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OIL NEWS

A joint over-water seismic study of the submerged lands of Cook Inlet in Alaska will shortly be conducted by a number of oil companies, Standard Oil Company of California, Western Operations, Inc. operator for the group, announced today(Nov. 26). Other companies participating in the survey include Ohio Oil, Pan American, Richfield, Shell, Sunray-Mid-Continent, Superior, Texaco (Alaska Inc.), Union and Western Gulf. Work is expected to begin after the first of the year. Waters to be surveyed are adjacent to the Kenai Peninsula lowlands, site of the Standard-Richfield Swanson River Unit, where an oil discovery made in 1957 is currently undergoing testing. The seismic program will cover a broad area to give participating companies sufficient preliminary data on which to make individual appraisals of the potential of the submerged lands, the company said. Results are intended to serve as a guide for determining what follow up work, if any, each of the companies will undertake. Standard emphasized that the program is being planned in close cooperation with the Alaska Regional Bureau of Commercial Fisheries, the Territorial Land Board, Alaska Fish and Game Department and the Bureau of Sports Fisheries and Wildlife to assure that the seismic operations will not be harmful to marine life or interfere with sport or commercial fishing activity. A representative of the agencies will be present at all times during the surveys. The seismic energy will be generated by a special explosive, developed in experiments during exploration of the offshore California area, which has been demonstrated to be non-injurious to fish. Standard also disclosed that underwater detection equipment will be employed to enable survey boats to avoid schools of fish. Operations as a whole will be scheduled to avoid conflict with any commercial fishing season. Estimated cost of the joint program will be about $1,000,000, the company said. Some seven boats, especially equipped to operate in winter weather, are expected to be employed in the survey. Selection of the seismic contractor will be announced shortly. Joint survey work such as is planned for the inlet has been customary in exploration in the Gulf of Mexico and offshore California, because of the sizable expenditures involved. In addition to the cost sharing advantage, the joint approach also reduces duplication of individual surveys over the same area, Standard explained.

Standard and Richfield have moved their drill rig from Swanson River Unit No. 3 well back to the No. 2 well, where they will do some more work. The Swanson River Unit is on the Kenai Peninsula. No. 3 well was drilled to a depth of 11,653 feet. The production test is continuing at Well No. 1. In mid-November, Colorado Oil's Yakutat No. 3 was down to 10,848 feet and Humble and Shell were fishing for stuck collars at 12,473 feet in their Bear Creek Unit No. 1 well near Wide Bay on the Alaska Peninsula. Halbouty-King and Alaska Consolidated Oil are making preparations to drill at sites on the Kenai Peninsula near Swanson River Unit and on the Alaska Peninsula near Iniskin, respectively.

The Alaska Department of Lands has drawn up its suggested rules and regulations for the leasing of State oil and gas lands. The Alaska Land Board has scheduled a public hearing for all interested parties on the proposed rules and regulations for December 11 and 12, 1958, at Anchorage. Great interest has been aroused by a press release from the Land Board announcing that no applications for oil and gas leases will be accepted until the State has classified the lands as competitive or noncompetitive. The reason for not accepting applications until land classifications are made is to prevent the State Land Department from being overrun with inquiries and applications, many of which would have to

be rejected. The proposed classification of competitive lands would be based on all available information including the U.S.G.S. Open File Report 159 "Geology of Possible Petroleum Provinces in Alaska" and its accompanying map showing which portions of Alaska are possible oil provinces. The Land Board proposes that lands within the boundaries of the geologic provinces be classed as competitive, and open only to competitive bidding for oil and gas leases. Undoubtedly, the hearing will be well attended and much comment will be heard.

HOMESTEAD MINERAL RIGHTS

This subject is of great interest in Alaska today, but very few people have a complete understanding of it. Even most of the U.S. Bureau of Land Management authorities who work with it regularly must, of necessity, go to their law books and instruction manuals when asked questions on it. We will try to present here a general working idea of the subject.

We are concerned in this discussion with two main classifications of minerals: the Leasing Act minerals and the mining law minerals. The Leasing Act minerals are oil, gas, coal, phosphate, sulfur, and others which by the Leasing Act may only be acquired by leasing ground from the government where they occur, and not by staking under the mining laws. The mining law minerals are mostly the metals, but also include limestone and other types of nonmetallics and building materials, all of which may be acquired by staking and recording under the mining laws.

Also involved in the subject is the classification of lands as to their mineral character. The U.S. Geological Survey is charged with the job of classifying lands mineralwise, and must tell the BLM which lands are prospectively valuable for the Leasing Act and/or mining law minerals and which are not. The 1898 homestead law established the basic fact that homesteads may not be taken up on land prospectively valuable for minerals. A second law passed in 1922 partly changed the situation and made it permissible to take up homesteads on lands prospectively valuable for Leasing Act minerals, but not on the mining law mineral land.

