STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
Head Office: 1069 State Office Bldg., Portland 1, Oregon
Telephone: CApitol 6-2161, Ext. 488

Field Offices

2033 First Street
Baker

239 S.E."H" Street
Grants Pass

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PROGRESS OF GEOLOGIC STUDIES IN OREGON

Compiled by Herbert G. Schlicker*

The number of geologists doing field work in Oregon has noticeably increased in recent years. This can be accounted for by the greater number of graduate students working for degrees in geology and the concentrated efforts by the U.S.Geological Survey and the State of Oregon Department of Geology and Mineral Industries to complete the State mapping project. It is probable that during the summer of 1960 more than one hundred geologic field studies will be underway. If the number appears to be excessive, it should be realized that only about two-thirds of Oregon's 96,000 square miles have been geologically mapped, and at least half of this mapping has been reconnaissance. Furthermore, the stratigraphic and mineral-deposit studies so far completed are relatively few compared to the many that must be accomplished before Oregon's resources are adequately known.

This paper is intended to show, by means of lists and index maps, the subjects and areas currently selected for geologic study by schools, government agencies, and individuals. Even though an effort was made to include all such geologic studies in the compilation, it is quite possible that a few have been overlooked.

The studies have been separated into lists A, B, C, and D, the first three of which are accompanied by index maps. List A and its corresponding index map show areas of geologic mapping by graduate students for college theses, including those theses completed since 1958 but not appearing in the Department's Miscellaneous Paper No. 7, Bibliography of theses on Oregon geology.

List B and its index map show areas of geologic mapping in progress or contemplated by State and Federal agencies and by persons working privately or under research grants. It also includes a few theses areas already shown on Map A, indicating that these theses and their maps are being prepared for publication.

List C and its index map show areas of special studies such as paleontology, stratigraphy, mineral investigations, and geology of local interest. This work is also being done by government agencies, graduate students in geology, and private researchers.

List D consists of special studies similar to those indicated on List C, but covering too broad a distribution to show on an index map.

It should be pointed out that most of the titles assigned to the projects listed are as yet only approximate. Definitely known titles of completed studies are indicated by quotation marks. In compiling the material for this report, the writer received much valuable information from the geologists contacted regarding their forthcoming field work, and it is regretted that space did not allow printing of more than a very brief statement about each project. The fine cooperation shown by the many persons who contributed to the compilation is greatly appreciated.

If a record of this type is found to be of sufficient interest to geologists, the Department will continue to obtain and periodically publish such information.

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* Geologist, State of Oregon Department of Geology and Mineral Industries, and former champion DOGAMI bridge player. How about a game?

LIST "A": GEOLOGIC MAPPING BY GRADUATE STUDENTS FOR COLLEGE THESES

(1) Arndt, John R., Geology of the southwestern part of the Mitchell quadrangle, Ore. Oregon State College master's thesis. In progress.

(2) Bateman, Richard L., Geology of T.20 S., R.28 E., Burns No. 2 quadrangle, Oregon. University of Oregon master's thesis. In progress.

(3) Beeson, Marvin H., Geology of T.19 S., R.28 E., Burns No. 2 quadrangle, Oregon. University of Oregon master's thesis. In progress.

(4) Blair, Frank H., Geology of the southwestern quarter of the Alvord Lake No. 3 quadrangle, Oregon. Oregon State College master's thesis. In progress.

(5) Bristow, Milton M., "The geology of the northwestern third of the Marcola quadrangle, Oregon." University of Oregon master's thesis, 1959.

(6) Carnahan, Gary L., Geology of the southwestern part of the Eagle Cap quadrangle, Oregon. Oregon State College master's thesis. In progress.

(7) Cochran, David O., Cenozoic geology of the Pueblo Mountains, Oregon and Nevada. University of Washington doctoral thesis. In progress.

(8) Crowley, Karl C., Geology of the southeastern quarter of the Canyon City No. 3 quadrangle, Oregon. University of Oregon master's thesis. In progress.

(9) Dodds, R.Kenneth, Geology and stratigraphy of the western half of the Svenson quadrangle, Oregon. University of Oregon master's thesis. In progress.

(10) Greene, Frank F., Geology of the northeastern corner of the Sparta quadrangle, Oregon. Oregon State College master's thesis. In progress.

(11) Gregory, Cecilia Dolores, Geology of the Drewsey area, Oregon. University of Oregon master's thesis. In progress.

(12) Haddock, Gerald H., "Geology of the Cougar Peak volcanic area, Lake County, Oregon." Washington State College master's thesis, 1959.

(13) Hoover, Linn, "Geology of the Anlauf and Drain quadrangles, Douglas and Lane counties, Oregon." University of Washington doctoral thesis, 1959.

(14) Howard, John K., General geology of the Cape Sebastian-Gold Beach area, Oregon. University of Wisconsin master's thesis. To begin summer 1960.

(15) Johnson, George D., "Geology of the northwest quarter of the Alvord Lake No. 3 quadrangle, Oregon." Oregon State College master's thesis, 1960.

(16) Kaiser, William, Petrology of basement rocks and sediments in the Port Orford region. University of Wisconsin master's thesis. To begin summer 1960.

(17) Kittleman, L.R., Geological study of the area bordering the southern half of the Owyhee Reservoir. University of Oregon doctoral thesis. In progress.

(18) Koch, John G., Geology of Humbug Mountain area, Oregon. University of Wisconsin master's thesis. To be completed May 1960.

