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LEGISLATURE PASSES LAWS AFFECTING THE MINERAL INDUSTRY

The fifty-first Legislative Assembly, which recessed May 10, considered and passed more legislation of importance to Oregon's mineral industry than any Legislature for a great many years. In general, three broad areas were covered --sand and gravel operations, the leasing of state lands for oil and gas investigations and operations, and placer mining.

Two House Joint Memorials were acted on: HJM 11, urging the Federal Government to encourage the development of the mining industry, passed, while HJM 12, memorializing Congress to decline passage of legislation to extend Wilderness areas, passed in the House but was tabled in the Natural Resources Committee of the Senate.

As these laws will be of considerable importance to those interested in developing Oregon's mineral resources, brief explanations or section-by-section descriptions are given below. All of these bills have been signed by the Governor but only a few bore an emergency provision. Therefore it will be some time in August before most take effect. Persons wishing to obtain copies of the acts should write to the Legislative Fiscal Committee, 313 State Capitol, Salem, Oregon.

Legislation in regard to leasing of Oregon's offshore lands, leasing for hard rock minerals in the Lower Columbia River, and for pipelines across the ocean beach came about as the result of Opinion Nos. 5119 and 5124 by the Attorney General. The State Land Board had requested opinions from the Attorney General on the power of the Board to lease Oregon's offshore lands and to grant easements across the ocean beach. The Attorney General's opinions were to the effect that such authority did not exist.

The policy statements regarding sand and gravel operations were made at the request of the Governor's Natural Resources Committee and were the result of efforts by the State Game Commission and the Fish Commission of Oregon. These two commissions have long sought greater control on removal of sand and gravel from streams.

The new placer mining law was recommended by a special committee of the State Bar association. Oregon has had no state placer mining law in the past and this new law parallels the state law on location of lode claims.

The Compulsory Unitization Act was requested by the Department of Geology and Mineral Industries as a conservation measure if oil and gas are found in the state.

Laws affecting sand and gravel operations

HB 1629 - Land Board policy on Removal of Sand and Gravel Act: Amends existing law regarding the authority for the State Land Board to lease sand and gravel deposits and creates new provisions. In effect it establishes a policy for the Land Board which states that in the leasing of land for sand and gravel removal, consideration be given to protect the scenic and recreation resources, public health, and recreational enjoyment of the people and to conserve plant, aquatic, and animal life. The Land Board is now required to consult with the State Game Commission and the Fish Commission of Oregon prior to advertising for bids and to request information as to the probable effect of removal of gravel, rock, sand or silt. The Game and Fish commissions are to advise the board as to any provisions which might be included in the lease. Application to the

State Land Board for a lease on a sand and gravel deposit must include a complete description of the location of the contemplated operation, the time and manner of contemplated removal, and such other pertinent information as the board may require.

HB 1635 - Water Pollution Act: Amends the law relating to water pollution by including "gravel crushing or washing operations" in the industrial operations to be controlled. The new law requires that gravel crushing and washing operations be prevented from adding unclarified wash water to streams if it may be destructive to fish or aquatic life.

HB 1637 - Other agency policy on Removal of Sand and Gravel Act:

Sec. 1 - Declares that "The protection and conservation of the habitat and spawning areas of game and food fish are declared to be of utmost public interest" and that "It is in the public interest to preserve, develop, or prevent unnecessary damage to food or game fish habitat and spawning areas in streams, lakes or other bodies of water within this State."

Sec. 2 - Requires that all cities, county courts, or other public officers or public agencies (except State Land Board which is covered in HB 1629) notify both the State Game Commission and the Fish Commission of Oregon before issuing permits or licenses "... for any program which contemplates the removal of any sand, gravel, rock, silt or other material ..." from streams or lakes.

Sec. 3 - Notice to both the State Game Commission and the Fish Commission of Oregon be by registered mail and contain complete description of contemplated operation, time and manner of removal, and "such other pertinent information as may be required by the State Game Commission or Fish Commission of Oregon."

Sec. 4 - State Game Commission and Fish Commission of Oregon to notify officer or agencies of any damage to food or game fish habitat or spawning areas.

Sec. 5 - Agency or officer cannot issue permit or license for 15 days unless notified by State Game Commission and Fish Commission of Oregon that the commissions have no interest in the matter. After 15 days a permit may be issued which may contain protective provisions established by State Game Commission and Fish Commission of Oregon.

Sec. 6 - Both Fish and Game commissions must investigate removal of materials to determine if it would "substantially affect the spawning areas or habitat of food or game fish".

Laws affecting the leasing of state lands for oil and gas investigations and operations

HB 1136 - Land Leasing Act: This new law (1) gives authority for "any State agency, board, or commission to lease land or mineral rights" after consultation with and consideration by the Department of Geology and Mineral Industries; (2) extends authority to the execution of leases and contracts covering the bed and banks of navigable lakes, rivers and streams, the leasing of which is not otherwise expressly authorized by statute; (3) provides that all leases and conveyances made prior to the effective date of this 1961 act are declared to be legal and enforceable; (4) allows for the location of hard rock mineral claims and leasing for oil and gas exploration to cover the same area without conflict; and (5) provides that the location of a mining claim on state lands is subject to the rights of any prior lessee.

HB 1316 - Beach Pipeline Act: Authorizes the State Land Board to grant easements and licenses for pipelines, cable lines, and other conduits across and under the shore of the Pacific Ocean and the adjacent submerged lands upon payment of just compensation by the grantee. (The entire beach between high and low tides from the northern boundary to the southern boundary of Oregon, except for a very few miles, belongs to the state and is declared a public highway.)

HB 1531 - Definition of submerged lands: Defines submerged lands as lands lying below the line of mean low tide and the beds of all tidal waters within the boundaries of this state as heretofore or hereafter established.

HB 1532 - The Offshore Leasing Act: In summary, this new law puts the responsibility for the offshore (submerged) lands in the hands of the State Land Board but requires the board to consult with various state agencies as to conditions for exploration and for leasing. It establishes a pro-

cedure for leasing state lands at an annual rental of 50 cents per acre with a minimum of $12\frac{1}{2}$ percent royalty and the lease to go to the party offering the highest cash bonus. Bids are to be sealed and opened publicly. Primary term of lease is 10 years, with a drilling term of 5 years and production to commence within 3 years after discovery of oil or gas in "paying quantities". Individual lease parcels to be a maximum of 3 geographical miles seaward by 6 statute miles along the shore. A more detailed explanation of the law is given below.

