

MINES AND PETROLEUM BULLETIN

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MINING NEWS

1968 claim location and assessment work - As most of our readers know the Division maintains a central recording system where information on mining claims in Alaska is filed as a public service. Data concerning the number and type of documents received in 1968 are as follows:

| | |
|--------------------------|-------|
| Claim Location Notices | 7,368 |
| Affidavits of Labor | 947 |
| Leases | 3 |
| Deeds | 99 |
| Miscellaneous Documents | 43 |
| Total Documents Received | 8,460 |

The number of location notices received represents an approximate fivefold increase over 1967.

Offshore mineral prospecting - An article in the January 20 issue of the Nome Nugget reports that a crew of 28 men, including 20 local residents, is engaged in offshore drilling from the ice in Norton Sound. The project is designed to explore and evaluate gold deposits in offshore sands near Nome. Current operations are about four miles west of town.

Shell Oil Company and American Smelting and Refining Company are cooperating in this joint venture. The drill crews are working around the clock in two shifts of 12 hours each. Recently open leads have developed in the ice pack near Nome but so far these have not interfered with progress on the project. Company representatives expressed hope for cooler weather to prevent development of other leads.

Warren Woodward represents Shell on the project; no official statements were made concerning the status of the project. The news article speculates that three holes have been drilled and the plan is to drill to about three miles out from the beach.

Gold production in Alaska - A graph depicting annual gold production in Alaska from 1880 until 1965 is presented on the next page. This graph is from page 9 of U.S. Geological Survey Professional Paper 610, "Principal Gold-Producing Regions of the United States". Availability of this publication was noted in the January issue of the Bulletin.

Approximately 32 pages of the 283-page publication are devoted to Alaska. A brief history and description of the principal gold districts, including the geology, is included.

ALASKA

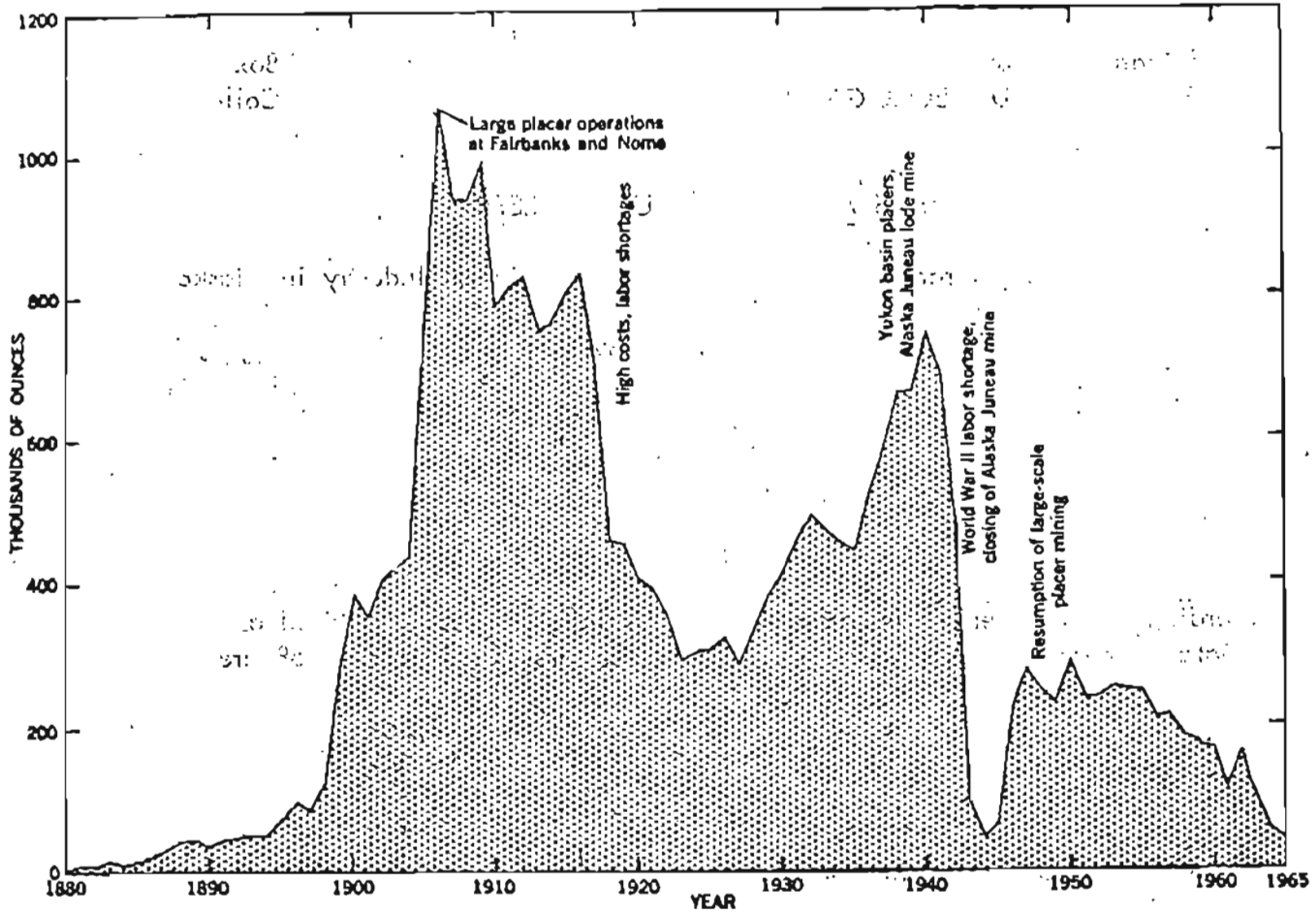


FIGURE 4.—Annual gold production of Alaska, 1880-1965. Sources of data: 1880-1900, U.S. Geological Survey (1883-1924); 1900-42, Smith (1944, p. 6); 1943-59, U.S. Bureau of Mines (1933-66). Production reported in dollar value was converted to ounces at prevailing price per ounce.

