GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet A

Study Area Boundary

Oroville
Palmer Lake
Okanogan R.
US 97
Republic
US 395
Kettle Falls
Franklin D. Roosevelt Lake
Omak
Okanogan
Omak Lake
Nespelem
Brewster
COLUMBIA R.

10
1
1,3
3
2
4
5
6
9
8
7,8

Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

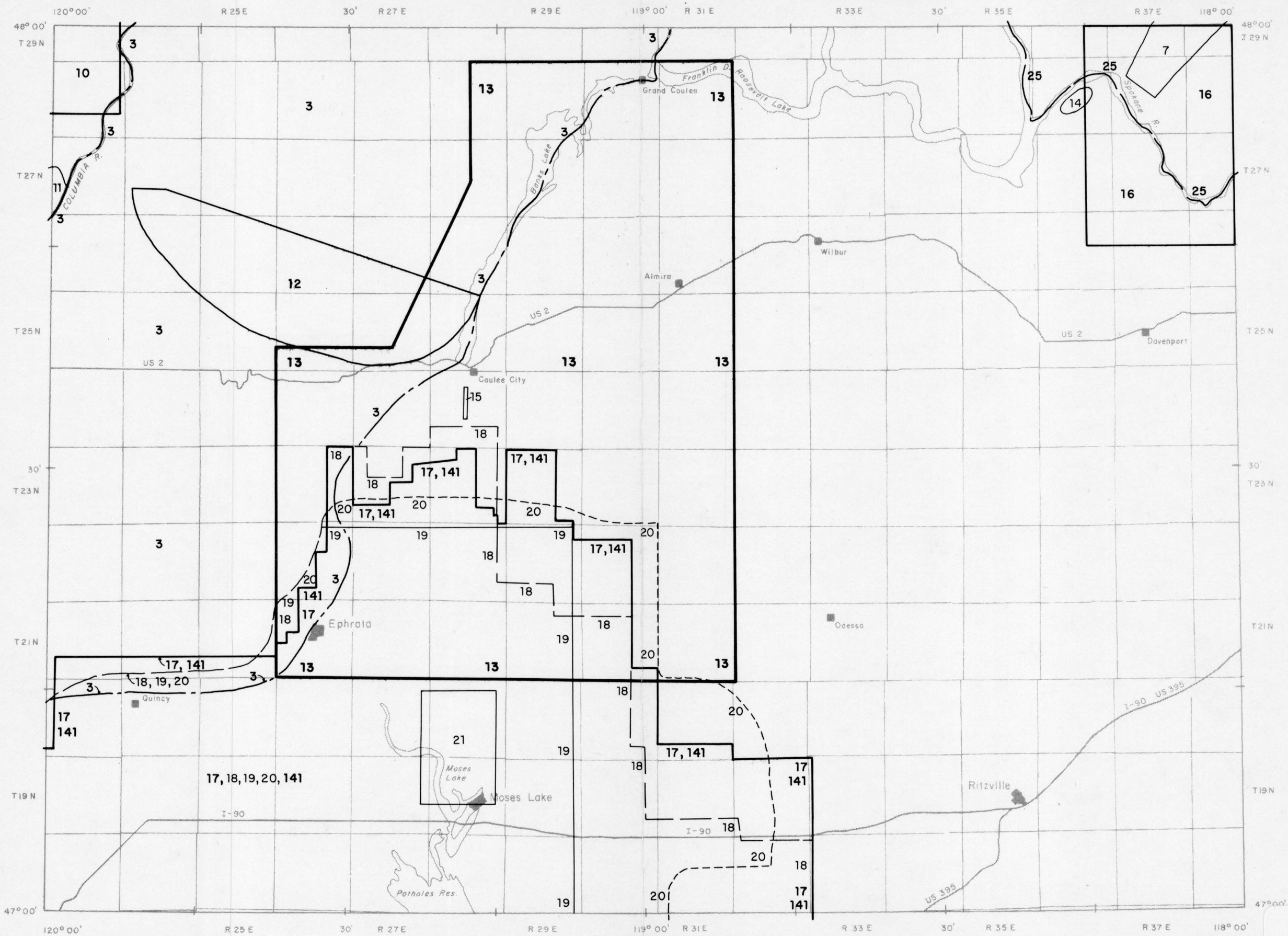
Okanogan Sheet

Sheet A

Pocket part 1 of 24 RHO-BWI-C-59

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet B



Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING
Ritzville Sheet

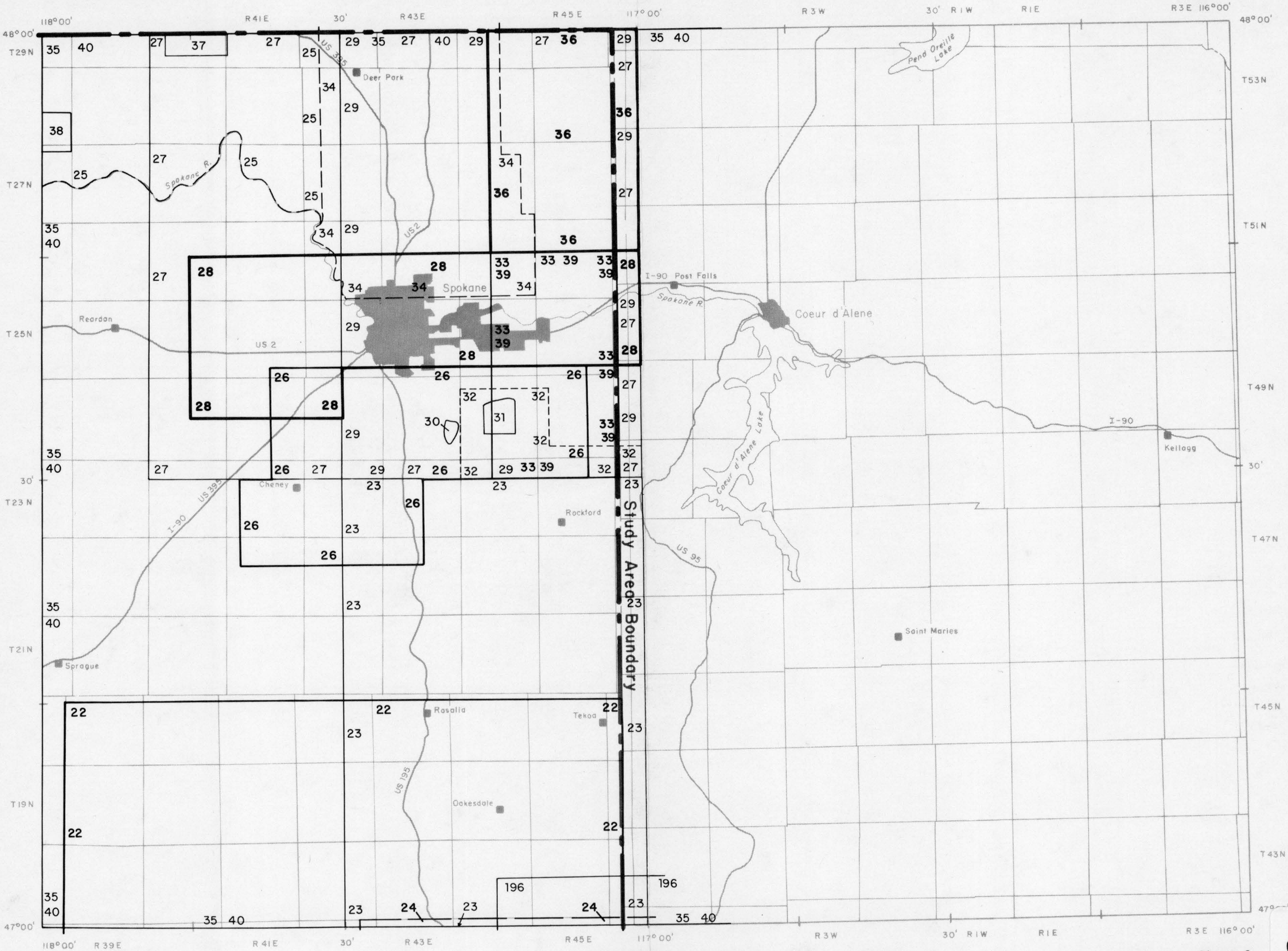
Sheet B

Pocket part 2 of 24 RHO-BWI-C-59

QE
A3
06
79-

OLYMPIA, WASHINGTON 98504

Sheet C



Base from AMS 1 by 2 degree series

0 5 10 Miles

0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Spokane Sheet

Sheet C

Pocket part 3 of 24 RHO-BWI-C-59

QE1
A3
06
79-
cop

RHO-BWI-C-59
WASHINGTON DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND EARTH RESOURCES
OLYMPIA, WASHINGTON 98504