Whether or not the mineral rights to the Leasing Act minerals are acquired by the homesteader depends upon the classification of the land at the time he files his properly executed final proof, which is his last bit of paper work prior to patent issue. If the land on which a homestead is acquired has been classified as prospectively valuable for oil, gas, coal, etc., then the homesteader does not receive the mineral rights to any Leasing Act minerals located therein. If the land has been classified as not prospectively valuable, then the homesteader does receive mineral rights, and will enjoy the benefit of any and all minerals found there from then on. Rights to the mining law minerals always go with the patent, regardless of the land classification. Of course, if the land were classed as prospectively valuable for mining law minerals at the time of entry, the entry would not have been allowed in the first place.

When a potential homesteader first applies for a homestead on land that has not yet been classified, the BLM requests a classification from the G.S. so that the character of the land may be known before the entry is allowed. If the classification is reported not prospectively valuable, the entry is promptly allowed. If it is prospectively valuable only for Leasing Act minerals, the applying homesteader must file a signed waiver of his Leasing Act mineral rights before he is allowed entry, or he may submit evidence to the BLM that the land is not mineral in character. If this evidence successfully proves his point, he may then proceed with his entry, retaining his mineral rights.

After the homesteader has fulfilled all requirements on his land and is ready to proceed with his final proof, there may have been another classification of the land as a

result of recent geological or leasing activities. Whether this has happened or not, the BLM calls for a new classification before allowing the final proof. If this later classification is mineral, where the first was nonmineral, the homesteader must then waive his mineral rights, or his final proof will probably not be accepted. However, a homesteader without mineral rights can take out an oil lease covering his homestead if he follows the oil-leasing regulations, and if someone else has not already done so.

Then we have the case of the homesteader on land classified as nonmineral who has not yet received his patent and who is suddenly confronted with someone applying for an oil lease covering his homestead. A new geological classification is called for, and if mineral, the homesteader's waiver is requested, and the lease is granted. If nonmineral, the homesteader's status is not changed, and the lease is not allowed. The lease applicant may undertake to prove the land is mineral in character, if he wishes. In this case, the homesteader can introduce counter-evidence that the land is not mineral in character, and a decision must be made as to which is right. But of course this costs the homesteader time, effort, and money. And it is evident from all this that the homesteader's position may be changed by new developments at any time up to the final proof.

When the homesteader is requested to sign a waiver, he has the alternative right to submit evidence to the BLM that the land is nonmineral in character. Failure of the homesteader to file the waiver or the evidence within a specified period may result in cancellation of the homestead entry. According to recent news reports, the 30-day filing period for this purpose has been lengthened to 90 days on certain Kenai Peninsula homesteads by order of Secretary Seaton.

All these provisions seem to be harsh and not exactly in keeping with our free pioneering way of life. However, the laws requiring these things have been in effect for 60 and 36 years, respectively, and are not likely to be greatly changed. Also, we should remember that homesteading was devised as an agricultural aid for those who wish to make their living from the soil, and not as a mineral industry incentive.

THE CLAIM STAKING QUESTION

In answer to our request of last month for opinions on whether the two-per-month placer claim staking law should be repealed, we received only three letters. These were all in favor of repealing the law so that placer claims could be staked at the same rate as lode claims. We assume that none of our readers are seriously against the proposal, for the strong objectors to a proposal are the ones usually heard from first and most.

One of our correspondents went on to say: "We recognize the evil attendant upon staking claims simply to block out competition, and we think that, for both lode and placer claims, the man who makes the discovery should be given a reasonable time to expand his discovery, but not to merely hold for an unlimited period of time, claims which he has no intention of developing." He then goes on to suggest that an equitable measure for safeguarding every one's rights would be to require that assessment work be performed on each and every claim to be held, and not just on a few claims for the whole group as it is now. There is food for thought in the idea.

FIELD TESTING OIL SEEPS

A few words on the determination of what is oil are probably long overdue. Every so often some prospector finds an "oil seep" only to have his visions of riches fade into the distance upon arrival at the assay office. What appears to be an oil seep to the inexperienced usually is not. The most frequent find is a thin film on the surface of pools, swamps, or streams, but this is seldom oil. Quite often the film is an oxide from decaying vegetation. In one case recently, the film turned out to be a finely-ground graphite. One extremely simple way to check a film on water is to distrub it with a stick or the toe of

your boot. If the broken film remains in pieces and does not immediately recover the surface of the water, it is definitely not oil. Crude oil has quite a distinct odor. It is usually black, viscous, and will stick to glass.