Sec. 1 - Definitions.

Sec. 2 - Places authority for administration of submerged lands in Land Board.

Sec. 3 - Allows Land Board to grant nonexclusive permits for explorations on offshore lands. The taking of cores and other samples may be granted upon consultation with the Department of Geology and Mineral Industries. Measures to protect the fish and wildlife resources are to be included in the permit after consultation with the Fish Commission and Game Commission.

Sec. 4 - Permits are to be for no more than 2 years but are renewable. Must notify the Fish and Game commissions where work is to be done. Information supplied to the Fish and Game commissions must be kept confidential.

Sec. 5 - Records of drillings done under permit are to be delivered to the Department of Geology and Mineral Industries and kept confidential for 5 years.

Sec. 6 - Provides for public hearing on application to lease lands for drilling.

Sec. 7 - Requires board to determine if lease would be in public interest after public hearing. Sets up minimum standards to make determination.

Sec. 8 - Maximum area of any one lease to be not more than "3 geographical miles seaward by 6 statute miles along or parallel to shore". (No limit on number of areas to be put up for lease at any one time.)

Sec. 9 - Form of lease to include provisions "deemed desirable by the Board" after consultation with several state agencies.

Sec. 10 - Sets primary term of lease at 10 years.

Sec. 11 - Sets royalty as not less than $12\frac{1}{2}$ percent.

Sec. 13 - Advance land rental of 50 cents per acre per year.

Sec. 14 - Size of bond to be determined by the Department of Geology.

Sec. 16 - Allows for slant drilling, drilling from islands, or drilling from floating structures.

Sec. 17 - Restoration of drilling site to be to substantially its original condition.

Sec. 18 - Avoidable pollution or avoidable contamination prohibited. "Avoidable" defined as acts or omissions of lessee and events that could have been prevented by "exercise of a high degree of care".

Sec. 20 - Drilling term set at 5 years and production within 3 years of discovery of oil or gas in "paying quantities".

Sec. 21 - Reasonable nonconflicting uses to be allowed on leasehold.

Sec. 22 - Permits, easements, or leases cannot be assigned without consent of board.

Sec. 24 - Lessee's surrender clause.

Sec. 25 - Lessor's cancellation clause.

Sec. 26 - Provides for "periodic mutual negotiations" between lessor and lessee to keep conditions and rules and regulations current.

Sec. 27 - Leasing notice to be published for two weeks in newspapers of general circulation in state and to include description of lands, rate of royalty, rental, amount of deposit, manner of filing, and time and place of filing. Lease to be awarded to person offering highest cash bonus. Bids to be placed in sealed envelope and opened publicly.

Sec. 28 - All leases, instruments, bonds, contracts, etc., to be executed by Land Board or to the Land Board.

Sec. 29 - Proceeds to go to common school fund.

Sec. 30 - No discrimination between bidders on drilling site and method.

Sec. 31 - Offshore drilling site, if man-made island, must be approved by various state agencies.

Sec. 40 - Allows the Department of Geology to promulgate rules and regulations to regulate exploration surveys and operations to remove oil and gas.

HB 1568 - The Compulsory Unitization Act: This law is essentially the Interstate Oil Compact Commission's model law for compulsory unitization. Unit operation of an oil field would take place only on written approval of "(A) those owners who, under the board's order, will be required to pay at least 75 percent of the costs of the unit operation, and (B) those persons, who at the time of the order of the board, owned of legal title 75 percent of royalty and overriding royalty payable with respect to oil and gas produced from the pool or part thereof over the entire unit area". In addition to the unitization provisions, several corrections were made to the existing Oil and Gas Conservation Act. These are as follows:

(1) Provision was made for use of bond money for the abandonment of oil and gas drillings by the Department of Geology rather than turning the bond money over to the State Treasurer and the Emergency Board reimbursing the department.

(2) New definitions were made in order to conform with definitions in the Offshore Leasing Act and new definitions of condensate, person, pool, owner, producer, protect correlative rights, and unit area were added.

(3) Unit operations were excluded from registration with the Corporation Commissioner and were declared to not violate any laws relating to trusts and monopolies.

(4) Provisions on the turning over of information to the department were amended to state that records must be kept confidential for a period of 2 years from the date of abandonment or completion rather than from the date of filing.

(5) The law requires the Department of Geology to hold hearings in conformance with the State's Administrative Procedures Act, and modifies the hearing and appeal procedures of the present department law.

Laws affecting placer mining

HB 1668 - The State Placer Mining Act:

Sec. 1 - Legal subdivision defined as a subdivision of a state survey or of a U. S. survey extended over area to be located.

Sec. 2 - Notice of discovery and location of placer deposit must contain (1) the name of claim, (2) name of locators, (3) date of location, (4) number of feet or acres claimed, together with a description, either by legal subdivisions, if practicable, or by reference to a permanent monument or natural object, which will identify the claim.

Sec. 3 - If claim is not located by legal subdivisions, the boundaries must be marked within 30 days after posting of notice and in such a way that they are readily traced. Boundary markings to be of the same size, materials and dimensions as quartz claims. Boundaries to be marked at each corner or angle and at intervals of not less than 1320 feet. Claims located by legal subdivisions need not be staked or monumented.

Sec. 4 - Location work is to be completed within 60 days of posting location notice and to consist of an open cut of not less than 5 cubic yards of material which should expose the deposit.

Sec. 5 - The claim must be filed in the county courthouse within 60 days from posting of location notice and the filing must be accompanied by an "affidavit of excavation" that the location work was done.

Sec. 6 - All placer claims located after the effective date of this law that do not comply with provision of above sections are void.

HB 1732 - Columbia River Minerals Leasing Act:

Sec. 1 - Gives the State Land Board authority to lease the bed of the Columbia River from Goble, Oregon, to the Pacific Ocean. Establishes a ceiling on royalty of not more than 10

percent of the gross value of the minerals removed.