Sheet D-I

Study Area Boundary

Base from AMS 1 by 2 degree series

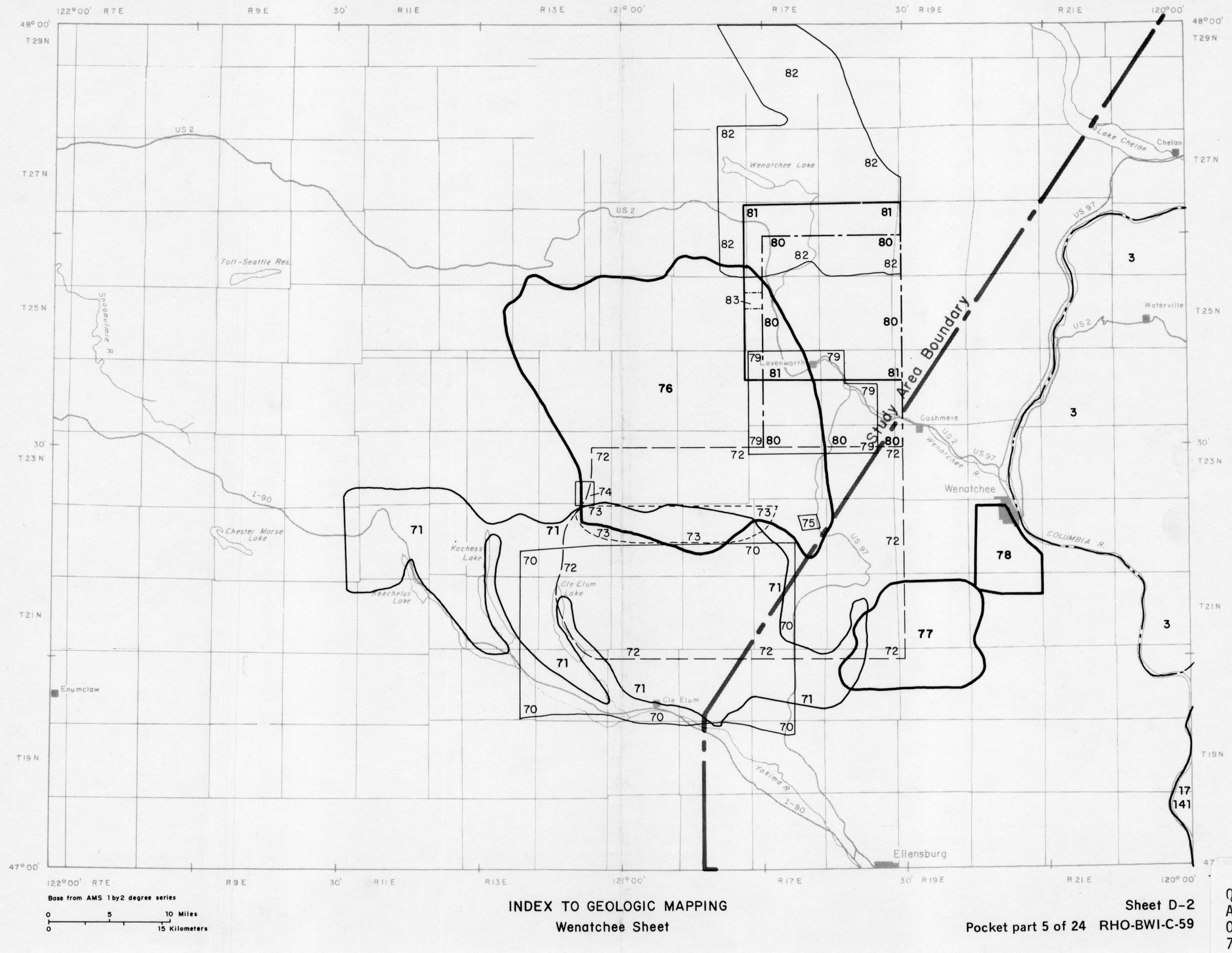
0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Wenatchee Sheet

OLYMPIA, WASHINGTON 98504

Sheet D-2



Base from AMS 1by2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Wenatchee Sheet

Sheet D-2

Pocket part 5 of 24 RHO-BWI-C-59

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet D-3

122°00' R7E R9E 30' R11E R13E 121°00' R17E 30' R19E R21E 120°00'

48°00' T29N T27N T25N 30' T23N T21N T19N 47°00'

US 2 Tolt-Seattle Res. Snoqualmie R. I-90 Chester Morse Lake Kachess Lake Keechelus Lake Cle Elum Lake Wenatchee Lake Lake Chelan Chelan Waterville Leavenworth Cashmere Wenatchee Enumclaw Cle Elum Ellensburg Yakima R. Wenatchee R. US 97 COLUMBIA R.

Study Area Boundary

97 98 96 100 99 101 102 92 11 89 87 91 88 93 94 95 90 86 84 85

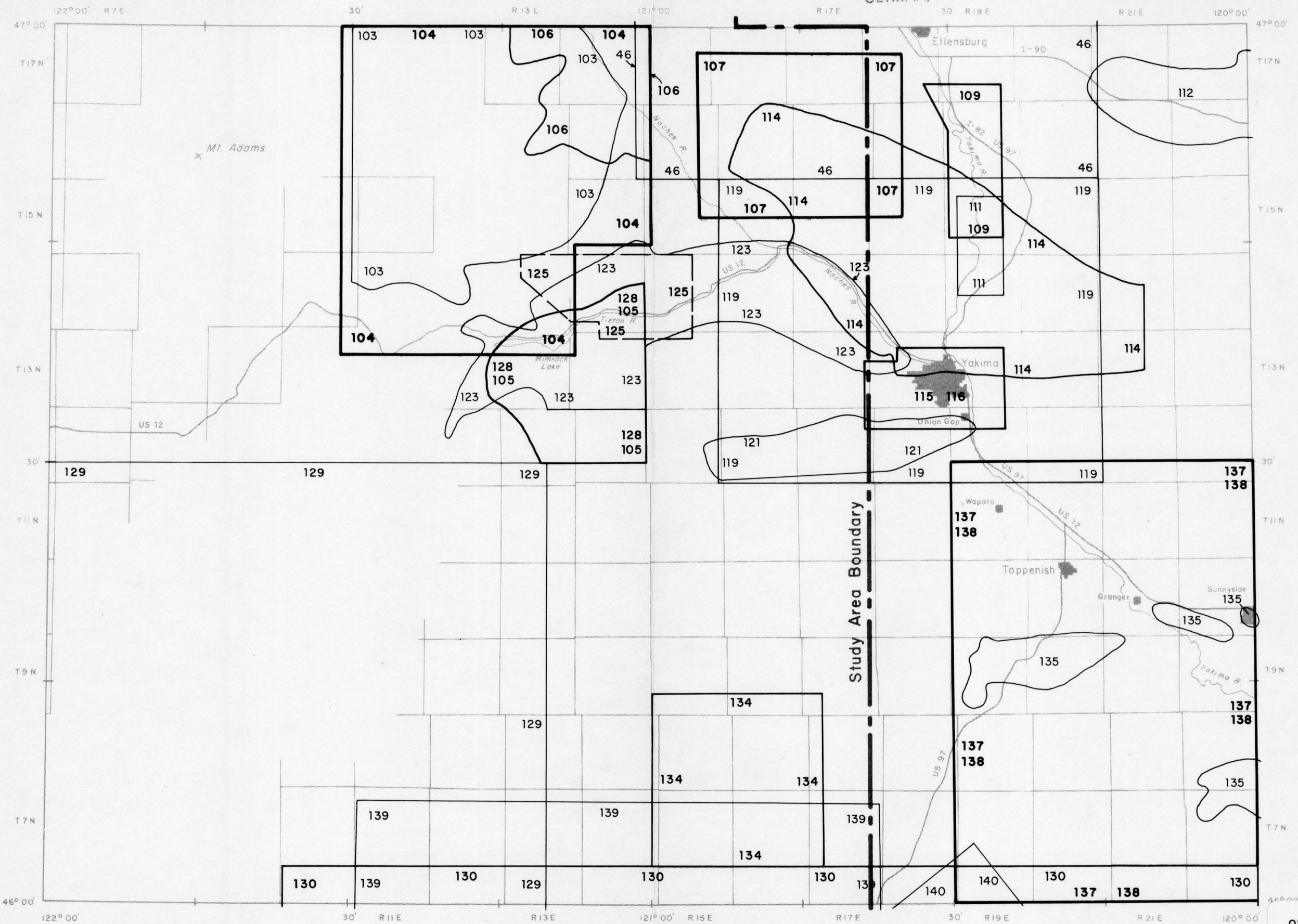
Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING
Wenatchee Sheet

Sheet D-3
Pocket part 6 of 24 RHO-BWI-C-59

DEPARTMENT OF NATURAL RESOURCES
GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504



Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Yakima Sheet

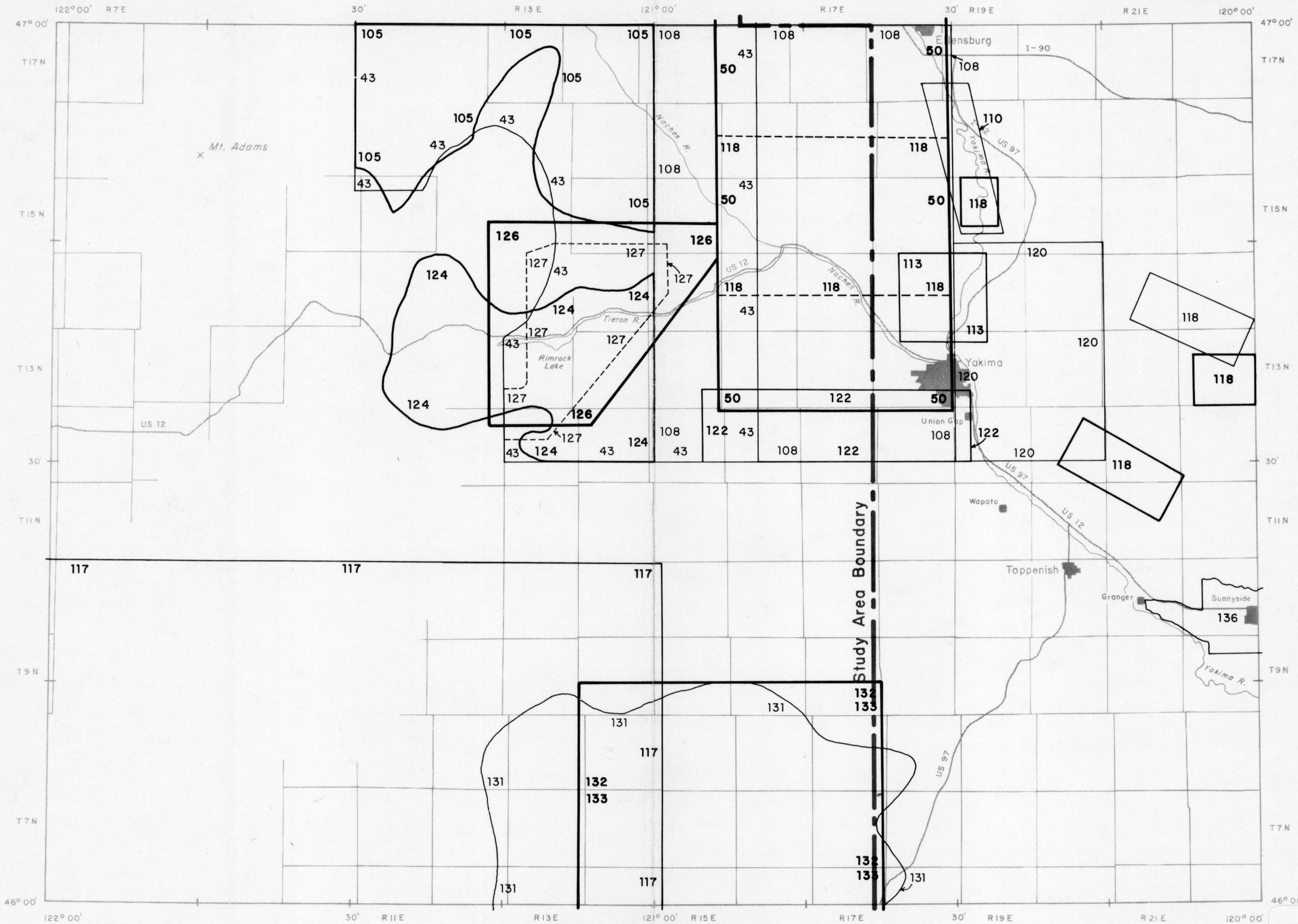
Sheet E-1

Pocket part 7 of 24 RHO-BWI-C-59

QE
A3
06
79

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet E-2



Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Yakima Sheet

Sheet E-2

Pocket part 8 of 24 RHO-BWI-C-59

QE17
A3
06
79-5

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet F-1

Base from AMS 1 by 2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

Walla Walla Sheet

Study Area Boundary

Sheet F-1

Pocket part 9 of 24 RHO-BWI-C-59

QE17
A3
06
79-5
copy

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Study Area Boundary

Base from AMS 1by2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING
Walla Walla Sheet

QE1
A3
06

GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Sheet G

Base from AMS 1by2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING
Pullman Sheet

Sheet G

Pocket part 11 of 24 RHO-BWI-C-59

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A3
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79-

