1,497	557																					
HYDE COAL CO.	HYDE	CUMBERLAND																										19,710	14,247	NO RPT	16,596	75,919	78,036	66,757	36,688																																																			
HYDE MINES INC.	NO.1	CUMBERLAND																																																			204	580	70		736	1,760																							
	NO.2	CUMBERLAND																																																									2,892																						
IDEAL COAL CO.	NO.1	BLACK DIAMOND																																																			94																												
INDIAN COAL CO.	INDIAN	RENTON																																1,017	2,574																																																		
ISSAQUAH COAL CO.	NO.1	ISSAQUAH																																																							799	5,588	3,153																						
ISSAQUAH SUPERIOR COAL MINING CO.	ISSAQUAH	ISSAQUAH																									4,780	90,487	80,994	40,271	42,511																																																							
JENKINS-EVANS COAL CO.	FRANKLIN	BLACK DIAMOND																																																4,219	1,105																														
JERGENSEN COAL CO.	NO.1	RENTON																																												600																																			
JOHNSON COAL CO.	NO.1	BLACK DIAMOND																																																							153	2,501	2,327	2,222	1722	1942	2,098	883																	
JOHN McQUADE	Mc QUADE	RENTON																													874	1,399	2,321	1,500																																																			
J.J. COAL CO.	J. J.	RENTON																																																1,026	411																														
JOHN-RICHMOND COAL CO.	NO.1	NEWCASTLE																																															98	98																															
KANGLEY COAL CO.	KANGLEY	KANGLEY																																2,416																																																			
KANGLEY COAL CO. INC.	NO.1	KANGLEY																																															193	208																															
KANGLEY COAL MINING CO.	— — — — —	KANGLEY																																				12,513																																													
KANGLEY WEST COAL CO.	NO.1	KANGLEY																																										1,717																																					
KEOLER COAL CO.	NAVY NO.1	CUMBERLAND																																								2,187	1,402																																							
K&F COAL CO.	NO.3	ENUMCLAW																																															32																																
KRAIN COAL CO.	NO.1	ENUMCLAW																																								324		611																																						
KING CARBON COAL CO.	— — — — —	ENUMCLAW																																		590																																																
KUMMER COAL CO.	NO.1	BLACK DIAMOND																																												206	3,142	2,791	3,310	263								417	952	3,106	4,218	4,223	3,879																			
KUMMER COAL OPERATORS	KUMMER	BLACK DIAMOND																																																		5,748	16,761	22,731	8239																										
LAHEY COAL CO.	NO.1	ISSAQUAH																																																						288	5,206	6,275	4,590	1,454																				
LANDSBERG COAL CO.	NO.1	LANDSBERG																																												773	3,223																																		
LAWSON COAL MINES	NO.1	BLACK DIAMOND																																													7,152	19,214	34,959	15,129																															
LAWSON & CO.	LAWSON	BLACK DIAMOND									11,000	28,860	45,834	52,161	78,600	97,329	107,750	186,987	98,587	79,200	92,656	91,935	73,015	83,694	83,687	7,099																																																														
LEARY COAL CO. (BECAME NW IMPROVEMENT CO. 1912)	LEARY	RAVENSDALE													48,000	63,578	71,426	187,900	183,883	184,370	257,705	261,688	32,545	162,625	152,327	166,018																																																														
LISCO COAL CO.	LISCO	RENTON																																			2,013	3,810																																																
MACKS COAL CO.	MACKS	BLACK DIAMOND																																																																		840	2,572	1,186	343	131	61							
MAPIE RIDGE COAL CO.	NO.1	RENTON																																														1,170	105																																
MAY CREEK COAL CO.	MAY CREEK	COALFIELD																							3,003							1,211					714	1,246																																																
Mc KAY OPERATORS INC.	NO.1	RAVENSDALE																																															45	268																															
McKAY COAL CO.	NO.1	BLACK DIAMOND																																																												179																		