Sec. 2 - Requires the Land Board to hold a public hearing to determine if an invitation to lease should be made. Notice of hearing to be given to certain state agencies; the public, by publication in newspapers; and prospective bidders.

Sec. 3 - After the public hearing the Land Board will determine if an invitation to lease would be in the public interest. Minimum criteria to make the determination are established.

Sec. 4 - Sets up leasing procedure as follows: (1) Notice inviting bids to be published in newspapers. Notice to contain description of lands, rate of royalty and rental, manner in which bids are to be filed, amount of deposit to accompany bid, the time and place for filing of bids, and statement that the lease will be awarded to bidder offering highest cash bonus. (2) Bid and supporting material to be in a sealed envelope. (3) Bids to be opened publicly at specified time and place.

Sec. 5 - All leases and instruments to be executed by the Land Board.

Sec. 6 - Proceeds to go to common school fund.

Sec. 7 - Maximum area in any single lease to be 640 acres.

Sec. 8 - The Land Board must consult with certain state agencies to determine provisions of lease to protect the interests of the state.

Sec. 11 - Leases may be without limitation as to time but may be cancelled if due diligence is not exercised by lessor in developing and operating.

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OREGON PALEONTOLOGIST DIES

A. W. (Lon) Hancock, retired Portland postman turned paleontologist, died Thursday, May 18, at the age of 77. Mr. Hancock was born in Harrison, Arkansas, but had lived in Portland since 1910. After his retirement from the Post Office in 1944, he devoted all of his time to his hobby of paleontology and, although not trained in this field, his enthusiastic endeavors and eventually his famed discoveries made him known the world over. His spectacular find of mammals and other vertebrates in the Clarno formation of Wheeler County completely reshaped the interpretation of Oregon's Eocene history. Mr. Hancock was one of the founders and mainstays of Camp Hancock, a summer field camp for young scientists. He was an honorary director of the Oregon Museum of Science and Industry and a charter member of both the Oregon Agate and Mineral Society and the Geological Society of the Oregon Country. His collection of more than 10,000 fossils and artifacts has been willed to the Oregon Museum of Science and Industry where a memorial room will be established to honor him.

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OME GRANTS EXPLORATION LOAN FOR MUSICK VEIN

The Office of Minerals Exploration entered into a \$54,000 contract May 10 with Emerald Empire Mining Company of Cottage Grove to drive 1200 feet of tunnel on the Musick vein in the Bohemia District in southern Lane County. The contract is on a joint participation basis, with both parties contributing equally on the work, which started May 25. The Emerald Empire Mining Company is leasing the ground to be explored from Lane Minerals Company, which owns numerous mining properties in the district. The portal of the new tunnel will be 335 feet below the old No. 6 level of the Musick Mine, which was discovered in 1891 and is one of the oldest properties in the area. Principal values in the Musick vein are lead, zinc, and copper, with minor amounts of gold and silver.

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PROFITABILITY SCOREBOARD - New-Field Wildcats (17-State Area)							
Wells Productive of Some Oil or Gas in Year of Discovery					Wells Discovering Profitable Fields Based on 6 Years of Development History		
Year of Discovery	Total New-Field Wildcats	Number Productive of Some Oil or Gas	Per Cent Productive	Ratio of Productive Wells	Number of A-B-C-D Reserve Fields	Per cent of A-B-C-D Fields to Total New Field Wildcats	Ratio of A-B-C-D Fields to Total New Field Wildcats
1944	3,014	330	10.9	1 - 9.1	84	2.79	1 - 36
1945	2,913	335	11.5	1 - 8.7	71	2.44	1 - 41
1946	2,995	313	10.5	1 - 9.6	73	2.44	1 - 41
1947	3,325	378	11.4	1 - 8.8	78	2.35	1 - 43
1948	4,087	471	11.5	1 - 8.7	92	2.25	1 - 44
1949	4,238	479	11.3	1 - 8.8	108	2.55	1 - 39
1950	5,149	577	11.2	1 - 8.9	125	2.43	1 - 41
1951	6,044	666	11.0	1 - 9.1	127	2.10	1 - 48
1952	6,440	720	11.2	1 - 8.9	118	1.83	1 - 55
1953	6,634	747	11.3	1 - 8.9	156	2.36	1 - 43
1954	7,033	875	12.4	1 - 8.0	117	1.66	1 - 60
11-Year Period	51,872	5,891	11.356	1 - 8.8	1,149	2.22	1 - 45

WILL SUCCESS FOIL ROCK HUNTERS?*

By Frank J. Gardner

Who'd ever think that "success" is a bad word? Well, it can be, and it has been for at least 16 years, according to the AAPG Committee on Statistics of Exploratory Drilling.

Because of its use of the words "Successful New-Field Wildcat" and "Success Per Cent" in its annual tabulations, the committee feels it has misled some Ivy League experts on oil. In the report covering 1960 drilling, to be published in next June's AAPG Bulletin, the words will not appear.

In a *Journally Speaking* column headed "Pennies from Harvard" (OGJ, Feb. 13, 1961, p.41) Henry Ralph told a tale of one professor who belittled the risk involved in wildcatting, based on the annual AAPG report. It's true that this report for 16 years has indicated that one out of nine wildcats has been successful, but the good professor chose to ignore another part of the report which, for the past 11 years, has tried to point out that actual success must be measured in another way -- performance.

One of the vital tables in the report lists numbers of successful wildcats which can still be called successful after 6 years of development history. And for the 11-year period, the ratio of success to failure in wildcat drilling, as revealed by this table, averages 1 in 45 rather than 1 in 9. In 1954, the latest year for which a 6-year development history can be recorded, success hit an all-time low of 1 in 60.

The profitability scoreboard as it will appear in the June Bulletin of the AAPG, is shown above. It will not be exactly as shown here, for the "scoreboard" tag is our own, and some of the subtitles have been cropped for space, but the figures are all there. Note that the words "success" or "successful" are nowhere to be seen. Rather, the words "productive of some oil or gas" will be substituted.

The only successes, really, are those tabulated in the first column of the table on the right--the "A-B-C-D-Reserve Fields." The smallest field to qualify as profitable is a "D" reserve of 1 million barrels of oil or 6 billion cubic feet of gas. A "C" reserve is 10 to 25 million barrels or its gas equivalent, while the "B" reserve is 25 to 50 million barrels, and an "A" reserve is 50 million or more.