OLYMPIA, WASHINGTON 98504

Sheet H

Study Area Boundary

Base from AMS 1by2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

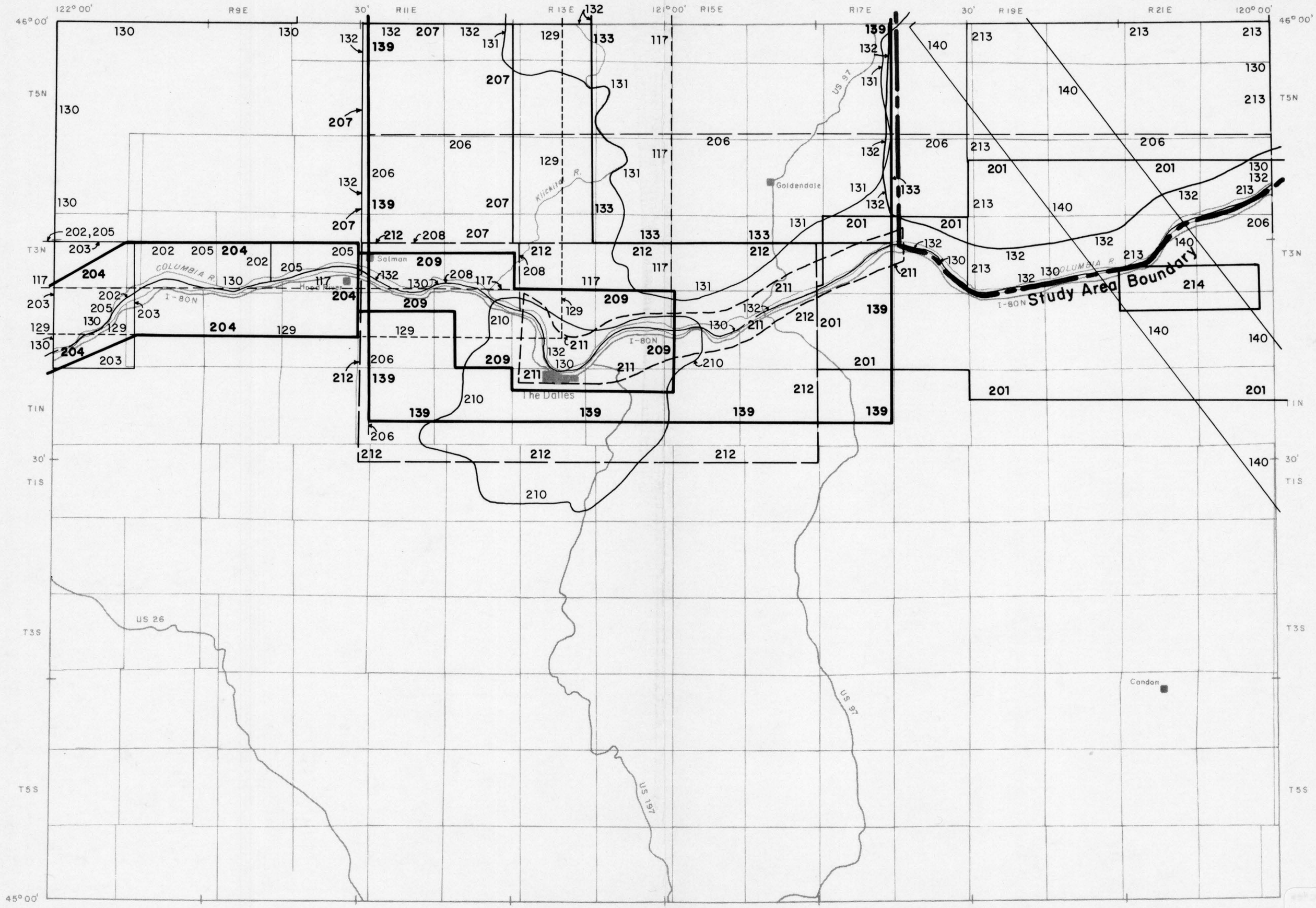
Pendleton Sheet

Sheet H

Pocket part 12 of 24 RHO-BWI-C-59

OLYMPIA, WASHINGTON 98504

Sheet I



Base from AMS 1by2 degree series

0 5 10 Miles
0 15 Kilometers

INDEX TO GEOLOGIC MAPPING

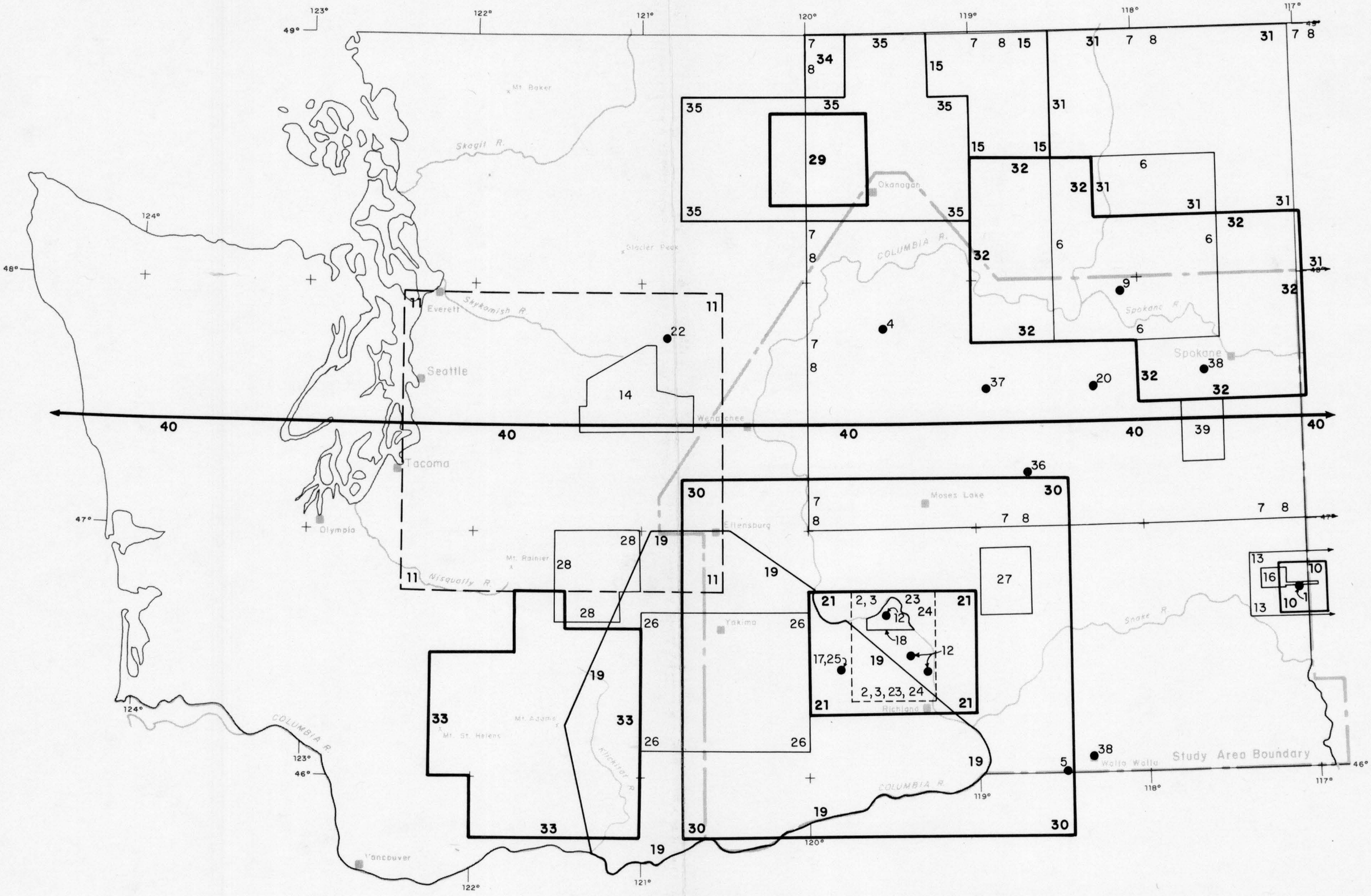
The Dalles Sheet

Sheet I

Pocket part 13 of 24 RHO-BWI-C-59

QE17
A3
06
79-5

Sheet J



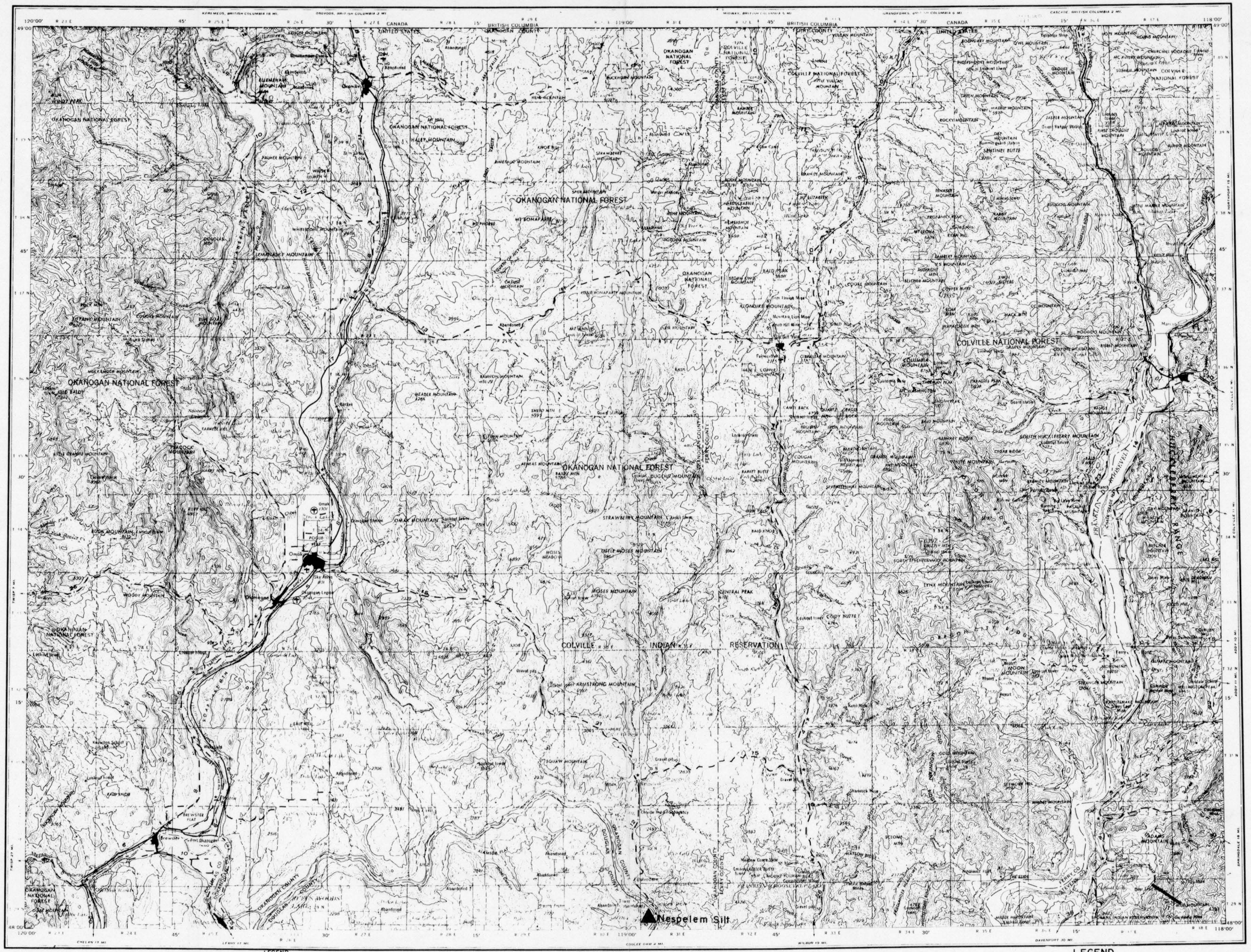
INDEX TO GEOPHYSICAL SURVEYS — WASHINGTON

0 20 40 Miles
0 60 Kilometers

Sheet J

Pocket part 14 of 24 RHO-BWI-C-59

QE175
A3



LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES: Over 500,000 — LOS ANGELES; 100,000 to 500,000 — OMAHA; 25,000 to 100,000 — GALVESTON; 5,000 to 25,000 — Laramie; 1,000 to 5,000 — Grand Coulee; Less than 1,000 — Sun Valley

RAILROADS: Standard gauge (Single track / Double or Multiple); Narrow gauge

BOUNDARIES: International; State; County; Park or reservation

ROADS: Hard surface, heavy duty (3 LANES / 4 LANES); More than two lanes wide; Two lanes wide; Federal route marker; Hard surface, medium duty (3 LANES / 4 LANES); More than two lanes wide; Two lanes wide; State route marker; Improved light duty; Unimproved dirt; Trail

Landplane airport; Landing area; Seaplane airport; Orchard; Woods-brushwood; Approximate road alinement

Landmarks: School; Church; Other

Horizontal control point; Spot elevation in feet; Marsh or swamp; Intermittent or dry stream; Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