(18a) _____, Mapping of Humbug Mountain area to be extended south and east for doctoral thesis. To begin summer 1960.

(19) Lawrence, John K., Geology of the southern third of the Sutherlin quadrangle, Oregon. University of Oregon master's thesis. In progress.

(20) Lindsley, Donald H., Geology and paleomagnetism of the Spray quadrangle, Oregon. Johns Hopkins University doctoral thesis. In progress.

(21) Maloney, Neil J., Geology of the eastern half of the Beatty Butte No. 4 quadrangle, Oregon. Oregon State College master's thesis. In progress.

(22) Nolf, Bruce O., Structure and stratigraphy of the Wallowa Mountains, Oregon. Princeton University doctoral thesis. In progress.

(23) Oregon, University of, Northern third of the Dixonville quadrangle, Oregon. Area to be assigned.

(23a) _____, Southern third of the Glide quadrangle, Oregon. Area to be assigned.

(24) Patterson, Peter V., Geology of the northern third of the Glide quadrangle, Oregon. University of Oregon master's thesis. In progress.

(25) Payton, Clifford C., Geology of the middle third of the Sutherlin quadrangle, Oregon. University of Oregon master's thesis. In progress.

(26) Peck, Dallas L., Geology of the Cascade Range in Oregon north of latitude 43°. Harvard University doctoral thesis. To be completed June 1960.

(27) Prostka, Harold, Geology of the Sparta quadrangle, Oregon. Johns Hopkins University doctoral thesis. In progress.

(28) Pyle, Charles A., Geology of the northwestern third of the Roseburg quadrangle, Oregon. University of Oregon master's thesis. In progress.

(29) Schnaible, Robert H., Geology of the middle third of the Glide quadrangle, Oregon. University of Oregon master's thesis. In progress.

(30) Smedes, Harry W., "Geology of part of the northern Wallowa Mountains, Oregon." University of Washington doctoral thesis, 1960.

(31) Trantham, Charles I., Geology of the southwestern fourth of the Canyon City No.3 quadrangle, Oregon. University of Oregon master's thesis. In progress.

(32) Taylor, Edward M., Geology of the northwestern part of the Mitchell quadrangle, Oregon. Oregon State College master's thesis. In progress.

(33) Vigrass, Laurence W., Geology of the Suplee area, Crook, Grant, and Harney counties, Oregon. Stanford University doctoral thesis. In progress.

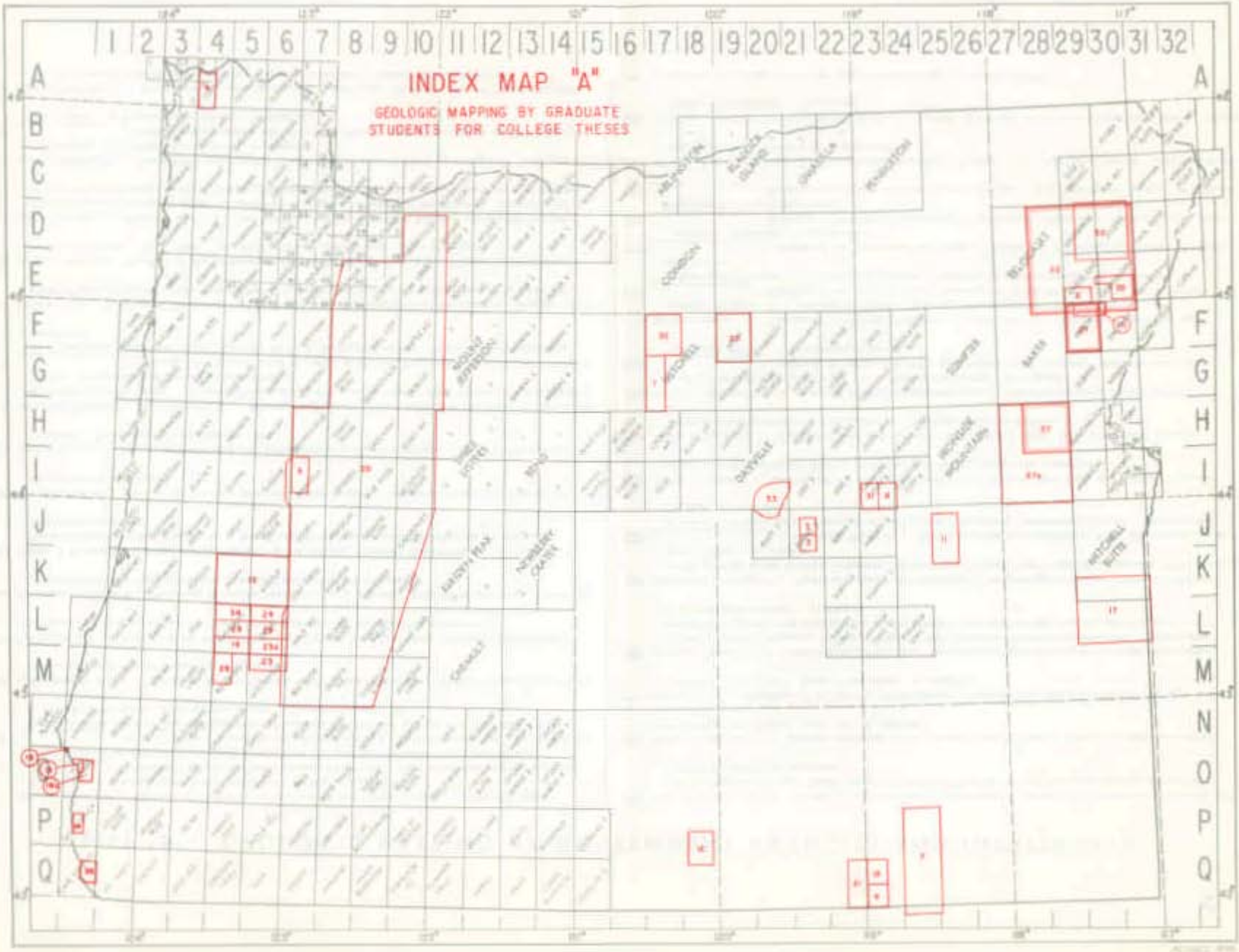
(34) Westhusing, James K., "The geology of the northern third of the Sutherlin quadrangle, Oregon." University of Oregon master's thesis, 1959.