*Courtesy of The Oil and Gas Journal, April 24, 1961, p. 205.

"We're not trying to be pessimistic--just realistic," says the AAPG Committee. Its chairman, J. Ben Carsey of Humble Oil & Refining Co., feels that the figures must be fully understood by those inside and outside the industry if they are to be of any benefit.

It all reminds us of a speech by George C. Hardin, Jr., Houston consulting geologist, when he appeared before a group of Gulf Coast geologists in 1959. His subject was "Beware the Semantic Trap"; its theme was that different words mean different things to different people. To some people, success is a great word; to others, it's a real stinker.

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OREGONITE, A NEW MINERAL

A new mineral called "Oregonite" has been named and described by Paul Ramdohr and Margaret Schmitt in Neues Jahrbuch für Mineralogie, Monatsh. 1959, no. 11-12. Oregonite is a metallic nickel-iron arsenide occurring as water-rolled pebbles in Josephine Creek, Oregon. The pebbles have a smooth brown crust. Composition of the mineral is given as $\text{Ni}_{10}\text{Fe}_6\text{As}_9$ or Ni_2FeAs_2 . A little cobalt and traces of copper are present. Under the microscope the mineral is metallic white with high reflectivity. Hardness is about 5. Associated minerals include small amounts of native copper, bornite, chalcopyrite, molybdenite, chromite, and perhaps niccolite. The gangue (40% by volume) consists of penninite and serpentine. (Extracted from The American Mineralogist, Sept.-Oct. 1960.)

Note: This mineral is not to be confused with josephinite, which has similar properties but contains no arsenic. Its composition is given as FeNi_3 .

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APPLICATIONS MADE FOR OFFSHORE EXPLORATION

The State Land Board, composed of Governor Mark O. Hatfield, Secretary of State Howell Appling, and State Treasurer Howard C. Belton, received applications for offshore explorations from Shell Oil Company and Gulf Oil Corporation at its meeting May 23. Also in attendance at the meeting were representatives from Standard Oil Company and Pure Oil Company. The Governor instructed the Department of Geology and Mineral Industries, the State Game Commission, and the Fish Commission of Oregon to prepare rules and regulations for operation and indicated that action on the applications for exploration would be taken at the next Land Board meeting June 5. This meeting will take place in the Board of Control Room, State Capitol Building, Salem, Oregon, and will begin at 10 a.m.

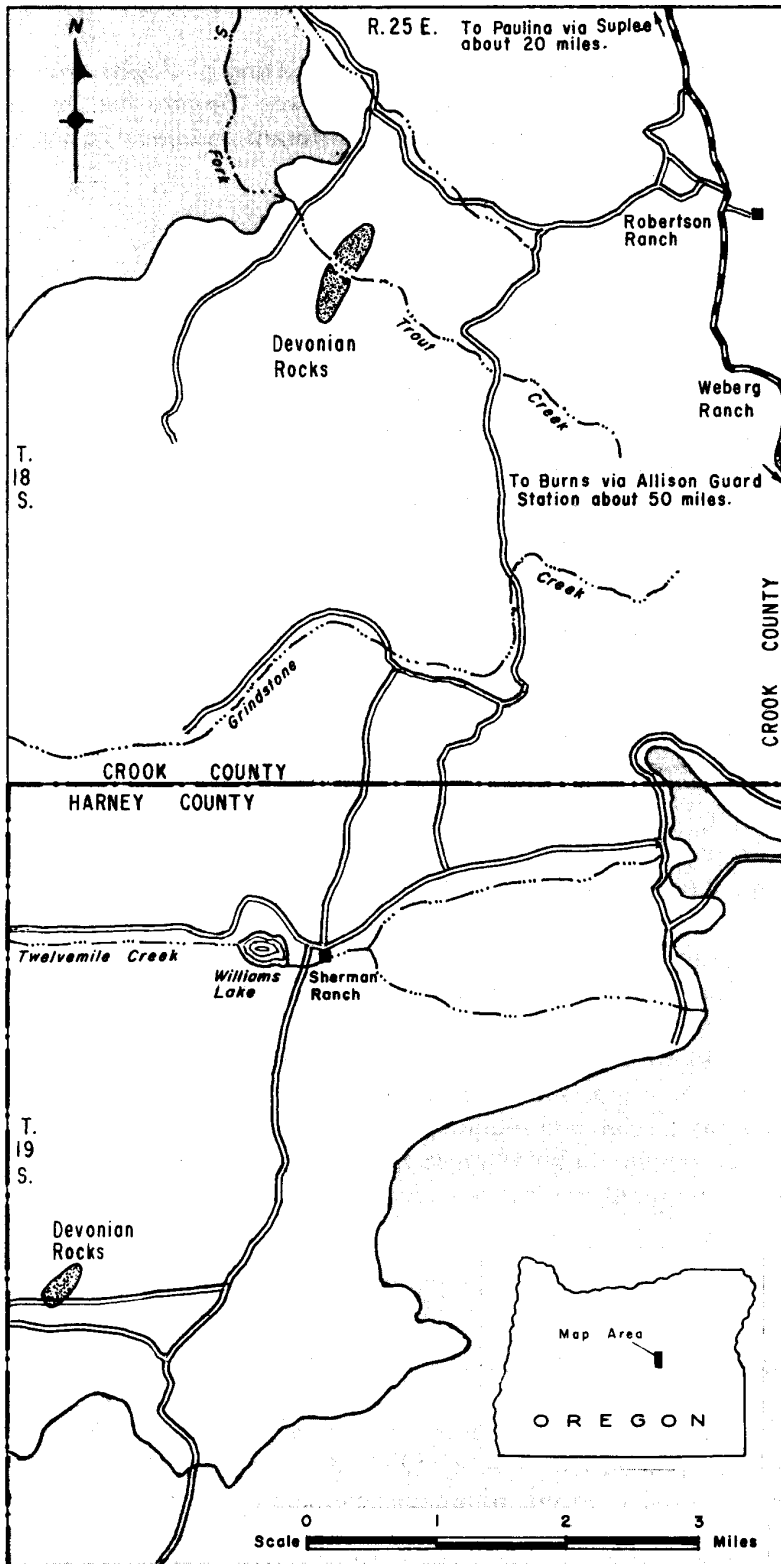
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HANNA MINING COMPANY PURCHASES RIDDLE NICKEL PLANT

Hanna Mining Company has completed purchase from the government of the Riddle Nickel plant in Douglas County. The plant started production in July, 1954, and has been in continuous operation ever since. More than 100 million pounds of nickel have been produced under contract with the General Services Administration. This contract has been filled and Hanna Nickel Smelting Company, a wholly owned subsidiary, has begun selling ferronickel on the open market.