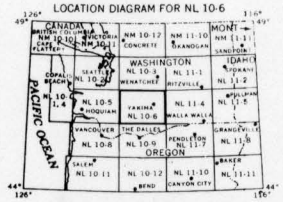
CONTOUR INTERVAL 200 FEET

WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS

TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0°02' WESTERLY

LOCATION DIAGRAM FOR NL 10-6



LEGEND

Cross Section

Type Section and formation name

Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

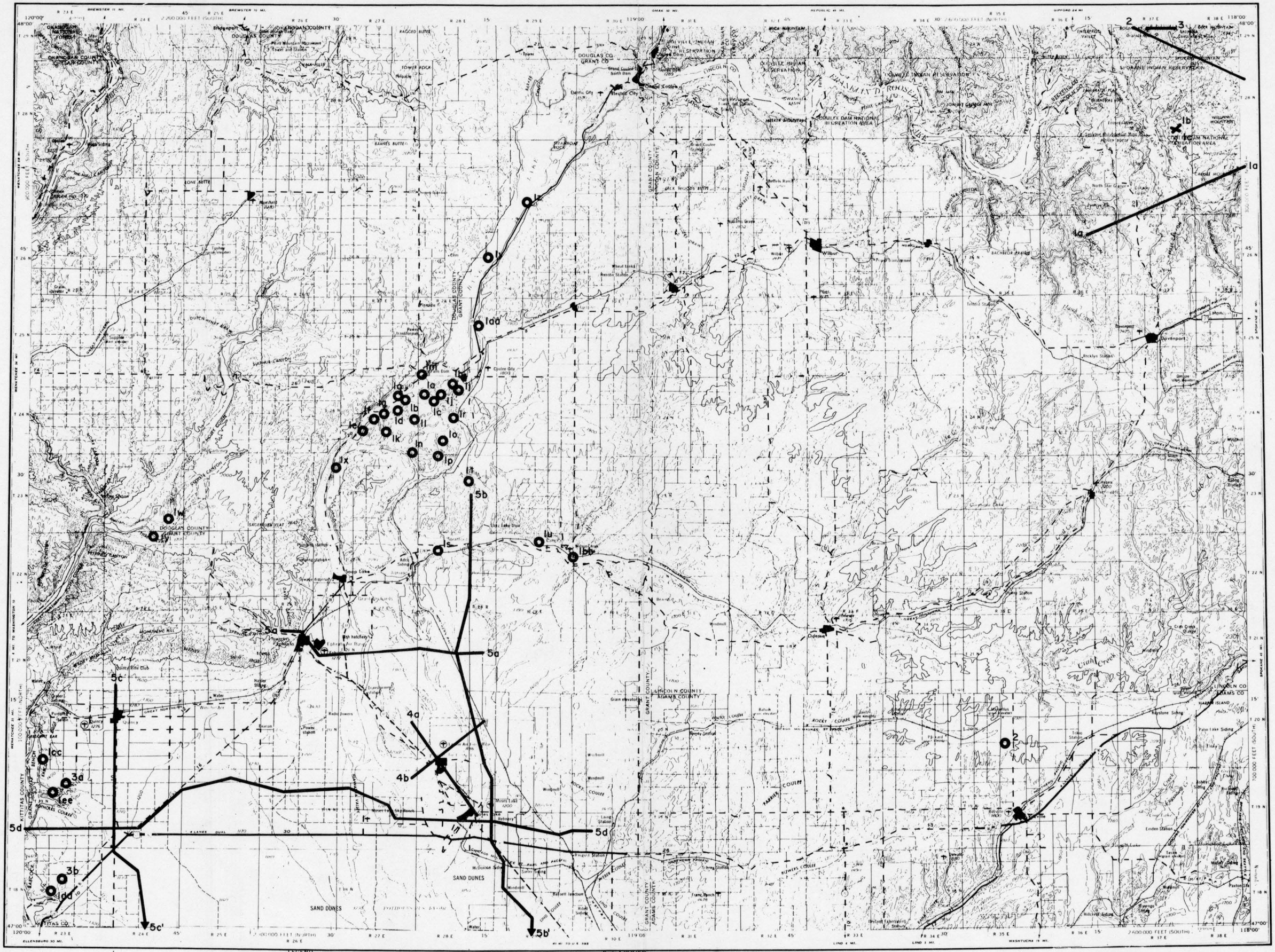
100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

Sheet K

Pocket part 15 of 24 RHO-BWI-C-59



Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

ROADS
- Hard surface, heavy duty — More than two lanes wide — 2 LANES | 4 LANES
- Two lanes wide; Federal route marker
- Hard surface, medium duty — More than two lanes wide — 2 LANES | 4 LANES
- Two lanes wide; State route marker
- Improved light duty
- Unimproved dirt
- Trail

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood
Approximate road alinement

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet
Marsh or swamp
Intermittent or dry stream
Power line

Scale 1:250,000

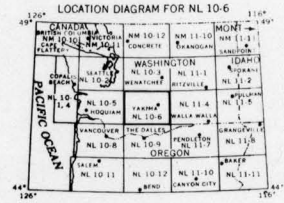
5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

LOCATION DIAGRAM FOR NL 10-6



LEGEND

2 ——— Cross Section

2a ○ Columnar Section

2 ——→ 2' Cross Section continued on adjacent map

Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1956. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

ROADS
- Hard surface, heavy duty, More than two lanes wide — 3 LANES
- Two lanes wide; Federal route marker — 3 LANES (3)
- Hard surface, medium duty, More than two lanes wide — 3 LANES
- Two lanes wide; State route marker — 3 LANES (11)
- Improved light duty
- Unimproved dirt
- Trail

Landmarks: School; Church; Other

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood
Approximate road alinement

Horizontal control point
Spot elevation in feet — 221
Marsh or swamp
Intermittent or dry stream
Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

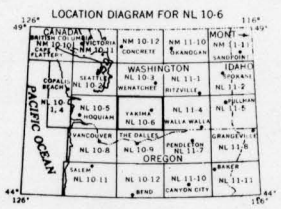
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°50' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

LOCATION DIAGRAM FOR NL 10-6



LEGEND

2 — Cross Section

2a — Columnar Section

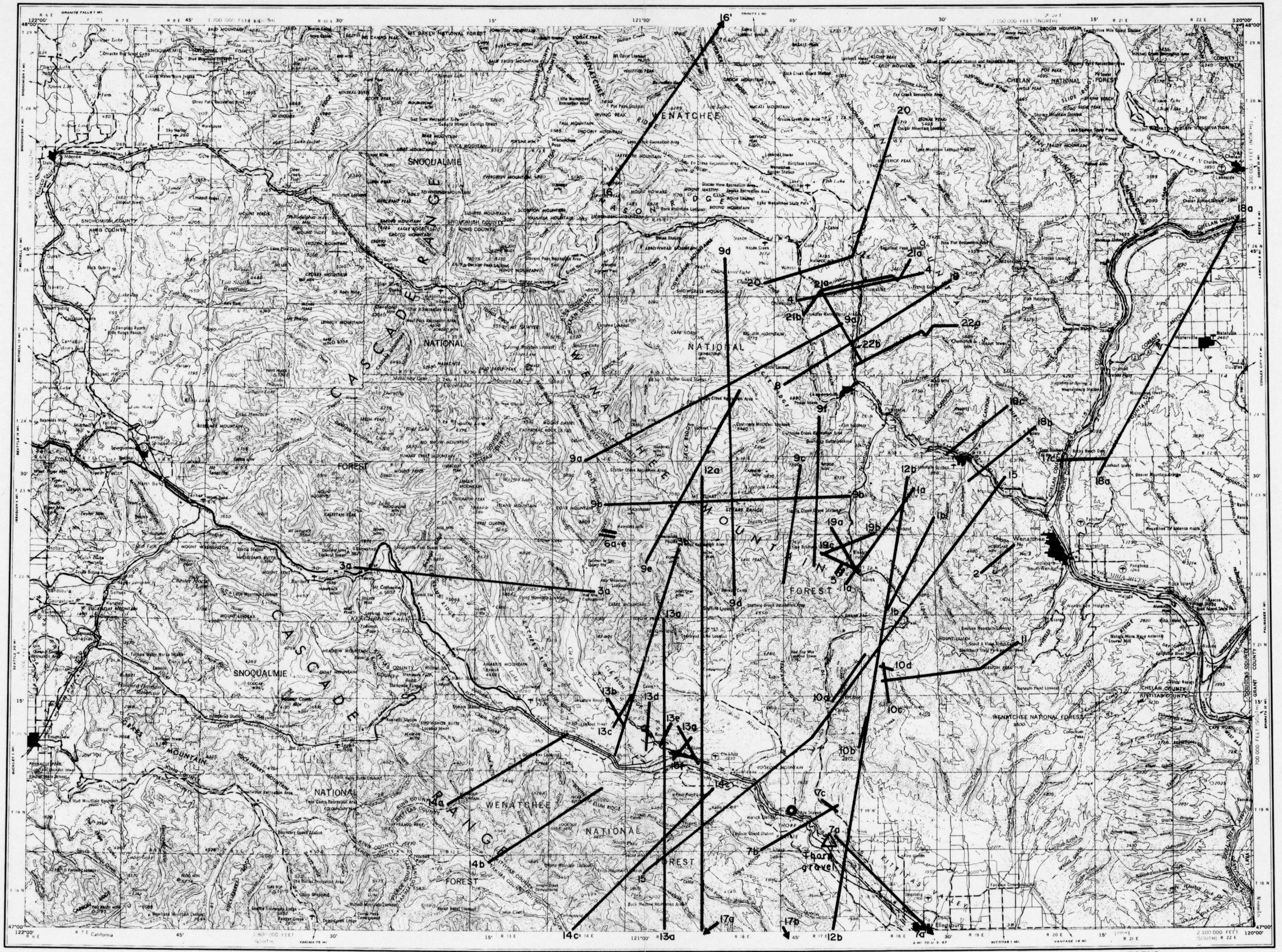
2 → 2' — Cross Section continued on adjacent map

▲ Type Section and formation name

Sheet M

Pocket part 17 of 24 RHO-BWI-C-59

OLYMPIA, WASHINGTON 98504



Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS: Standard gauge, Single track, Double or Multiple; Narrow gauge

BOUNDARIES: International, State, County, Park or reservation

ROADS
- Hard surface, heavy duty — More than two lanes wide
- Two lanes wide; Federal route marker
- Hard surface, medium duty — More than two lanes wide
- Two lanes wide; State route marker
- Improved light duty
- Unimproved dirt
- Trail

Landplane airport; Landing area; Seaplane airport; Orchard; Woods-brushwood; Approximate road alinement

Landmarks: School; Church; Other

Horizontal control point; Spot elevation in feet; Marsh or swamp; Intermittent or dry stream; Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

