UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
NATIONAL PARK SERVICE

WATER RESOURCES INVESTIGATION
OPEN-FILE REPORT 79-1487
PLATE 1

CORRELATION OF MAP UNITS

Qal, Qls	Holocene and Pleistocene	QUATERNARY
Tr	Pliocene	TERTIARY
Tcr	Pliocene and Miocene	TERTIARY
Tjd	Miocene and Oligocene	TERTIARY
Tc	Oligocene and Eocene	TERTIARY
Ks		CRETACEOUS

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM – Unconsolidated deposits of silt, sand, and gravel

Qls LANDSLIDE DEPOSITS – Unstratified and unsorted mixtures of basaltic, tuffaceous, and sedimentary rocks

Tr RATTLESNAKE FORMATION – Conglomerate, gravel, sand and interbedded rhyolitic tuff

Tcr COLUMBIA RIVER BASALT GROUP (Undifferentiated) – Olivine-bearing basaltic flows, tuff, and ash flows

Tjd JOHN DAY FORMATION – Tuffaceous siltstone, rhyolitic and ash-flow tuff, and pebble-tuff conglomerate

Tc CLARNO FORMATION – Andesitic flows, flow breccia, tuff, siltstone and conglomerate

Ks SEDIMENTARY ROCKS – Shale, siltstone, and conglomerate

CONTACT

FAULT – Dashed where approximately located; U, upthrown side; D, downthrown side

SYNCLINE – Fold axis, arrow shows direction of plunge

PROPOSED UNIT BOUNDARY – November 1977

STRIKE AND DIP OF BEDS

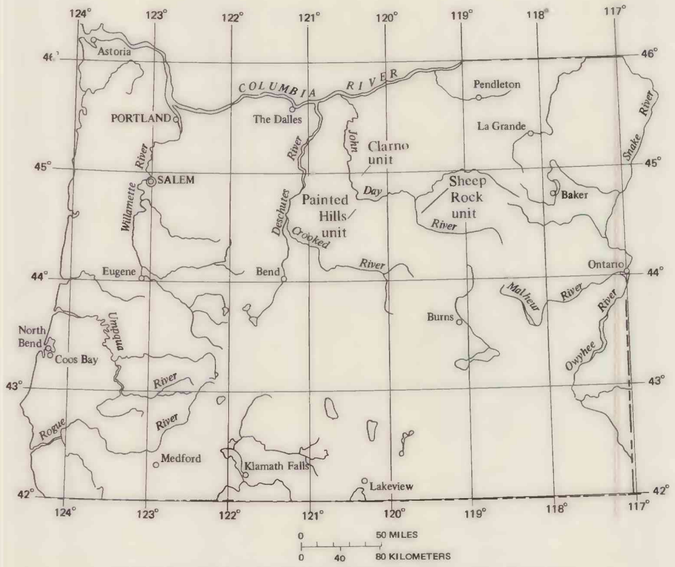
bca WELL – Location number shown

ddcs SPRING – Location number shown

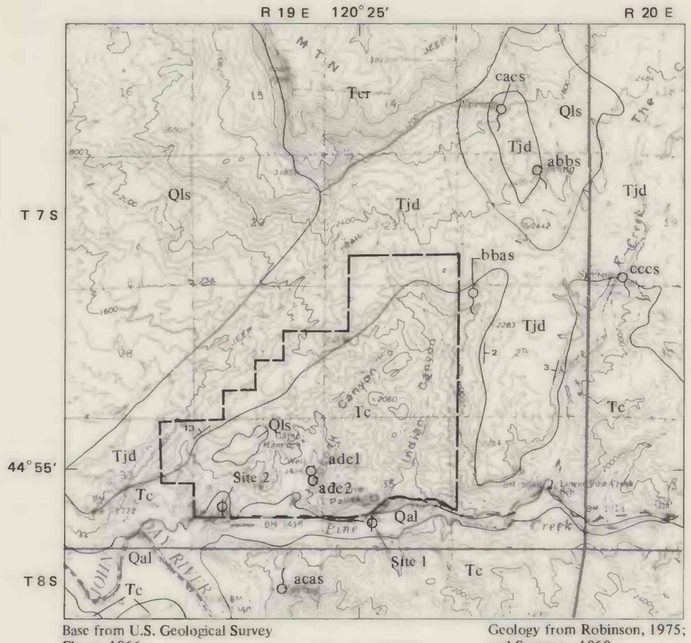
PROPOSED WELL SITE

PROPOSED CAMPGROUND

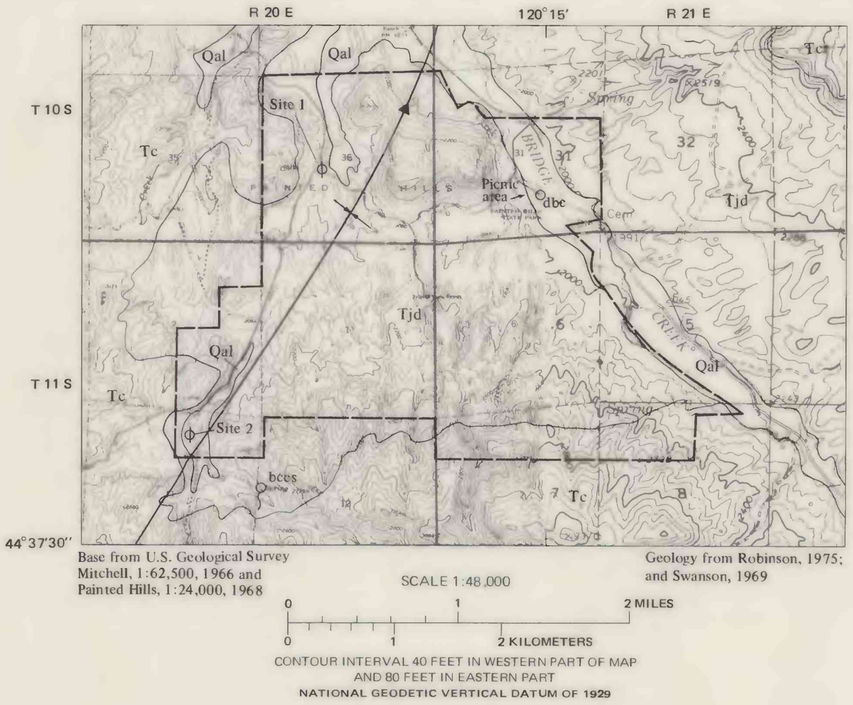
1404055 STREAM GAGING STATION – Station number shown



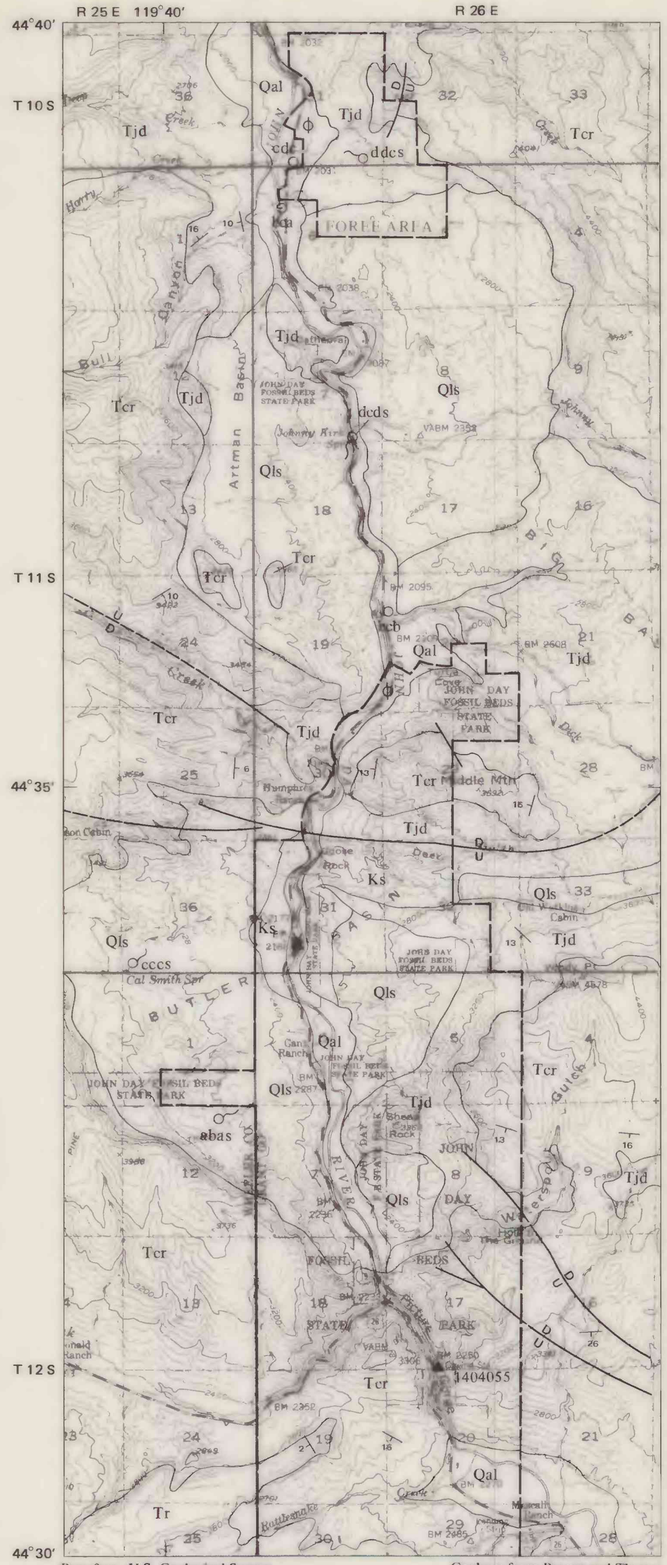
INDEX MAP OF OREGON SHOWING LOCATION OF STUDY AREA



CLARNO UNIT



PAINTED HILLS UNIT



SHEEP ROCK UNIT

GEOHYDROLOGIC MAPS OF CLARNO, PAINTED HILLS, AND SHEEP ROCK UNITS OF THE JOHN DAY FOSSIL BEDS NATIONAL MONUMENT, OREGON