(35) Wetherell, Clyde E., "Geology of part of the southeastern Wallowa Mountains, northeastern Oregon." Oregon State College master's thesis, 1960.

(36) Widmier, John M., Stratigraphy and structure of the Brookings-Cape Ferrelo region, Oregon. University of Wisconsin doctoral thesis. To begin summer 1960.

(37) Wolff, Ernest N., "The geology of the upper Willow Creek-Cow Creek valley area of northern Malheur County, Oregon." University of Oregon master's thesis, 1959.

(37a) _____, The geology of the Caviness quadrangle, Oregon. University of Oregon doctoral thesis. In progress.


INDEX MAP "A"
GEOLOGIC MAPPING BY GRADUATE STUDENTS FOR COLLEGE THESES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
A B C D E F G H I J K L M N O P Q

LIST "B": GEOLOGIC MAPPING BY GOVERNMENT AGENCIES AND INDIVIDUALS

(1) Baldwin, Ewart M., Revision of the Dallas and Valsetz geologic maps, Oregon. State of Oregon Department of Geology and Mineral Industries. To begin August 1960.

(2) _____, Geologic map of the lower Umpqua River area. Work completed and being edited for publication by the U.S.Geological Survey as an Oil and Gas Investigation series OM map.

(3) _____, et al., Proposed cooperative geologic mapping venture between the U.S.Geological Survey and the State of Oregon Department of Geology and Mineral Industries in the Camas Valley-Dutchman Butte region, southwestern Oregon. Expected to begin 1961.

(4) Buddenhagen, H.J., Geology of the pre-Tertiary inlier of central Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

(5) Corcoran, R.E., Geology of the Mitchell Butte quadrangle, Oregon. State of Oregon Department of Geology and Mineral Industries. Field work completed and manuscript in preparation.

(6) Dickinson, William R., Petrology of marine Mesozoic clastic volcanic rocks in the Izee area, including chemical and mineralogical aspects. Stanford University. In progress.

(7) Dodds, R.Kenneth, Geology and stratigraphy of the Astoria, Svenson, Cannon Beach, and Saddle Mountain quadrangles, Oregon. U.S.Army Corps of Engineers. Unaffiliated study. Field work 50 percent completed.

(8) Donath, Fred A., Basin-range structure of south-central Oregon. Columbia University. Manuscript in preparation for publication.

(9) Dott, R.H., Jr., Eocene sedimentation and paleogeography around Coos Bay, Oregon. University of Wisconsin. Field work to be completed 1960.

(10) Hampton, Eugene R., and Brown, R.G., Geology and ground-water resources of the upper Grande Ronde River basin, Union County, Oregon. To be published as a Water Supply Paper by the U.S.Geological Survey. Field work and manuscript completed.

(11) _____, Geology and ground water resources of the Fort Rock basin, Lake County, Oregon. To be published as a Water Supply Paper by the U.S.Geological Survey. Field work and manuscript completed.

(12) Hoover, Linn, Geology of the Anlauf and Drain quadrangles, Douglas and Lane counties, Oregon. Completed and submitted for publication by the U.S.Geological Survey. Unedited version on open file.

(13) Howell, Paul W., Geology of the northeastern part of the Willamette Valley, Oregon, with emphasis on the stratigraphy. U.S. Army Corps of Engineers. Unaffiliated study. In progress.

(14) Koch, George S., Bowen, Richard G., and Prostka, Harold, Geologic mapping and preliminary geochemical investigations for copper in northeastern Oregon. Mapping of Baker No.1, Telocaset No. 4, and Sparta quadrangles. State of Oregon Department of Geology and Mineral Industries. In progress.

(15) Lewis, Richard Q., Compilation and mapping Oregon part of A.M.S.Baker quadrangle for State geologic map project. U.S.Geological Survey. In progress.

(16) _____, Field-checking eastern half of A.M.S.Bend quadrangle, Oregon, for State geologic map project. U.S.Geological Survey. In progress.

(17) Lowry, Wallace D., Geology of the Ironside Mountain quadrangle, Oregon. State of Oregon Department of Geology and Mineral Industries. Mapping completed, manuscript in preparation.

(18) Peck, Dallas L., et al, Geologic reconnaissance of the Western Cascades of Oregon north of latitude 43°. U.S.Geological Survey. Report completed and submitted for review; to be published as a Bulletin. Open-file report to be released.