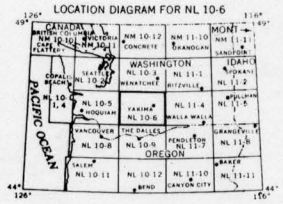
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

LOCATION DIAGRAM FOR NL 10-6

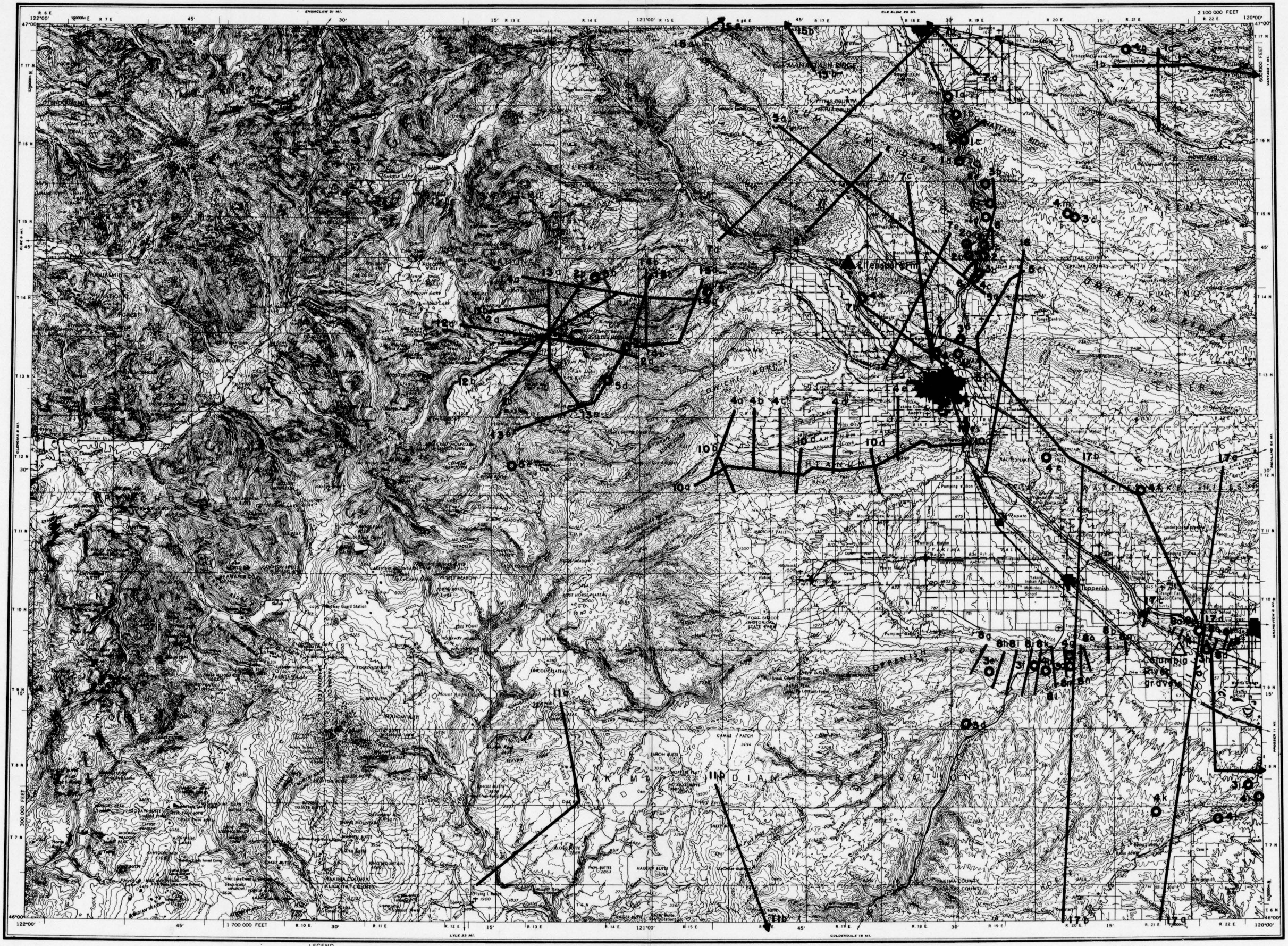


LEGEND

- 2 ——— Cross Section
- 2a ○ Columnar Section
- 2 ——→ 2' Cross Section continued on adjacent map
- △ Informal Type Section and formation name

Sheet N

Pocket part 18 of 24 RHO-BWI-C-59



Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood
Approximate road alinement

ROADS
- Hard surface, heavy duty — More than two lanes wide — 3 LANES OR MORE
- Two lanes wide; Federal route marker — 2 LANES
- Hard surface, medium duty — More than two lanes wide — 3 LANES OR MORE
- Two lanes wide; State route marker — 2 LANES
- Improved light duty
- Unimproved dirt
- Trail

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet
Marsh or swamp
Intermittent or dry stream
Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

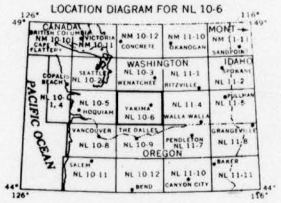
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

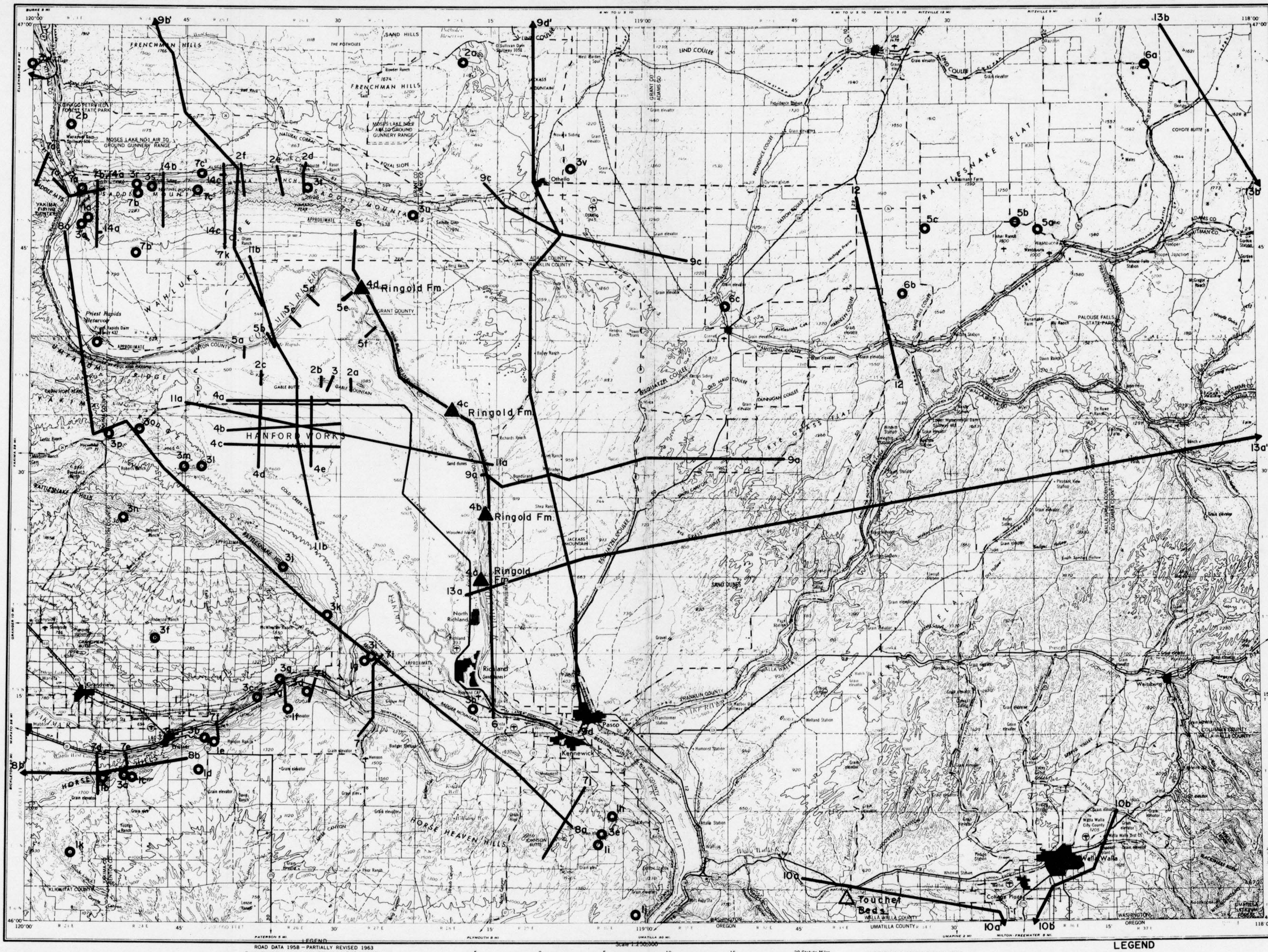
LOCATION DIAGRAM FOR NL 10-6



LEGEND

- 2 ——— Cross Section
- 2a ○ Columnar Section
- 2 ——→ 2' Cross Section continued on adjacent map
- ▲ Type Section and formation name
- △ Informal Type Section and formation name