MORRIS BROS. COAL CO.	DURHAM NO.2	DURHAM																																			21,127	24,517	27,866	23,473	29,189	23,583	18,889	2,907																																								
	DURHAM NO.1	DURHAM																																										4,946																																					
	MORRIS	DURHAM																																											5,232																																				
	OCCIDENTAL	PALMER																																								23,509	38,229	43,454	38,530	28,060	41,358	17,809	19,774	20,877	20,618																															
MUD LAKE COAL CO.	NO.1	RENTON																																												18																																			
NACO COAL CO.	NAVY	CUMBERLAND																																							296																																										
NATIONAL COAL CO.	NO.6	CUMBERLAND																													22,071	27,256	3,381																																																		
	NO.1	CUMBERLAND																												14,800																										101	338	90																							
	SUNSET	CUMBERLAND																											18,555	9,326																																																					
NATIONAL DEVEL. CO	TAYLOR	RENTON																																																		1,837	323																												
NAVY COAL CO.	NAVY NO.1	CUMBERLAND																																				140	380								1,259	1,336	383	181																																
NEWCASTLE-KING COAL CO.	KING	NEWCASTLE																																																2,073	3,682	2,319	1,851	584			322																								
NEW LAKE YOUNG COAL CO.	NO.1	RENTON																																																4,581	11,191	9,945	5,836	7,560	11,578	14,384	9,508	5,892	5,685	1,824	641	2,402	458																		
NIBLOCK COAL CO.	NIBLOCK	SNOQUALMIE																																					1,260	618																																												
NORTHWEST IMPROVEMENT CO. (WAS LEARY COAL CO.)	RAVENSDALE	RAVENSDALE																									114,111	154,085	127,972	124,347																																																										
	HIAWATHA	DURHAM																														2,752	7,395	13,460	2,448	4,235	26120																																																
	Mc KAY	RAVENSDALE																																																								7,774	47,894	38,580	25,252	24,474	293																					
	NO.5 STRIP	RAVENSDALE																																																									7,076	69,935	101,722	15,669																					
OAKDALE COAL CO.	NO.1	KANGLEY																																											180	623																																			
OCCIDENTAL COAL CO.	OCCIDENTAL	BAYNE																																								3,395																																									
OCCI. COKING & COAL CO.	OCCIDENTAL	BAYNE																									25,984	32,745																																																												
OKAY COAL CO.	McKAY NO.1	BLACK DIAMOND																																																						1,444	2,296	521																							
OLD LAWSON COAL CO.	NO.1	BLACK DIAMOND																																																4,275																															
OLSON COAL CO.	NO.1	CUMBERLAND																																																											3,665	7,982	9,669	6,127	6,096	6,205																
OLD SUNSET MINE	NO.1	CUMBERLAND																																																			57																												
OREGON IMPROVEMENT CO.	NEWCASTLE	NEWCASTLE	14,963	76,102		160,514	154,225	153,000	139,817	79,827	125,337	138,024	163,000																																																																									
(CHANGED TO PACIFIC COAST COAL CO. 1898)	FRANKLIN	BLACK DIAMOND		136,844		44,557	73,500	88,000	99,180	70,584	56,063	105,268	168,000																																																																										
	DURHAM	DURHAM	6,360	22,319																																																																																		
	KANGLEY	KANGLEY				5,544	14,152	16,673		7,190	1,519																																																																											
	ALTA	KANGLEY				2,000	13,500	9,000	3,500																																																																													
OZARK MINING CO.	NAVY	CUMBERLAND																												5,838	37,641	35,090	27,902	58,580	7,759	5,318																																																		
PACIFIC COAST COAL CO.	NEWCASTLE	NEWCASTLE												113,715	26,804																									6,470	10,176		256,385	344,609																																												
	COAL CREEK	NEWCASTLE												41,517	165,538	130,957	140,841	145,374	148,312	133,750	168,360	269,932	166,473	233,791	223,728	224,342	210,331																																																															