(19) Peterson, Norman V., Geologic mapping in the Lakeview area, Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

(**) Sargent, S.C., Geology of The Dalles, White Salmon, Wishram, and Wasco quadrangles, Oregon and Washington. U.S.Army Corps of Engineers. In progress.

(20) Snavely, Parke D., Jr., and Wagner, Holly C., Detailed geologic mapping of the Cape Foulweather, Euchre Mountain, Yaquina, Toledo, Waldport, and Tidewater 15-minute quadrangles, Oregon, and related stratigraphic and petrographic studies in the central part of the Oregon Coast Ranges. U.S.Geological Survey. In progress.

(21) Taubeneck, William H., Series of papers to be published in the Geological Society of America Bulletin on the geology of the Elkhorn Mountains, northeastern Oregon. (Part 1 published February 1957.) Oregon State College. In progress.

(22) _____, and Nolf, Bruce O., Series of papers to be published in the Geological Society of America Bulletin on the evolution of the Wallowa Mountains, northeastern Oregon. Oregon State College. In progress.

(23) Thayer, Thomas P., Geology of the Aldrich Mountain, Mt. Vernon, John Day, and Prairie City quadrangles. U.S.Geological Survey. Mapping completed, manuscript in progress.

(24) Trimble, Donald E., Geology of Portland, Oregon, and adjacent areas. U.S.Geological Survey. Manuscript being edited for publication as a Geological Survey Bulletin.

(25) Walker, George W., In charge of State geologic map project. Presently mapping eastern half of A.M.S.Klamath Falls quadrangle. U.S.Geological Survey. In progress.

(26) _____, Mapping to continue in Adel quadrangle, which includes Steens Mountain and Pueblo Mountains. U.S.Geological Survey.

(27) Waters, Aaron C., Geology of the Ochoco Reservoir, Lookout Mountain, Eagle Rock, and Post quadrangles, Oregon. U.S.Geological Survey. Map and manuscript near completion.

(28) _____, Geology of the Madras, Dufer, eastern part of the Mt. Hood, and Mt. Jefferson quadrangles, Oregon. U.S.Geological Survey. Mapping 95 percent completed, manuscript in preparation.

(29) _____, Geology of the Columbia River Gorge, Oregon. U.S.Geological Survey. Mapping completed, manuscript in preparation.

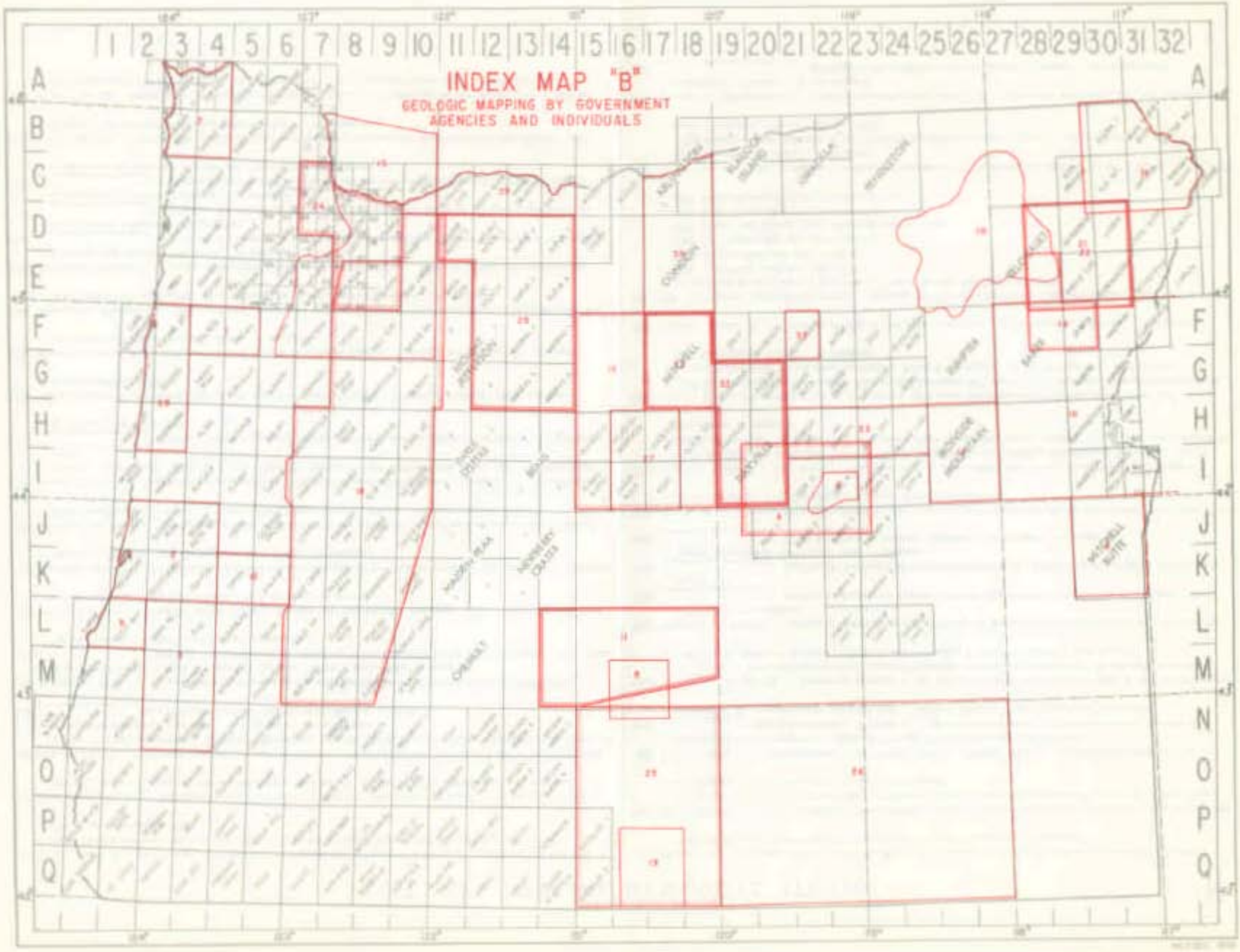
(30) _____, Geology of the Condon and Arlington quadrangles, Oregon. U.S.Geological Survey. Mapping 90 percent completed.