Sheet O



Scale 1:250,000

Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track / Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood
Approximate road alinement

ROADS
- Hard surface, heavy duty — More than two lanes wide — 3 LANES OR 4 LANES
- Two lanes wide; Federal route marker — (3)
- Hard surface, medium duty — More than two lanes wide — 3 LANES OR 4 LANES
- Two lanes wide; State route marker — (11)
- Improved light duty
- Unimproved dirt
- Trail

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet — 221
Marsh or swamp
Intermittent or dry stream
Power line

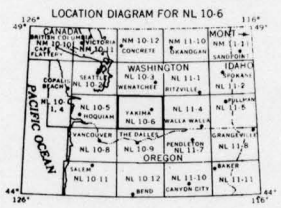
5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

LOCATION DIAGRAM FOR NL 10-6



LEGEND

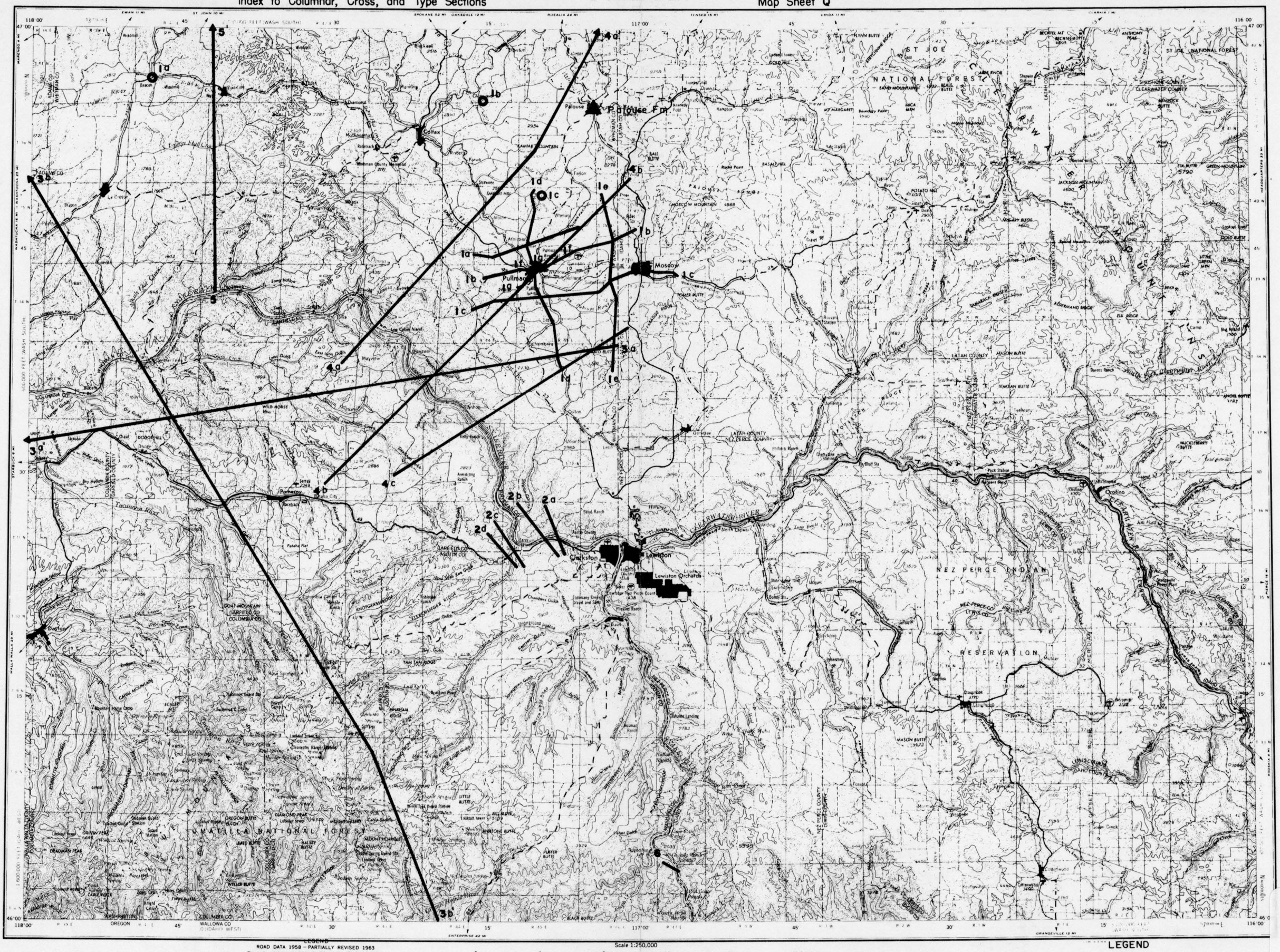
- 2 —— Cross Section
- 2a ○ Columnar Section
- 2 ——→ 2' Cross Section continued on adjacent map
- ▲ Type Section and formation name
- △ Informal Type Section and formation name

Sheet P

Pocket part 20 of 24 RHO-BWI-C-59

Index to Columnar, Cross, and Type Sections

Map Sheet Q



Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LEGEND

ROAD DATA 1958 — PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
- Over 500,000 — LOS ANGELES
- 100,000 to 500,000 — OMAHA
- 25,000 to 100,000 — GALVESTON
- 5,000 to 25,000 — Laramie
- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

ROADS
- Hard surface, heavy duty — More than two lanes wide — 3 LANES OR MORE
- Hard surface, medium duty — More than two lanes wide — 3 LANES OR MORE
- Two lanes wide; State route marker
- Improved light duty
- Unimproved dirt
- Trail

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood
Approximate road alinement

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet — 221
Marsh or swamp
Intermittent or dry stream
Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

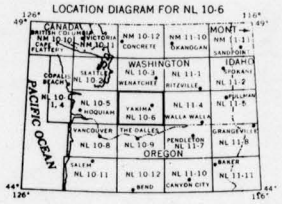
5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

1960 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 21°30' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 21°00' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0°02' WESTERLY

FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.

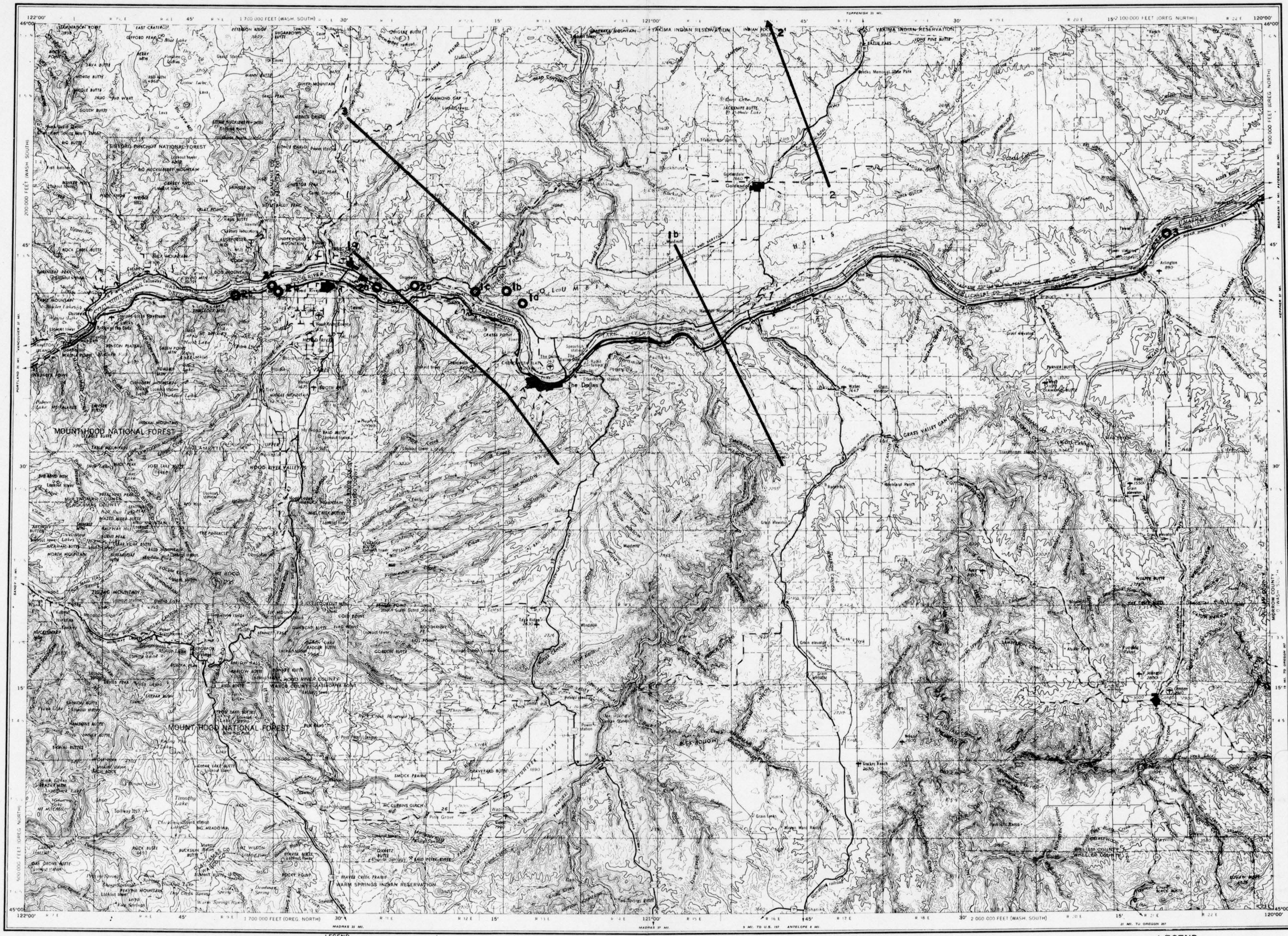
LOCATION DIAGRAM FOR NL 10-6



LEGEND

- 2 ——— Cross Section
- 2a ○ Columnar Section
- 2 ——→ 2' Cross Section continued on adjacent map
- ▲ Type Section and formation name