	NO.14	BLACK DIAMOND																					49,983	94,713	131,079	123,851	108,315	119,045	67,683	44,512	3,148																																																							
	NO.11	BLACK DIAMOND																										238,765	164,762	133,686	206,975	300,216	311,994	253,002	287,539	68,248	202,290	229,338	255183	251,417	235,157	28,263																																															
	FRANKLIN	BLACK DIAMOND																																																					67,702	66,418	72,290	57,123	26,468																							
	GEM	BLACK DIAMOND												17,629	39,600	36,460	52,735	65,646	58,274	2,324	71,082	86,645	94,068	8,923	37,528	47,108	52,715	49,319																																																																				
	NO.1	BLACK DIAMOND															65,107	190,150	100,454	96,615	87,584	83,863	18,050																			168,042		320,345	320,345																																															
	CANNON	BLACK DIAMOND																										6,125	36,858	5,196		15,745	40,534	14,388	13,385	6,607	5,400																																																						
	LAWSON	BLACK DIAMOND																																																10,191	66,311	17,116																															
	FULTON	BLACK DIAMOND																																																									29,355	2,624																					
	NEW BLK. DIAMD.	CEDAR MTN.																																											219,990	197,172	189,300	152,889	155,704	154,173	175,340	141,429	87,994	44,075	22,757																													
	WEST COAST	CEDAR MTN.																																							37,664	65,732	15,151																																										
	FORD	NEWCASTLE																										292,124	244,778	238,343	301,563	368,096	324,247	181,072	163,182	94,164	232,255	211,443	215,118	156,343	55,402																																																
	PRIMROSE	NEWCASTLE																																								92	83,057	99,158																																								
	NO.7	BLACK DIAMOND												148,612	128,000	92,711	72,238	82,480	47,046	63,347	55,984	11,199																																																																							
	ISSAQUAH	ISSAQUAH																													49,363	66,652	42,047	124,629	26,255	113,279	19,384																																																		
	HYDE	HYDE																																		1,207																																																		
	MORGAN SLOPE	BLACK DIAMOND																					209,805	278,981	272,662	255,736	246,042																																																													
	NO.8	BLACK DIAMOND																									34,923	61,003	1,583																																																												
	NO.12	BLACK DIAMOND																									2,462																																																															
	RENTON	RENTON																													133,770																																																									
	OLD LAWSON	BLACK DIAMOND																																																	8,887	1,657																														
PALMER COKING COAL CO.	DURHAM	DURHAM																																													4,339	20,469	24,409	28,732	42,823	28,063	15,633	10,721	19,070	31,326	16,329	13,969																							
	DANVILLE	LANDSBERG																																																	1,927	2,088	13,080	34,348	41,300	28,359	22,088	13,255	18,116	20,416	23,377	18201	21,503	26,839	50,066	48,846	44,816	46,790	18,634	21,420	18,077	37,952	56,464	33,967	794						
	OCCIDENTAL	PALMER																																																		20,274	18,715	14,512	14,577	5,124		5,944	13,056																							
	PALMER	DURHAM																																																									6,822	12,039	2,585	1,492																					
	FULTON STRIP PIT	BLACK DIAMOND																																																										17,412																						
	NO.10, 11, 12	BLACK DIAMOND																																																											34,242	37,989	42,474	45,044	44,147	45,039	87,594	69,351														
	FRANKLIN NO.10	BLACK DIAMOND																																																																		15,042								2,267	8,172	8,043	8,599
	FRANKLIN NO.12	BLACK DIAMOND																																																																	37,221					6,139	15,789	15,617	5,029			
	KUMMER	BLACK DIAMOND																																																																		7,527											
	FRANKLIN-FULTON NO.1&2	BLACK DIAMOND																																																																		44,031										
	FULTON NO.2	BLACK DIAMOND																																																																			42,685	18,092								