A test for petroleum in sand is quoted from von Bernewitz' Handbook for Prospectors as follows:

> "Procure a sample of 1 to 5 pounds; crush it fine and mix. Dry in the sun (this may prove difficult in some parts of Alaska) - not over a fire. Put a couple of ounces into a small bottle and add chloroform or carbon tetrachloride (don't breath this stuff) until the material is saturated and covered. Shake for 15 minutes. Place a white filter-paper into a glass funnel and a white plate below the funnel. Pour the pulp on to the filter, and when drained put the dish containing the liquor in the open so that it can evaporate. After the liquor has evaporated, and if anything remains, it is oil. Also examine the paper. If oil is present, it will appear as a brown or black ring on the paper."

ROCK AND MINERAL DEALERS WANTED

Since the passing of the Statehood bill, both the U.S. Bureau of Mines and the TDM have been recipients of increasing numbers of letters requesting rock or mineral specimens from the new State of Alaska. Neither agency is in a position to fulfill these requests. The TDM would like to compile a list of persons and firms who will sell Alaskan rock or mineral specimens by mail for the reference of correspondents requesting them. We would appreciate hearing from anyone who wishes their name and address placed on such a list.

ECONOMIC INTEREST OF CONTRACT STRIP MINERS

A big question in the coal industry for a long time has been whether a contract strip coal miner being paid a fixed price per ton of coal by the owner has a sufficient "economic interest" in the coal yet in place to entitle him to a depletion deduction. The question is important because the owner and stripper cannot both receive depletion allowances on the same coal. Court results on the matter have so far been inconsistant. The U.S. Supreme Court is now reviewing two typical lower court cases, and its decision is awaited with great interest. In Alaska, it may help decide a pending case in which it is questioned whether a contract strip miner is actually mining, or in the business of excavating, for purposes of Territorial taxation. The Territorial mining tax rates are, of course, much more lenient than for most other businesses.

MISCELLANEOUS

We thought for sure we would have a flood of mail because of our Kodiak statement last week. We didn't actually say it, but we strongly inferred that Kodiak was the largest island under the American flag. One of the local intelligentsia tripped us up on it before the Bulletin was all in the mail, but he was the only one we heard from. The island of Hawaii is about 430 square miles larger than Kodiak.

Because so many more columnists, reporters, and authors are writing about Alaska these days than ever before, requests for the TDM Bulletin have caused the biggest monthly jump in our mailing list since we started publication. Circulation increased by 49 copies this month to a total of over 1400.

The U.S.G.S. has published two new reports on the area 55 miles long by 5 to 12 miles wide which extends along the Nenana River and Alaska Railroad across the Alaska Range.

They are Professional Papers 293-A and 293-B, bound together in one volume, and entitled "Quaternary geology of the Nenana River and adjacent parts of the Alaska Range, Alaska" and "Engineering geology of part of the Alaska Railroad with special reference to landslides". They can be seen in Alaskan U.S.G.S. and TDM offices, and can be purchased from the Government Printing Office, Washington 25, D.C. for $2.75 for the volume.

The program for this year's Northwest Mining Association convention, December 5 and 6 at Spokane, looks very interesting. Exploration, mining, production, costs, management, and other phases and problems will be topics of discussion. Of special interest to our TDM assayers would be the subject, "Should You Pay Your Assayer as much as Your Plumber?" which will be discussed by the president of Ledoux and Company, a well-known metallurgical and assay laboratory.

E. AND M. J. METAL MARKET PRICES

	Nov. 20 1958	Month Ago	Year Ago
Copper, per lb.	29.1¢	27.7¢	26.5¢
Lead, per lb.	13¢	13¢	13.5¢
Zinc, per lb.	11.5¢	11¢	10¢
Tin, per lb.	99.5¢	96.4¢	89.1¢
Nickel, per lb.	74¢	74¢	74¢
Platinum, per oz.	$53-60	$54-60	$81-87
Quicksilver, per flask	$228-231	$232-235	$225-230
Silver, foreign, New York	90.1¢	88.6¢	90.4¢
Silver, domestic, per oz.	90.5¢	90.5¢	90.5¢
Antimony ore, per unit	$3.10-3.20	$3.10-3.20	$2.90-3.00
Chrome ore, per long ton	$42-44	$44-46	$115
Molybdenum conc., per lb.	$1.25	$1.18	$1.18
Titanium ore, per ton	$23-26	$23-26	$26-30
Tungsten ore, per unit	$19-22	$15.50-22	$55