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DEVONIAN ROCKS IN THE SUPLEE AREA OF CENTRAL OREGON



ABSTRACT*

By W.P. Kleweno, Jr., & R.M. Jeffords,
Humble Oil & Ref. Co., Houston, Texas

Fossiliferous limestones and associated clastic rocks in the Suplee area of the pre-Tertiary inlier, central Oregon, have been determined to be of Devonian age. The two small outcrops are the only known occurrences of Devonian rocks in Oregon. Mississippian, Pennsylvanian, Permian, and Triassic strata crop out near-by.

The main outcrop, in Crook County, consists of 100 feet of highly folded, massive, cherty, stromatoporoidal limestone. This bed is underlain by about 200 feet of massive green chert grit and sandstone and apparently is overlain by chert and argillite. A second small outcrop, a few miles away in Harney County, consists of poorly exposed fossiliferous limestone.

The light- to medium-brown limestone consists largely of skeletons of organisms in their original growth positions and surrounded by a very fine granular matrix. The fauna included stromatopora (*Gerronostroma elegans*), corals (*Dohmophyllum involutum*, *Heliolites parosa*, *Thamnopora cervicornis*, and *Alveolites lemnicus?*), and brachiopods (*Meristella robertensis*, *Rhipidomella* sp., *Atrypa* sp., and *Gypidula?* sp.). These forms indicate a Middle Devonian age; they also suggest a correlation with beds in the Roberts Mountains of Nevada and with beds in the Shasta Lake and Yreka areas of northern California.

*Paper presented by W. P. Kleweno, Jr., and R. M. Jeffords, Humble Oil & Refining Co., Houston, Texas, at the meeting in San Diego, Calif., March 26-31, 1961, of the Cordilleran Section (Geological Society of America), Pacific Coast Section (The Paleontological Society), and The Seismological Society of America.

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EXPLANATION	
	Improved Gravel Road
	Unimproved Dirt Road
	Tertiary Rocks
	Pre-Tertiary Inlier
	Devonian Rocks

WESTERN GOVERNORS ADOPT POLICY ON MINING

At the Western Governors Conference in Salt Lake City, Utah, May 14-17, governors of all western states except Hawaii met to consider many items of mutual interest. One of the more important policy statements adopted unanimously by the conference was the one on mining. In their statement of policy the governors noted that the mining industry had contributed greatly to the development and economy of the West but that in recent years there has occurred a progressive deterioration that has seriously impaired mining's capacity to maintain its traditional contribution to the western economy and the nation's welfare. Part of the resolution adopted by the western governors is as follows:

- (1) That the administration and the Congress take a firm and positive position to develop a national minerals policy;
- (2) That the national minerals policy recognize the necessity for immediate inventory and appraisal of the domestic mineral resources through geological and geophysical mapping, accelerated research for new and expanded uses and beneficiation of low-grade ores, the consideration of incentive measures to encourage investment, the proper use of and access to our public lands, and reasonable controls on imports to protect the ability of the domestic minerals industry to produce at fair prices in our economy; and
- (3) That in order to enhance our security and that of the Free World, our national minerals policy should recognize our ability and intent to cooperate in meeting international mineral requirements for the economic growth and development of the Free World, we encourage and urge cooperation in the inventorying of the mineral resources of the Free World and in the more accurate reporting of international statistical information related to international mineral resources; and
- (4) That to facilitate the adoption and implementation of a national minerals policy, the National Minerals Advisory Council be re-established.

More specifically, it is recommended that:

As to government stockpiles: No sale or other distribution of these shall be made until an adequate national minerals policy has been adopted, and thereafter no such disposal of stockpiles shall be made which would interfere with the maintenance of a healthy domestic mineral industry under such national minerals policy.

As to foreign aid: The Congress should specifically prohibit the making of loans and grants to develop foreign production of any minerals and metals which are being imported into the United States in surplus amounts.

As to mercury, fluorspar and cobalt: An annual quota (or tariff) be imposed on imports to preserve something over one-half of the domestic market for mercury and fluorspar producers, and something slightly less than one-half for domestic cobalt producers.

As to antimony, chrome and manganese: Small excise taxes (or tariffs) be imposed on foreign imports of these metals, the proceeds from which should be sufficient when distributed among United States producers to maintain a healthy nucleus of domestic production of these strategic metals, the car-lot program for manganese be resumed and present stockpiles of non-usable manganese be processed to usable form.

As to public lands: (1) Since the mineralized area of economic potential in public lands makes up but a small fraction of one percent of the total area, it is not to the advantage of the western states or of the nation as a whole that these mineralized areas be withdrawn for all time or locked up in wilderness systems or other federal reserves; furthermore, under no circumstances should there be any permanent withdrawals of any federal lands without the concurrence of the Governor of the State in which the lands are located; and (2) an adequate study be made to determine if the true intent of the principle of multiple use of public lands is being properly carried out in all areas by all agencies of the government.

As to federal taxes: There should be no decrease in present depletion or depreciation rates which might further injure the already seriously weakened western mining industry, and further, additional exploration should be encouraged by removing the present limitation on tax deductible exploration.

As to the Buy American Act: This policy should be strictly followed on a national basis, and a similar policy is equally applicable on a state-wide basis, and should be followed wherever possible, and the Government should immediately cease the use of barter of surplus agricultural products for the procurement of current government agency requirements.

