

EXPLANATION:

Qal

QUATERNARY FLUVIAL DEPOSITS OF COLUMBIA RIVER.

Qls

LANDSLIDE DEPOSITS

Tcr

COLUMBIA RIVER BASALT: DENSE, FINE GRAINED, APHYRIC, SPORADICALLY MICROPHYRIC BASALT, LOCALLY INTERBEDDED WITH SCAPPOOSE FORMATION SANDSTONES AND GRAVELS; MINOR TALUSITE PILLOWS AND BRECCIAS.

Ts

SCAPPOOSE FORMATION: TUFFACEOUS, MICACEOUS, FOSSILIFEROUS SANDSTONES, SILTSTONES AND MUDSTONES; SANDS VARY FROM LITHIC TO ARKOSIC TO QUARTZOSE; LOCALLY CONTAINING CARBONIZED PLANT FRAGMENTS, MINOR COAL LENSES, PETRIFFIED WOOD AND PEBBLE TO BOULDER CONGLOMERATES WITH CLASTS OF MUDSTONE, GRANITE AND COLUMBIA RIVER BASALT; LOCAL CHANNEL COMPLEXES.

Tps

PITTSBURGH BLUFF FORMATION: DARK GRAY, FOSSILIFEROUS, TUFFACEOUS SANDY MUDSTONES, WEATHERING TO VERY LIGHT BROWN WITH THIN (LESS THAN 25 CM) BEDS OF LIGHT GRAY TO WHITE CLAYSTONE; FINELY LAMINATED, CROSS BEDDED ARKOSIC SANDS WITH THIN COAL SEAMS AND LENSES; MASSIVE TUFFACEOUS, FOSSILIFEROUS, CONCRETIONARY SANDY SILTSTONES.

Tpl

PITTSBURGH BLUFF FORMATION, LAMINATED SEQUENCE: INTERBEDDED, LAMINATED MUDSTONES AND SANDSTONES; BLACK MUDSTONE WITH LAMINAE OF FINE GRAINED SAND PREDOMINATES.

Tk

KEARSEY FORMATION: TUFFACEOUS, CONCRETIONARY, DARK GRAY BLACK, FOSSILIFEROUS MUDSTONE, WEATHERING TO LIGHT BUFF YELLOW, WITH FLASHER TYPE BEDDING; ASSOCIATED SANDSTONE LENSES AND SILTSTONES.

Tc Tv

COHLITZ FORMATION AND GOBLE VOLCANICS: INTERBEDDED, MICACEOUS, ARKOSIC SANDSTONE, SILTSTONE, AND MUDSTONE, WITH SAND PREDOMINATING IN THE UPPER PORTION AND SILTS PREDOMINATING IN THE LOWER PORTION. VOLCANICS ARE BASALTIC FLOWS, SOME SUBAQUEOUS, MOST PHYRIC; LOCALLY HYDROTHERMALLY ALTERED; OCCASIONAL BASALT CONGLOMERATE BETWEEN FLOWS.

Ti

INTRUSIVE ROCK: BASALTIC INTRUSIVE ROCK OF EOCENE AGE.



SCALE 1:31,680

1 INCH = 2.6 KILOMETERS

GEOLGIC SYMBOLS

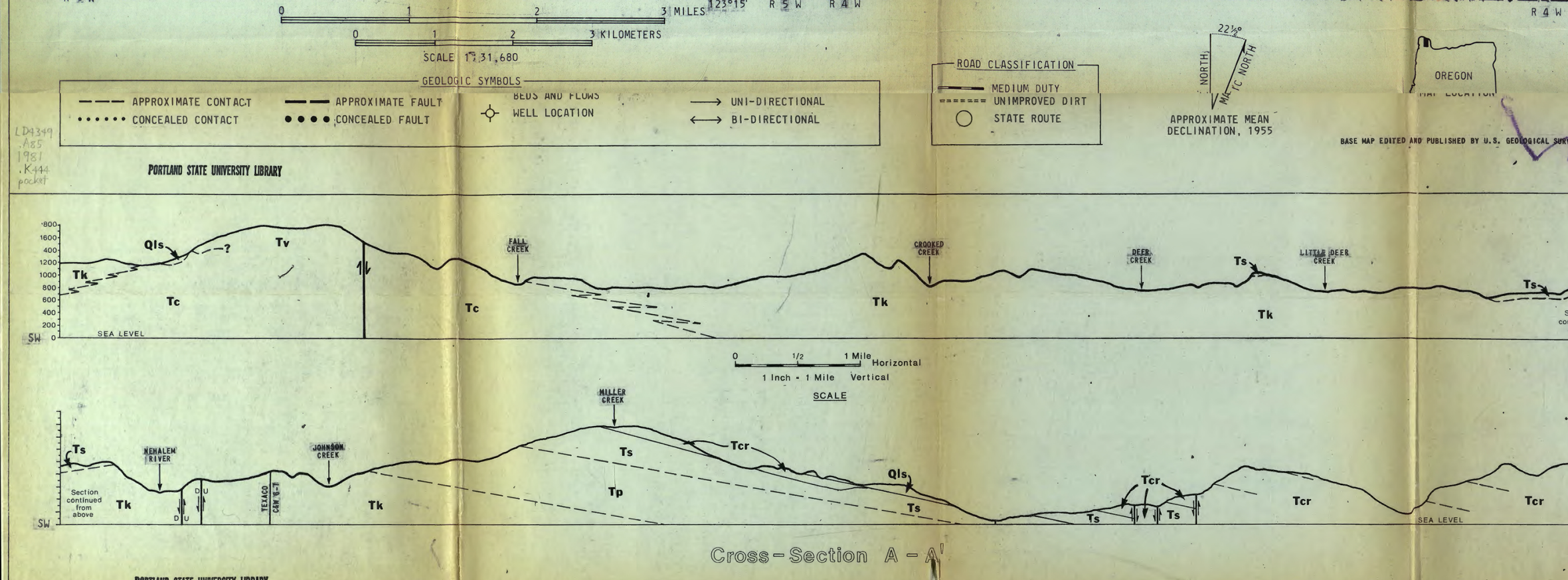
--- APPROXIMATE CONTACT
 CONCEALED CONTACT
 --- APPROXIMATE FAULT
 CONCEALED FAULT
 * BEDS AND FLOWS
 * WELL LOCATION
 → UNI-DIRECTIONAL
 ↔ BI-DIRECTIONAL

ROAD CLASSIFICATION

— MEDIUM DUTY
 - - - - - UNIMPROVED DIRT
 ○ STATE ROUTE

APPROXIMATE MEAN DECLINATION, 1955

BASE MAP EDITED AND PUBLISHED BY U.S. GEOLOGICAL SURVEY



Cross-Section A - A'

PRELIMINARY GEOLOGIC MAP

of

Townships 4, 5, 6 & 7 N.

Ranges 4 & 5 W.

Northwest Oregon

GEOLOGY COMPILED BY:
 MOIN KADRI
 KEVIN KELTY
 ELIZABETH DROWAY
 DALE TIMMONS
 ROBERT VANATTA