(31) _____, Geology of northern Wallowa County, Oregon. U.S.Geological Survey. In progress.

(32) Wilcox, R.E., Geology of the Monument quadrangle, Oregon. U.S.Geological Survey. Mapping to be completed 1960. Manuscript in preparation.

(33) Wilkinson, W.D., Geology of the Mitchell, Dayville, Richmond, and Picture Gorge quadrangles, Oregon. Oregon State College. In progress.

(**) Information received too late for areas to be outlined on INDEX MAP "B".


INDEX MAP "B"
GEOLOGIC MAPPING BY GOVERNMENT AGENCIES AND INDIVIDUALS
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
A B C D E F G H I J K L M N O P Q

LIST "C": SPECIAL GEOLOGIC STUDIES

(1) Dole, Hollis M., and Bowen, Richard G., Structural and petrographic study of welded tuff in the Malheur canyon between Juntura and Harper. State of Oregon Department of Geology and Mineral Industries. To begin 1960.

(2) Goodspeed, G.E., "The igneous and metamorphic rocks at Cornucopia, Oregon." To be published in the Geological Society of America Bulletin. University of Washington. Manuscript in progress.

(3) Hay, Richard L. Diagenetic alterations of the volcanic materials of the Clarno and John Day formations in the Mitchell quadrangle, Oregon. Secondary zeolites, feldspars, and "clay" minerals have received particular emphasis. University of California. In progress.

(4) _____, Area of future study of Clarno and John Day formations.

(5) Hogenson, G.M., Ground-water resources of the east Portland area. Coordinated with USGS Map GQ-104 (Trimble). U.S.Geological Survey. Water Supply Paper in progress.

(6) _____, Geology and ground-water resources of the Umatilla River Basin, Oregon. U.S.Geological Survey. Water Supply Paper in progress.

(7) Hotz, Preston E., Klamath nickel studies, Oregon and California. Recessed 1958. Mapping of Riddle nickel deposit, 1960 field season. U.S.Geological Survey.

(8) Jarman, Gary D., Foraminifera and associated sediments of the coastal waters in the vicinity of Newport, Oregon. Oregon State College master's thesis. In progress.

(9) Johnson, Arvid M., Stratigraphic study of the Deer Butte formation, Owyhee Reservoir area, Mitchell Butte quadrangle, Oregon. University of Oregon master's thesis. To begin summer 1960.

(10) Jones, David L., Cretaceous rocks and fossils in the Ashland-Medford area, Oregon. U.S.Geological Survey. In progress. Possible future work will extend to Port Orford-Gold Beach, and Myrtle Creek areas.

(11) _____, Collecting Cretaceous fossils in the Mitchell area in conjunction with W.E.Wilkinson of Oregon State College.

(12) Jones, Robert W., "Lower Tertiary foraminifera from Waldport, Oregon." Oregon State College master's thesis, 1960.

(13) Kleck, Wallace D., Study of zeolites in the vicinity of Eugene, Coburg, and Springfield, Oregon. University of Oregon master's thesis. In progress.

(14) Newcomb, Reuben C., Geologic and hydrologic factors that govern the occurrence of ground water in the Columbia River basalt. U.S.Geological Survey research project. In progress.

(15) Peterson, Norman V., Study of the Bear Creek uranium occurrence. State of Oregon Department of Geology and Mineral Industries. In progress.

(16) _____, Study of the Lakeview uranium deposits. State of Oregon Department of Geology and Mineral Industries. In progress.

(17) _____, Study of the Powell Butte uranium occurrence. State of Oregon Department of Geology and Mineral Industries. In progress.

(18) _____, Steens Mountain and Pueblo Mountains uranium occurrences. State of Oregon Department of Geology and Mineral Industries. In progress.

(19) Pigg, John H., Stratigraphic study of the lower Tertiary sediments in the Pilot Rock and Heppner area, Oregon. University of Oregon master's thesis. In progress.

(20) Price, Donald, Detailed reconnaissance mapping of the surficial geology of the French Prairie part of the Willamette Valley, Oregon. U.S.Geological Survey ground-water study. To begin 1961.

(21) Ramp, Len, Geology of the Quartz Mountain silica deposit, Quartz Mountain quadrangle, Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

(22) Rau, Weldon W., Basic studies of the microfauna of the Newport embayment, Newport, Oregon. Also, foraminifera of the Nye formation. Extended studies include Tertiary microfauna of the Coast Range of Oregon. U.S.Geological Survey. In progress.

(23) Sceva, Jack E., Ground-water study of Cow Valley, Malheur County, in order to determine the ground-water recharge rate. State of Oregon Water Resources Department.