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SEISMOLOGICAL STATION NEAR BAKER

A temporary seismological station has been set up east of Baker to record earth movements and seismic disturbances. The test station is being operated by a four-man team from the Geotechnical Corporation, a scientific instrument manufacturing firm at Garland, Texas, which is under contract to the U. S. Government to select sites for seismological stations. The program is part of Project Vela-Uniform and is being conducted under the technical supervision of the Air Force Technical Applications Center and under the overall direction of the Advanced Research Projects Agency. Selection of the Baker site as a permanent station depends on additional studies and measurements. However, the preliminary geologic investigations indicated that the area satisfies the basic criteria for such an installation. Called on for professional help regarding the geology of the area was Norman Wagner, geologist at the Oregon Department of Geology and Mineral Industries' Baker office. (Information from Baker Democrat-Herald, May 9, 1961)

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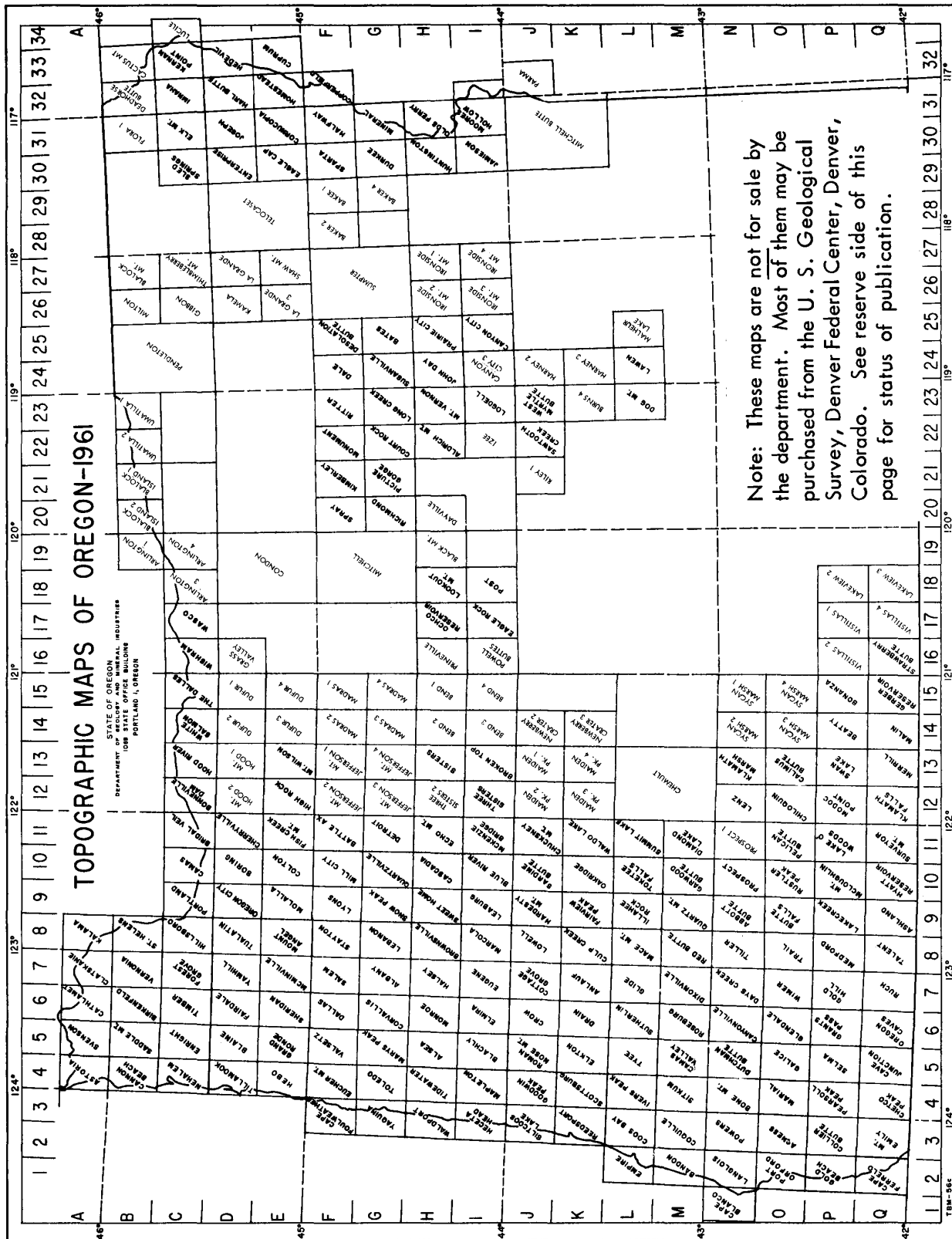
BILL INTRODUCED TO END GOLD BACKING OF CURRENCY

Representative Abraham J. Multer (New York), Chairman of a House Subcommittee on Banking and Currency, has introduced a bill which, if passed, would end the present 25 percent gold backing of currency. This bill, H.R. 6900, would (1) eliminate the requirement that Federal Reserve Banks maintain gold certificate reserves of at least 25 percent against deposit and note liabilities, and (2) remove federal limits on the interest rate insured banks and Federal Reserve member banks may pay on time deposits of foreign governments and central banks. Hearings were scheduled on this bill to begin May 17 but in a recent letter from Robert L. Cardon, Clerk and General Counsel of the Committee, it was stated "Hearings on this legislation have been postponed in order to provide more time to develop a witness schedule that will give a fair opportunity to present all viewpoints on this legislation, without scheduling witnesses who would merely offer repetitive testimony." This letter and the delay in hearings were the result of a large volume of protests deploring the speed with which efforts were being made to push this bill through Congress. One of the protests appeared in the column, "Business Tides" in NEWSWEEK, May 22, 1961, under an article entitled "Keep the Gold Reserve" by Henry Hazlitt. Mr. Hazlitt stated, in part, "The International gold standard when it prevailed, was the chief safeguard against tampering with the currency on the part of politicians and bureaucrats. It was the chief safeguard against domestic inflation." Another powerful force in delaying hearings was the resolution on gold adopted by the western governors at their conference in Salt Lake City May 14-17.

The conclusions of this resolution, which also called for assistance to the western gold miners, stated: (1) That the Western Governors urge an incentive or bonus payment that will assure to domestic producers a fair economic return; and (2) That they express their opposition to changing the present law requiring the Treasury to hold gold to the value of 25 percent of the outstanding notes and deposit liabilities of federal reserve banks until a careful and exhaustive study is made of the relationship of gold to the value of the dollar, with particular reference to the effect of this relationship on the economics of the western states where the major portion of domestic gold is mined.