	ROGERS	LANDSBERG																																																																			15,217	12,573	8,516	14,375					
	ROGERS NO.2	LANDSBERG																																																																				8,678	32,472	15,763	28,152	25,838	25,502	16,574	
	ROGERS NO.3	LANDSBERG																																																																							5,383	22,780	8,824	23,372	39,069
PALMER BITUMINOUS CO. CO.		PALMER																																		614	810																																																
PARKIN-KANGLEY COAL CO.	KANGLEY	SELLECK																																					28,210	64,141	70,452	44,978																																								
	NO.1	BAYNE																																								857	11,937																																								
PIONEER COAL CO.	NO.1	RENTON																																											1,069	60																																			
POCAHONTAS COAL CO. (ALSO CANAL COAL CO.)	POCAHONTAS	PALMER																		540	849	30							9,403	22,021	11,623	32,730	24,517	9,665	8,160																																																				
	DAVIS	PALMER																																																171	97	44																													
PUGET SD. TRACTION LIGHT AND POWER CO.	RENTON	RENTON																									103,963	139,562	113,218	120,948	135,203																																																										
RAINIER COAL CO.	NO.1	BLACK DIAMOND																																																			25																												
RAVEN COAL CO.	RAVENSDALE	RAVENSDALE																														730	5,154																																																					
RED DEVIL COAL CO.	NO.1	RENTON																																												60																																			
RENTON COAL CO.	RENTON	RENTON																														131,800	112,683	59				1,085																																																	
	SLUDGE DUMP	RENTON																															6,995	52,341	62,413	22,151	8829																																																		
RENTON MINING CO.	TALBOT NO.1	RENTON																																																						4,856	16,964	15,843	23,694	19,929	15,275	9,248																						
RENTON SUNBEAM COAL CO.	SUNBEAM NO.1	RENTON																																						14,187	19,713	21,051	17,816	17,371																																								
REYNOLDS COAL CO.	NO.1	ISSAQUAH																																								70	378				2,416	4,769	7,415	16,462	8843																																
RICHMOND-STANLEY COAL CO.	NO.1	NEWCASTLE																																											2,438																																				
	NO.1	BLACK DIAMOND																																														479	132																																
RIVERTON COAL CO.		RIVERTON																																		1,200																																																		
ROMANO COAL CO.	RED DEVIL	RENTON																																													453																																		
ROSE-MARSHALL	CUMBERLAND	CUMBERLAND																					8,165	12,175	4,996																																																																	
SCRANTON COAL CO.	NAVY	CUMBERLAND																											9,326	1,098																																																										
SEA. COAL & IRON CO. (ALSO CALLED ISSAQUAH SUPERIOR CO. MINING CO.)	GILMAN	ISSAQUAH	9,138	41,482		55,956	102,105	121,378	81,623	92,890	138,836	112,085	115,370	124,238	126,706	121,829	117,184	105,643	50,896																																																																					
	RENTON	RENTON								2,420	7,000	11,200	35,000	38,000	37,170	72,865	104,071	134,743	91,777	117,120	116,452	168,203	154,338	145,732	161,141	155,275																																																																
SNOQUALMIE COAL & COKE CO.	SNOQUALMIE	SNOQUALMIE																5,000	3,200		827	3,120																																																																								
	DENNY	BLACK DIAMOND					3,200	5,474	7,000	6,500	3,500	2,000	6,600				10,044	10,705	16062	15,060	8,680	9589	2,507	2,158	3,121	2,057																																																																
	GRAND RIDGE	ISSAQUAH						591																6,913	39,484	40,411																																																																			
	EUREKA	CUMBERLAND						800	16,000	8,000					35											2400																																																																
	NAVY	CUMBERLAND							4,800	3,347	1,706	3,018	3,500	3,600	650							6,236	7,616																																																																			
SPRINGBROOK COAL CO.	NO.1	RENTON																																												1,226	5,242	2,139																																				