(24) _____, and Bartholomew, William S., Ground-water study of The Dalles area in order to determine the ground-water recharge rate. State of Oregon Water Resources Department.

(25) Schlicker, Herbert G., Economic geology of the intrusive rocks in the central part of the Coast Ranges of Oregon. State of Oregon Department of Geology and Mineral Industries. To be published as Part 2 of Department bulletin. (Part 1, see Snavely, P.D., Jr., et al.) In progress.

(26) Shotwell, J.Arnold, Studies of mammalian paleontology in the northern Great Basin area. University of Oregon. In progress.

(27) _____, Studies of Barstovian mammals in the Great Basin. University of Oregon. To begin 1960.

(28) _____, Studies of the fauna of the Clarno formation. University of Oregon. Field work largely completed; laboratory work in progress.

(29) _____, Study of Pliocene faunas. University of Oregon. In progress.

(30) Smith, W.C., Mineralogy and geologic setting of the borate-bearing playas or marshes. Includes Alvord Lake, Oregon. U.S.Geological Survey. Reports in progress.

(31) Snavely, Parke D., Jr., et al., Intrusive rocks in the central part of the Coast Ranges of Oregon. U.S.Geological Survey and State of Oregon Department of Geology and Mineral Industries. To be published as Part 1 of Department bulletin. (Part 2, see Schlicker, Herbert G.) Field work completed. Manuscript in progress.

(32) Stuart, D.J., Reconnaissance gravity survey with some aeromagnetic traverses of the area from 123° W. longitude to the Pacific Ocean and between 44° and 45° N. latitude. Geophysical data to be correlated with the geology by Stuart, Parke D. Snavely, Jr., R.W.Bromery, and others. U.S.Geological Survey. In progress.

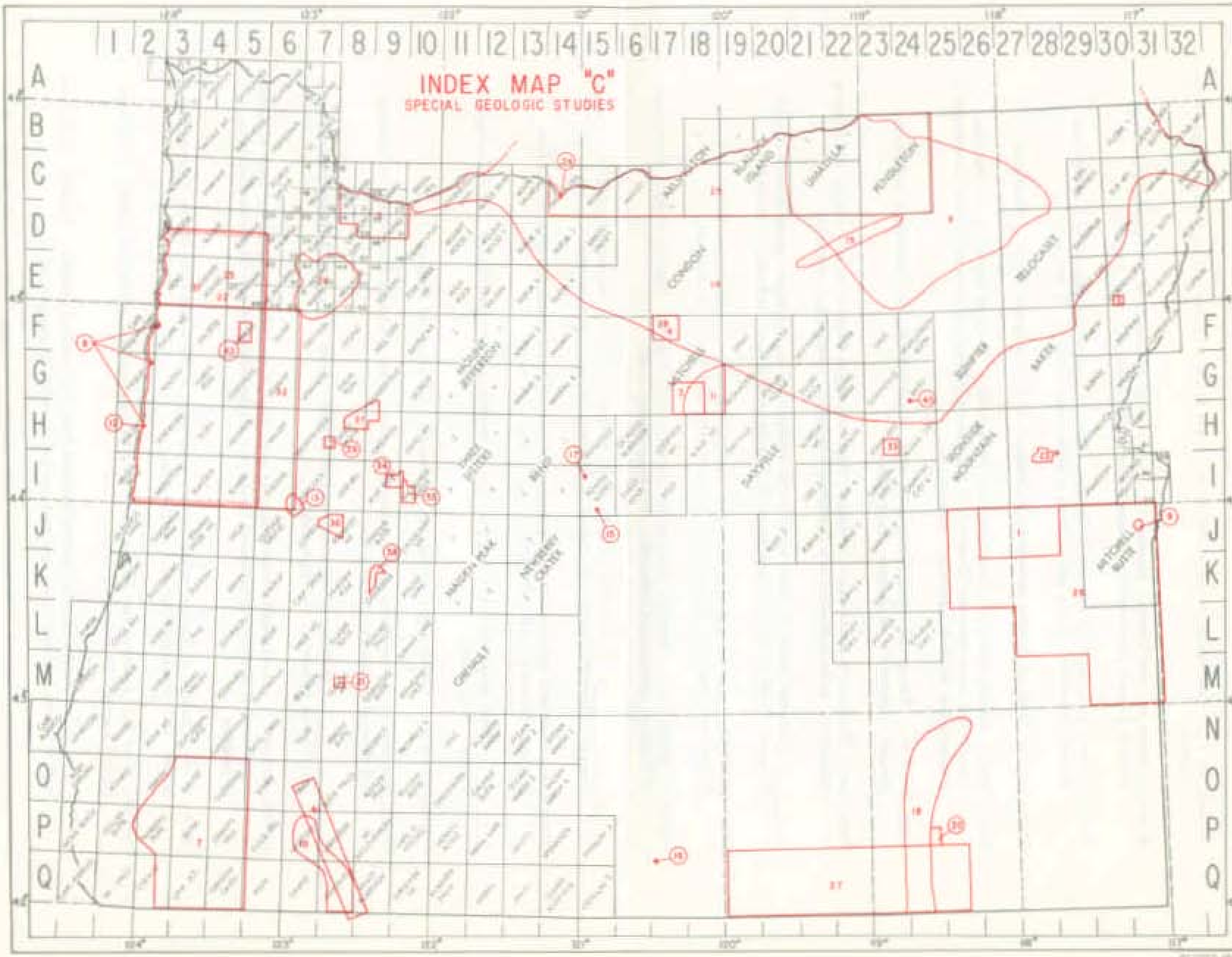
(33) Thayer, Thomas P., Chromite studies in the John Day area. U.S.Geological Survey. In progress.