It seems likely that efforts will be made to set up hearings on H.R. 6900 some time in the future. Mr. Cardon states that anyone wishing to testify should send a letter to him c/o House of Representatives Committee on Banking and Currency, Washington 25, D.C. It was also stated that those who would be unable to attend the hearing would undoubtedly be allowed to submit statements for the record.

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TOPOGRAPHIC MAPS OF OREGON-1961

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1000 STATE OFFICE BUILDING
PORTLAND, OREGON

Note: These maps are not for sale by the department. Most of them may be purchased from the U. S. Geological Survey, Denver Federal Center, Denver, Colorado. See reserve side of this page for status of publication.

TOPOGRAPHIC MAPS OF OREGON—1961

15-Minute Quadrangles
(Scale 1:62,000)

KEY TO SYMBOLS

A Map scheduled for publication
7-1-61 to 6-30-62

B Map scheduled for publication
7-1-62 to 6-30-63

C Map published by U. S. Army
29th Engineers

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1000 STATE OFFICE BUILDING
PORTLAND 1

Name	Location	Date	Name	Location	Date	Name	Location	Date	Name	Location	Date
Abbott Butte	N- 9	1947	Dead Horse Butte	B-32	B	LaGrande	D-27	B	Prospect 1	N-11	B
Agnes	O- 3	1954	Desolation Butte	F-25	1951	LaGrande 3	E-26	B	Quartz Mountain	M-9	1955
Albany	G- 7	1960	Detroit	G-11	1956	Lakeview	P- 9	1954	Quartzville	G-10	1956
Aldrich Mountain	H-22	1943	Diamond Lake	M-11	1956	Lake O'Woods	P-11	1955	Red Butte	M-8	1955
Alsea	H- 5	1958	Dixonville	M- 7	1954	Lakeview 2	P-18	B	Reedsport	K- 3	1956
Anlauf	K- 7	1956	Dog Mt.	L-23	1961	Lakeview 3	Q-18	B	Richmond	G-20	1953
Arlington 1	B-19	B	Drain	K- 6	1954	Langlois	N- 2	1954	Riley 1	J-21	A
Arlington 3	C-18	B	Dufur 1	D-15	B	Lawen	L-24	1961	Ritter	F-23	1952
Arlington 4	C-19	B	Dufur 2	D-14	B	Leaburg	I- 9	1951	Roman Nose Mountain	J- 5	1945
Ashland	Q- 9	1954	Dufur 3	E-14	B	Lebanon	G- 8	1957	Roseburg	M- 6	1955
Astoria	A- 4	C1939	Dufur 4	E-15	B	Lenz	N-12	1957	Ruch	Q- 7	1954
Baker 1	F-29	B	Durkee	G-30	1957	Logdell	I-23	A	Rustler Peak	O-10	1955
Baker 2	F-28	B	Dutchman Butte	N- 5	1948	Long Creek	G-23	1951	Saddle Mountain	B- 5	1955
Baker 4	G-29	B	Eagle Cap	E-30	1954	Lookout Mountain	H-18	1951	Salem	F- 7	1957
Bandon	M- 2	1944	Eagle Rock	I-17	1948	Lowell	J- 8	1955	Sardine Butte	J-10	1956
Bates	G-25	1951	Echo Mountain	H-11	1955	Lucile	C-34	B	Sawtooth Creek	J-22	1959
Battle Ax	F-11	1956	Elgin	C-28	B	Lyons	F- 9	1951	Scatsburg	K- 4	1955
Beatty	P-14	1955	Elk Mountain	C-31	1957	Mace Mountain	L- 8	1955	Selma	P- 5	1954
Bend 1	H-14	B	Elkton	K- 5	1955	Madras 1	F-15	B	Shaw Mt.	E-27	B
Bend 2	H-13	B	Elmira	I- 6	1957	Madras 2	F-14	B	Sheridan	E- 6	1956
Bend 3	I-13	B	Empire	L- 2	1944	Madras 3	G-14	B	Siltcoos Lake	J- 3	1956
Bend 4	I-14	B	Enright	C- 5	1955	Madras 4	G-15	B	Sisters	H-13	1961
Birkenfeld	B- 6	1955	Enterprise	D-30	1957	Maiden Pk. 1	J-12	B	Sitkum	M- 4	1955
Blachly	I- 5	1956	Euchre Mountain	F- 4	1957	Maiden Pk. 2	J-11	B	Sled Springs	C-30	1957
Black Mt.	H-19	B	Eugene	I- 7	1949	Maiden Pk. 3	K-11	B	Snow Peak	G- 9	1951
Blaine	D- 5	1955	Fairdale	D- 6	1955	Maiden Pk. 4	K-12	B	Sparta	F-30	1957
Blalock Island 1	B-21	B	Fairview Peak	K- 9	1955	Malheur Lake 1	L-25	A	Spray	F-20	1953
Blalock Island 2	B-20	B	Fish Creek Mountain	E-11	1956	Malin	Q-14	A	Stayton	F- 8	1960
Blalock Mt.	B-27	B	Flora 1	B-31	B	Mapleton	I- 4	1957	St. Helens	B- 8	1954
Blue River	I-10	1955	Forest Grove	C- 7	1956	Marcola	I- 8	1952	Strawberry Butte	Q-16	1961
Bonanza	P-15	A	Galice	O- 5	1948	Mariol	O- 4	1954	Summit Lake	L-11	1956
Bone Mountain	N- 4	1954	Garwood Butte	M- 9	1956	Marys Peak	G- 5	1957	Surveyor Mountain	Q-11	1955
Bonneville Dam	C-12	1957	Gerber Reservoir	Q-15	1961	McKenzie Bridge	I-11	1955	Susanville	G-24	1951
Boring	D-10	1944	Gibbon	C-26	B	McMinnville	E- 7	1943	Sutherlin	L- 6	1954