Sheet Q



LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES: Over 500,000 — LOS ANGELES; 100,000 to 500,000 — OMAHA; 25,000 to 100,000 — GALVESTON; 5,000 to 25,000 — Laramie; 1,000 to 5,000 — Grand Coulee; Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple): Standard gauge; Narrow gauge

BOUNDARIES: International; State; County; Park or reservation

ROADS: Hard surface, heavy duty — More than two lanes wide (3 LANES); Two lanes wide; Federal route marker (3); Hard surface, medium duty — More than two lanes wide (3 LANES); Two lanes wide; State route marker (11); Improved light duty; Unimproved dirt; Trail

Landplane airport; Landing area; Seaplane airport; Orchard; Woods-brushwood; Approximate road alinement

Landmarks: School; Church; Other; Horizontal control point; Spot elevation in feet (221); Marsh or swamp; Intermittent or dry stream; Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
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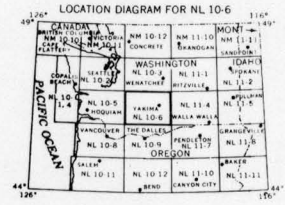
100,000-foot grid based on Washington coordinate system, south zone

10,000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

LOCATION DIAGRAM FOR NL 10-6



LEGEND

2 — Cross Section

2a — Columnar Section

2 — 2' Cross Section continued on adjacent map

Sheet R

DEPARTMENT OF NATURAL RESOURCES
GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

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GEOLOGY AND EARTH RESOURCES DIVISION
OLYMPIA, WASHINGTON 98504

Prepared by the Army Map Service (KCDV), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1959 by photogrammetric methods and from United States Quadrangles, 1:25,000, AMS, 1953. Planimetric detail revised by photo-planimetric methods. Horizontal and vertical control by USGS, USC&GS and CE. Photography field annotated 1958. Limited revision by U. S. Geological Survey 1963

100,000-foot grid based on Washington coordinate system, south zone

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LEGEND

ROAD DATA 1958 – PARTIALLY REVISED 1963

Figures in red denote approximate distances in miles between stars

POPULATED PLACES
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- 1,000 to 5,000 — Grand Coulee
- Less than 1,000 — Sun Valley

RAILROADS (Single track, Double or Multiple)
- Standard gauge
- Narrow gauge

BOUNDARIES
- International
- State
- County
- Park or reservation

Approximate road alinement

ROADS
- Hard surface, heavy duty — More than two lanes wide — 3 LANES | 4 LANES
- Two lanes wide; Federal route marker — 3
- Hard surface, medium duty — More than two lanes wide — 3 LANES | 4 LANES
- Two lanes wide; State route marker — 11
- Improved light duty
- Unimproved dirt
- Trail

Landplane airport
Landing area
Seaplane airport
Orchard
Woods-brushwood

Landmarks: School; Church; Other
Horizontal control point
Spot elevation in feet — 227
Marsh or swamp
Intermittent or dry stream
Power line

Scale 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
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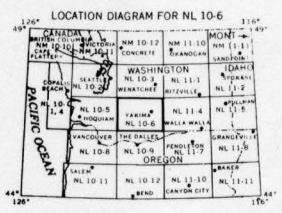
LOCATION DIAGRAM FOR NL 10-6



LEGEND

- 2 ——— Cross Section
- 2a ○ Columnar Section
- 2 ——→ 2' Cross Section continued on adjacent map

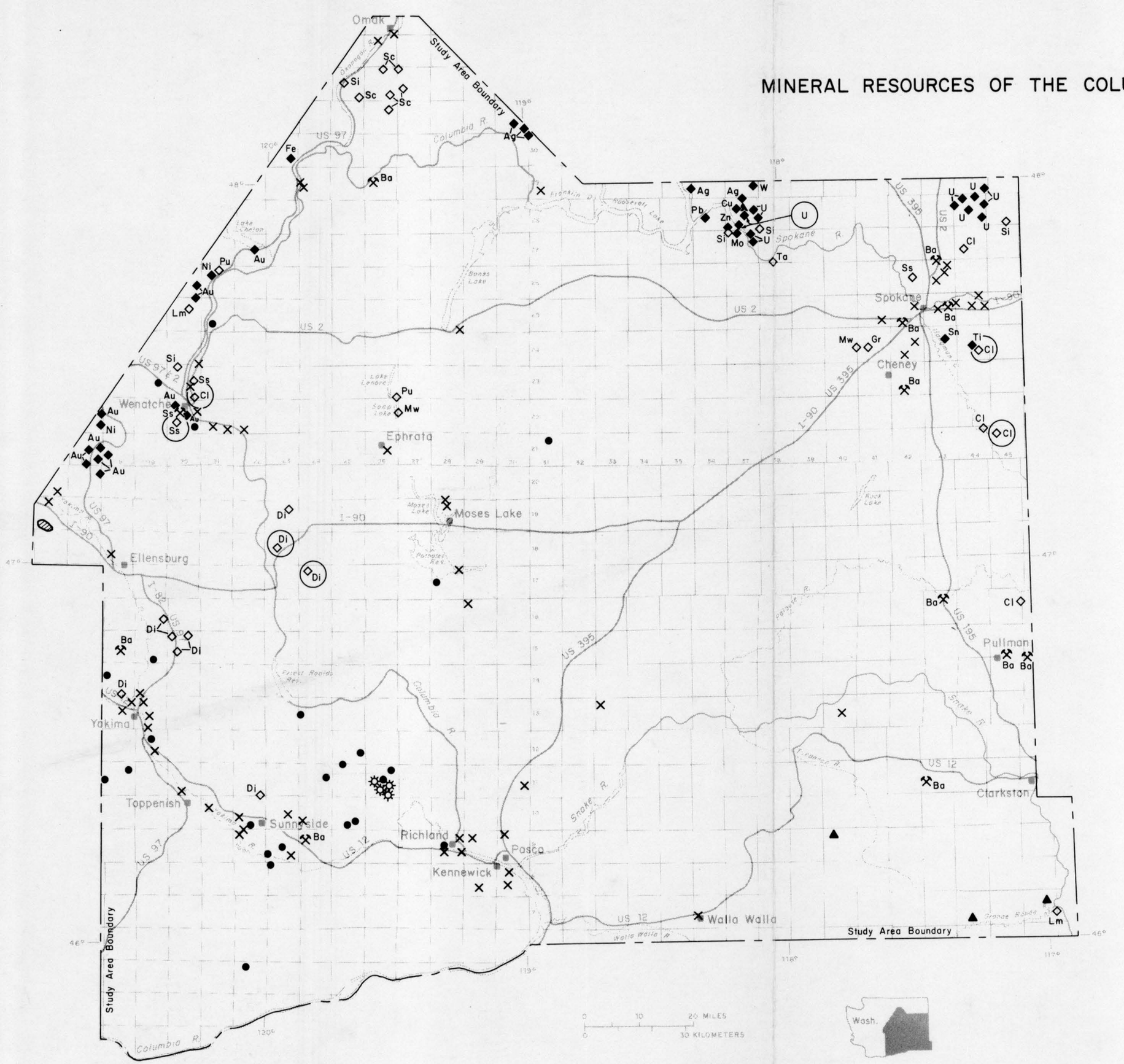
Sheet S

Pocket part 23 of 24 RHO-BWI-C-59

OLYMPIA, WASHINGTON 98504

MINERAL RESOURCES OF THE COLUMBIA BASIN

Sheet T



Metallic Mineral

- Current or recent producer
- Past producer or significant deposit

Ag – Silver	Pb – Lead
Au – Gold	Sn – Tin
Cu – Copper	Ti – Titanium
Mo – Molybdenum	U – Uranium
Ni – Nickel	W – Tungsten
	Zn – Zinc

Nonmetallic Mineral

- Current or recent producer
- Past producer or significant deposit

Cl – Clay	Pu – Pumice-pumicite
Di – Diatomite	Sc – Brine and salts
Gr – Granite	Si – Quartz
Lm – Limestone	Ss – Silica sand
Mw – Mineral Water	Ta – Talc

Energy Resource

- Gas well with record of production
- Exploratory oil and gas well
- Bituminous coal (area with reserves)
- Isolated occurrence of coal

Sand and Gravel Pits and Stone Quarries

- Stone quarry
  - Ba – Basalt
  - Ss – Sandstone
- Sand and gravel pit

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Plate T

From W.S. Moen, 1978, WDGER Map GM-22