(34 - 39) U.S.Army, Corps of Engineers, Geology of the dam sites in the Cascade Range. Reports and maps in the files of the Corps of Engineers, Pittock Block, Portland, Oregon.
- (34) Blue River dam site and vicinity.
- (35) Cougar dam site and vicinity.
- (36) Fall Creek dam site and vicinity.
- (37) Foster and Green Peter dam sites and vicinity.
- (38) Hills Creek dam site and vicinity.
- (39) Holly Reservoir dam site and vicinity.

(40) Vhay, J.S., Geology and geochemical experimentation, Quartzburg district, Grant County: a revision. U.S.Geological Survey. In progress.
"The copper-cobalt deposits of the Quartzburg district, Grant County." U.S. Geological Survey open-file report released January 1960.

(41) Wisconsin, University of, Cretaceous stratigraphy from Hilt, California, northward into the Medford quadrangle, Oregon. To be assigned.

(42) _____, Geology of the Dallas limestone deposit, Oregon. To be assigned.


INDEX MAP "C"
SPECIAL GEOLOGIC STUDIES
PENDLETON
UMATILLA
ARLINGTON
CONDON
BAKER
SUMPTER
TELOCASET
MITCHELL BUTTE
DAYVILLE
THREE SISTERS
BEND
NEWBERRY CRATER
CRESCENT
MAIDEN PEAK
MOUNT JEFFERSON

LIST "D": SPECIAL GEOLOGIC STUDIES (NOT SHOWN ON INDEX MAP)

Allison, Ira S., Continuing studies of Pleistocene lakes in Lake County and environs. Oregon State College.

Bostwick, David A., and Wagner, Norman S., Paleontological studies of the Paleozoic of Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

Brooks, Howard C., Study of mercury in Oregon. State of Oregon Department of Geology and Mineral Industries. To be published as a Department bulletin. In progress.

Imlay, Ralph, Study of Jurassic ammonites of Oregon. U.S.Geological Survey. In progress.

Kelly, Hal J., Harris, Henry M., and Schlicker, Herbert G., Study of nepheline syenite from Lincoln and Lane counties, Oregon. U.S.Bureau of Mines and State of Oregon Department of Geology and Mineral Industries. In progress.

Lund, Ernest H., Petrographic and stratigraphic study of welded tuffs and rhyolites in southeastern Oregon. University of Oregon. In progress.

Ramp, Len, Chromite in southwestern Oregon. State of Oregon Department of Geology and Mineral Industries. To be published as a Department bulletin. Manuscript completed.

_____, Geologic study of select areas in the sediments of the Applegate group in southwestern Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

Sahu, Basanta K., Theoretical and laboratory investigation of beach and dune sands between Port Orford and Coos Bay. University of Wisconsin doctoral thesis. In progress.

Schlicker, Herbert G., Landslide study of the Portland Hills, Oregon. State of Oregon Department of Geology and Mineral Industries. To begin summer 1960.

_____, Engineering geology of the Willamette Valley, between Portland and Eugene, Oregon. State of Oregon Department of Geology and Mineral Industries. To begin 1961.

Scott, R.A., General paleobotany, collecting, and study of fossil woods and other plants from Oregon, Wyoming, and Colorado. U.S.Geological Survey.

_____, Fossil wood and fruits from the Clarno formation (Eocene) of Oregon. U.S.Geological Survey. In progress.

Staples, Lloyd W., Continuing investigation of zeolites. University of Oregon.

Steere, Margaret L., Fossil localities of western Oregon. State of Oregon Department of Geology and Mineral Industries. In progress.

_____, Geology of the state parks of Oregon. State of Oregon Department of Geology and Mineral Industries. To begin 1960.

Stewart, Roscoe E., Stratigraphic implications of some fossil foraminifera in Oregon. State of Oregon Department of Geology and Mineral Industries. To be published as a Department bulletin. In progress.

Taylor, D.W., Studies of the nonmarine Tertiary gastropods of the Snake River plains, Oregon and Idaho. U.S.Geological Survey. In progress.

Trumbull, Ellen J., Research and field work on late Tertiary mollusks of the West Coast. U.S.Geological Survey. In progress.

_____, Middle Miocene marine mollusks from the Astoria formation. Oregon. U.S.Geological Survey. Manuscript completed and being edited for publication.

Youngquist, Walter, Lexicon of stratigraphic terms applied in Oregon. University of Oregon. In preparation.

KROLL TO RECEIVE GLASGOW AWARD

Word has just been received that Dr. W.J.Kroll, internationally known metallurgist and resident of Corvallis, Oregon, is to receive the Castner Gold Medal from the Society of Chemical Industry in Glasgow, Scotland, in April. Dr. Kroll, who developed and patented the Kroll process for producing titanium metal, introduced this process in 1947 for the production of ductile zirconium at the Albany, Oregon, laboratory where he was metallurgical consultant for the Bureau of Mines. Dr. Kroll has received a number of previous awards, one of which was the James Douglas Gold Medal presented in 1954 by the AIME for outstanding contributions to nonferrous metallurgy.