Bridal Veil	C-11	1954	Glendale	O- 6	1954	Medford	P- 8	1954	Svensen	A- 5	1955
Broken Top	I-13	1961	Glide	L- 7	1954	Merrill	Q-13	1957	Swan Lake	P-13	1957
Brownsville	H- 8	1952	Gold Beach	P- 2	1954	Mill City	F-10	1955	Sweet Home	H- 9	1951
Burns 4	K-23	A	Gold Hill	P- 7	1954	Milton	B-26	B	Sycan Marsh 1	N-15	A
Butte Falls	O- 9	1954	Goodwin Peak	J- 4	1956	Mineral	G-31	1957	Sycan Marsh 2	N-14	A
Cactus Mountain	B-33	B	Grand Ronde	E- 5	1955	Madoc Point	P-12	1957	Sycan Marsh 3	O-14	A
Calimus Butte	O-13	1956	Grants Pass	P- 6	1954	Molalla	E- 9	C1943	Sycan Marsh 4	O-15	A
Camas	C-10	1958	Grass Valley	D-16	B	Monroe	H- 6	1957	Talent	Q- 8	1954
Camas Valley	M- 5	1955	Halfway	F-31	1957	Monument	F-22	1951	The Dalles	C-15	1957
Cannon Beach	B- 4	1955	Halsey	H- 7	1960	Moares Hollow	I-31	1951	Three Sisters 2	H-12	A
Canyon City 3	I-24	A	Hardesty Mountain	J- 9	1955	Mount Angel	E- 8	1943	Three Sisters	I-12	1959
Canyon City 4	I-25	A	Hart Butte	D-32	1954	Mount Emily	Q- 3	1954	Thimbleberry Mt.	C-27	B
Canyonville	N- 6	1956	Harney 2	J-24	A	Mount Hood 1	D-13	B	Tidewater	H- 4	1956
Cape Blanco	N- 1	1956	Harney 3	K-24	A	Mount Hood 2	D-12	B	Tillamook	D- 4	1955
Cape Ferrello	Q- 2	1956	Hebo	E- 4	1955	Mount Jefferson 1	F-13	B	Tiller	N-8	1946
Cape Faulweather	F- 3	1957	Heceta Head	I- 3	1956	Mount Jefferson 2	F-12	B	Timber	C- 6	1955
Cascadia	H-10	1955	He Devil	D-33	1957	Mount Jefferson 3	G-12	B	Tolakee Falls	L-10	1956
Cathlamet	A- 6	1941	High Rock	E-12	1956	Mount Jefferson 4	G-13	B	Toledo	G- 4	1960
Cave Junction	Q- 5	1954	Hillsboro	C-8	1943 B	Mount McLoughlin	P-10	1955	Trail	O- 8	1945
Cherryville	D-11	1955	Homestead	E-32	1957	Mount Vernon	H-23	1943	Tualatin	D- 8	1943
Chetco Peak	Q- 4	1954	Hood River	C-13	1957	Mount Wilson	E-13	1956	Tyee	L- 3	1955
Chiloquin	O-12	1957	Huntington	H-30	1951	Nehalem	C- 4	1955	Umatilla 1	B-21	B
Chucksney Mountain	J-11	1955	Hyatt Reservoir	Q-10	1955	Newberry Crater 2	I-13	B	Umatilla 2	B-20	B
Clatskanie	A- 7	1952	Iliahee Rock	L- 9	1955	Newberry Crater 3	J-13	B	Valsetz	F- 3	1956
Collier Butte	P- 3	1954	Imnaha	C-32	1954	Oakridge	K-10	1956	Vernonia	B- 7	1955
Colton	E-10	1955	Ironside Mt. 1	H-27	B	Ochoco Reservoir	H-17	1950	Vistillas 1	P-17	B
Coas Bay	L- 3	1945	Ironside Mt. 2	H-26	B	Olds Ferry	H-31	1952	Vistillas 2	P-16	A
Copperfield	F-32	1957	Ironside Mt. 3	I-26	B	Oregon Caves	Q- 6	1954	Vistillas 4	Q-17	B
Coquille	M- 3	1945	Ironside Mt. 4	I-27	B	Oregon City	D- 9	1945 A	Waldo Lake	K-11	1956
Cornucopia	E-31	1954	Ivers Peak	L- 4	1955	Pearson Peak	P- 4	1954	Waldport	H- 3	1956
Corvallis	G- 6	1956	Izee	I-22	A	Pelican Butte	O-11	1955	Wallowa	C-29	B
Cottage Grove	J- 7	1959	Jamieson	I-30	1950	Picture Gorge	G-21	1955	Wasco	C-17	1957
Courtrock	G-22	1951	John Day	H-24	1943	Portland	C- 9	A	West Myrtle Butte	J-23	1959
Crow	J- 6	1945	Joseph	D-31	1957	Port Orford	O-2	1954	White Salmon	C-14	1957
Culp Creek	K- 8	1955	Kalama	A-8	C1943	Post	I-18	1951	Wimer	O-7	1954
Cuprum	E-33	1957	Kameia	D-26	B	Powell Butte	I-16	B	Wishram	C-16	1957
Dale	F-24	1951	Kernan Point	C-33	1954	Powers	N-3	1954	Yamhill	D-7	C1942
Dallas	F- 6	1957	Kimberley	F-21	1953	Prairie City	H-25	1959	Yaquina	G- 3	1946 A
Days Creek	N- 7	1954	Klamath Falls	Q-12	1957	Prineville	H-16	B			
Dayville	H-20	B	Klamath Marsh	N-13	1957	Prospect	N-10	1956			

30' Quadrangle Maps Available
Scale (1:125,000)

Name	Location	Date	Name	Location	Date	Name	Location	Date	Name	Location	Date
Arlington	C-19	1941	Dayville	I-21	1936	Mitchell	G-19	1926	Sumpter	G-27	1939
Baker	G-29	1934	Dufur	E-15	1945	Mitchell Butte	K-31	1921	Telocaset	E-29	1932
Bend	I-15	1940	Hood River	C-13	1940	Mt. Hood	E-13	1944	The Dalles	C-15	1941
Blalock Island	C-21	1944	Ironside Mt.	I-27	1908	Mt. Jefferson	G-13	1938	Three Sisters	I-13	1941
Chemult	M-13	1941	Madras	G-15	1931	Newberry Crater	K-15	1935	Umatilla	C-23	1921
Candon	E-19	1916	Maiden Pk.	K-13	1944	Pendleton	C-25	1935			