SPRINGBROOK MINING CO.	NO.1	RENTON																																													470	2,240	7,263																																		
	SPRINGBROOK	RENTON																																																7,008	12,758																														
	NO.3	RENTON																																																		693	5,695	16,586	14,373	15,250	20,034	18,803	18,479	7,475	11,077	8,931	2,222	2,698	290																
	NO.2	RENTON																																																		12,141	4,793																												
SPRINGBROOK KING COAL	NO.1	RENTON																																														231	2,031																																
SPRING GLEN COAL CO.	NO.1	RENTON																																																			429	2,955	7,741	8,493	4,372	4,729	3,698	3,999	5,253	7,774	10,247	3,895																	
STRAIN COAL CO.	RENTON	RENTON																																			20,089	22,578	23,132	23,903	20,314	28,304	22,245	17,798	17,438	29,435	23,024	11,108																																							
	COAL CREEK	NEWCASTLE																																														120	17,351	33,914	44,791	42,360	39,480	40,203	53,665	62,704	131,753	115,335		34,908	32,301	33,825	17,051	12,048																			
	McKAY	BLACK DIAMOND																																																	5,621	50,988	112,019	122,619																											
	FRANKLIN	BLACK DIAMOND																																																					54,087	9,075		90,623																								
	GINDER LAKE	BLACK DIAMOND																																																					33,369																										
	UPPER DIAMOND	BLACK DIAMOND																																																					33,918																										
SUCCESS COAL CO.	DANVILLE	RAVENSDALE																																					225	4,799	265																																											
SUNSET COAL CO.	SUNSET	CUMBERLAND																										9,924												206																																														
SUPERIOR C&I CO.	SUPERIOR	ISSAQUAH																							5,035	2,672																																																																
SWAN PERSON COAL CO.	NO.1	RAVENSDALE																																													216																																			
TALBOT MINING CO.	NO.1	RENTON																																																				155	564																										
TAYLOR COAL CO.	TAYLOR NO.1	TAYLOR																																												74							123	110																											
TERTELING & SONS, INC.	McKAY STRIP	RAVENSDALE																																																														6,245	20,714	31,927	21,263	17,977																
THERMAL COAL CO.	NO.1	RAVENSDALE																																											9,867	2,015																																			
TIGER MTN. COAL CO.	TIGER MTN.	ISSAQUAH																																													904	965	1,133	4,99	6,667	4,363	3,994	1,198																											
T & O COAL CORP	KUMMER	BLACK DIAMOND																																																	391																													
TULLOCK COAL CO.	DANVILLE NO.1	RAVENSDALE																																							435	178																																									
TWIN RIVER DEVEL. CO.	KANGLEY DUMP	KANGLEY																														8,144																																																							
WEST COAST COAL CO.	CEDAR MTN. NO.1	RENTON																																						736	10,720		17,771	32,329	65,901	98,247	71,158	65,529	79,437	70,074	64,082																															
WESTERN COKE & COLLIERIES	SNOQUALMIE	SNOQUALMIE																																3,109	937																																																
WONDER COAL CO.	NO.1	RAVENSDALE																																																	158	62																												
W. G. KEGLER COAL CO.	NAVY NO.1	CUMBERLAND																																								1,029	2,187	1,402																																							
		TOTAL TONS	72,219	405,122	NO RPT.	395,909	463,190	522,358	472,614	389,786	474,298	512,411	406,504	796,936	895,595	665,229	1,012,217	1,416,509	1,116,879	1,093,858	1,326,824	1,446,965	916,572	1,160,801	1,311,870	1,224,756	1,050,953	1,330,596	1,237,564	879,062	1,316,993	1,314,366	1,331,601	952,632	983,852	340,015	688,034	639,431	621,471	600,347	535,626	456,230	542,747	645,779	561,813	519,503	492,034	553,490	505,819	606,118	646,992	744,007	602,919	620,329	604,622	645,650	622,840	503,007	458,309	428,430	316,294	341,301	355,505	218,178	179,549	190,922	189,428	153,070	175,572	116,783	107,374	78,831	91,539	100,190	63,113	52,749	49,969	49,221	55,914	42,498	47,989	47,668
			1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967