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AEROMAGNETIC MAP OF PART OF JOSEPHINE AND CURRY COUNTIES PUBLISHED

The U.S.Geological Survey has just issued "Aeromagnetic map of the Kerby and part of the Grants Pass quadrangles, Josephine and Curry counties, Oregon," by J. R. Balsley, R. W. Bromery, E. W. Remington, and others, as Map GP-197 under the Geophysical Investigations Series. Map GP-197 may be obtained for 50 cents from the U.S.Geological Survey, Denver Federal Center, Denver, Colorado.

This is a contour map of magnetic intensity reflected by the ultrabasic rocks (peridotite and serpentine) that underlie the Kerby and adjacent Grants Pass quadrangles. The aeromagnetic survey was begun in 1950 as a follow-up of field mapping of ultrabasic rocks in southwestern Oregon by F. G. Wells, whose work on the Kerby quadrangle was published in 1949 as the State of Oregon Department of Geology and Mineral Industries Bulletin 40. Aeromagnetic mapping of the Kerby quadrangle compares favorably with surface geologic mapping and can be used to trace subsurface features as an aid to mineral exploration.

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MINING LAW CHANGE

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2337 of the Revised Statutes of the United States (30 U.S.C. 42) is amended (1) by adding "(a)" after "Sec. 2337.", and (2) by adding at the end thereof a new subsection as follows:

"(b) Where nonmineral land is needed by the proprietor of a placer claim for mining, milling, processing, beneficiation, or other operations in connection with such claim, and is used or occupied by the proprietor for such purposes, such land may be included in an application for a patent for such claim, and may be patented therewith subject to the same requirements as to survey and notice as are applicable to placers. No location made of such nonmineral land shall exceed five acres and payment for the same shall be made at the rate applicable to placer claims which do not include a vein or lode."

Public Law 86-390. 74 STAT. 7. Approved March 18, 1960.

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NORTHWESTERN MINING COUNCIL NAMES OFFICERS

The Northwestern Mining Council, Inc., with headquarters in Medford, Oregon, has announced the election of the following officers, all of whom live in Medford: President, W.H.Holloway; Vice President, Del Boyd; Secretary, Mrs. Truman Bishop; Correspondence Secretary, Mrs. Russ Mitchell; and Treasurer, Glenn Hall.

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MIOCENE FLORAS OF COLUMBIA PLATEAU PUBLISHED

"Miocene Floras of the Columbia Plateau," by Ralph W. Chaney and Daniel I. Axelrod, has been published as Monograph 617 by the Carnegie Institution of Washington. The work represents a complete re-study of the three chief Miocene floras of eastern Oregon, namely, the Mascall, Blue Mountains, and Stinking Water floras, all of which lived at approximately the same time, during the closing stages of Miocene volcanic activity. Geologic occurrence, composition, and paleoecology of the three floras are discussed by Chaney in Part I of the monograph, and systematic descriptions, followed plates of illustrations, are given by Chaney and Axelrod in Part II.

This 8½ x 11-inch volume, containing 229 pages and 44 plates, and obtainable in cloth binding ($4.75) or paper binding ($4.25), may be purchased from the Carnegie Institution of Washington, 1530 P Street Northwest, Washington 5, D.C.

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FEDERAL OIL AND GAS LEASING REGULATIONS CHANGED

The Department of the Interior announces that the U.S. Geological Survey, under recently amended Federal regulations, will publish maps or diagrams of "structures defined" on oil and gas fields located on Federal lands, and will distribute these records to local land offices of the Bureau of Land Management. Notice will be filed in the Federal Register. Although formal maps and diagrams for determinations of "structures undefined" will not be made and distributed, a memorandum of each such determination will be filed at the appropriate land office and will be available for public inspection upon request.

One of the functions of the Geological Survey is to determine whether public lands are or are not within any known geologic structure of a producing oil and gas field. This is done to insure appropriate administration of leasing. In making these determinations, the Survey employs the two terms mentioned above, "structures defined" and "structures undefined." "Structures defined" is used when there is sufficient accumulation of technical data to warrant publication of a map depicting structure boundaries. "Structures undefined" is used in an area of a first discovery when an immediate determination is needed in administering leases; or in areas where amount and rapidity of drilling outdate information accumulated.

In addition, the Interior Department has adopted new lease-description rules, according to the American Mining Congress Bulletin Service of April 1, 1960. The new rules will require all future applications for mineral leases and permits in unsurveyed areas to cover rectangular tracts of land with boundaries running due north-south and east-west. This will bring lease descriptions into conformity with the "protracted survey" system now employed by the Bureau of Land Management to facilitate oil and gas leasing of unsurveyed public lands. The protracted survey system of following lines drawn on maps will replace the more intricate language of metes and bounds.

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NEW DRILLING PERMIT

Permit No. 38 was issued April 11, 1960, to the Reserve Oil and Gas Company to drill an oil test. The surveyed location is 2334' south and 1855' west from the NE corner of Sec. 31, T. 6 S., R. 4 W., Polk County. Ground elevation is 346.30'. The drilling will be located approximately 8 miles northeast of Dallas. Principals in the company are Jasper W. Tulley, president, and Harold F. Green, secretary. Address of the company is 64 Pine Street, San Francisco 11, California. The land on which the drilling is to be done is owned by D. B. Roy, and the well name is Roy L. and G. Bruer No. 1.

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