(FROM U.S. GEOLOGICAL SURVEY PROF. PAPER 610, PG. 9)

The graph accurately reflects periods in the history of Alaska as well as national history. Peak production occurred during the early gold-rush years of the 1900's when numerous miners worked the creeks with small-scale hand operations and produced in aggregate the largest annual gold output Alaska has known. Production declined during and after World War I until about 1928. During the 1930's the big dredges were operating and gold production reached an important, but lesser peak just before the start of World War II. It is interesting to note that the dredges did not produce as much per year as the early-date hand miners at their peak. Gold mining practically ceased during the war; it picked up in the postwar years, reached a high in the early 1950's and has been slowly declining since that time. In addition to the graph presented above other notes of interest in Professional Paper 610 are as follows:

| | Total Gold Produced | |
|---|---------------------|----------------|
| | Rank in U.S. | Rank in Alaska |
| Alaska (29,872,981 fine ounces) (California, Nevada, Montana, and Colorado exceed Alaska in the order given.) | 5 | - |
| Fairbanks District (7,464,000 fine ounces) | 6 | 1 |
| Juneau District (6,884,000 fine ounces) | 7 | 2 |
| Nome District (3,606,000 fine ounces) | 12 | 3 |

PUBLIC LAND AND MINERAL REGULATIONS

BIA withdrawals - On page 3 of the January Bulletin the details of an application by the Bureau of Indian Affairs for withdrawal of unreserved public lands in Alaska were presented. It was stated in that issue that the withdrawal has no effect on mining claim locations. We have received further word on this matter from Burton W. Silcock, State Director, Bureau of Land Management. He revised his earlier statement to the effect that claims for nonmetallic minerals would be null and void if staked after inception of the withdrawal. Thus, materials like limestone, jade, and sulfur are withdrawn from location, but metallic minerals are open for location.

Summary statement of principles and recommendations concerning laws relating to mining - The November, 1968 issue of the Ore Bin (Vol. 30, No. 11) contained a summary of a presentation that the American Mining Congress made to the Public Land Law Review Commission.* The statement, presented below, is worth serious consideration and thought by anyone interested in the future of mining in the United States. Changes in the mining law of 1872 are inevitable and are being studied by the Land Law Review Commission. The summary below presents a number of suggested changes; these are in contrast to more drastic revisions recently suggested by outgoing Secretary Udall of the Department of Interior. He strongly recommended to the Land Law Review Commission that all minerals be subject to leasing, and claim staking be abolished. The AMC recommendations follow:

1. The maximum benefit to the public will be obtained by continuing the basic principle of the present mining laws, namely, the right of individuals to go on public lands and search for, discover, develop and acquire title to metals and minerals lying within the public domain.
2. One who discovers a buried and unknown mineral deposit in the public domain should have, as a reward for discovery of this resource of our Nation, the right to acquire for a nominal price, title to the mineral deposit, together with the right to use so much of the surface as may be needed for mining and related purposes.
3. The mining laws should be amended to provide one kind of mining claim for exclusive use in locating all locatable minerals; the existing distinction between lode and placer claims should be abolished.
4. The mining laws should be amended to require that (a) boundaries of new claims on surveyed land conform as nearly as practicable to the lines of the public survey and the claims be described by legal subdivision, and (b) boundaries of new claims on unsurveyed land be tied by courses and distances to a corner of a public survey or a United States mineral monument or some natural object or permanent monument.
5. The mining laws should be amended to eliminate extralateral rights in future mining locations.
6. The mining laws should be amended to specify requirements in making a location to the exclusion of all state location requirements.
7. Documents relating to unpatented mining claims should be required to be filed or recorded in only one office and that is the recording office for the county in which the mining claims are located.
8. The mining laws should be amended to provide for payment (at fair market value) of non-mineral surface resources when title to the surface is acquired by the patentee.
9. Because mineral exploration today is chiefly directed to discovery of nonoutcropping and often deeply buried mineral deposits and to encourage the expenditure of large sums necessary to carry forward needed mineral explorations, the existing mining laws should be amended to provide reasonable pre-discovery protection.

The complete statement, as presented to the Public Land Law Review Commission by the American Mining Congress, has been published in a booklet entitled "The Mining Industry and the Public Lands". Copies may be obtained from the American Mining Congress, Ring Building, Washington, D.C. 20036.

10. The mining laws should be amended to provide a simple way to clear the public domain of abandoned mining claims, i.e., to provide that a mining claim is conclusively presumed abandoned if notice is not filed in the appropriate county office at least once every three years.

11. The law permitting, geological, geochemical and geophysical surveys to be used as assessment work should be amended so as to remove requirements for public disclosure of confidential information obtained in such work and unwarranted limitations on use of surveys as assessment work.

12. As the Nation's hidden mineral resources cannot be developed and their value to the Nation determined until they are discovered, and because constantly improving tools and techniques of mineral exploration and mining are resulting in mineral discoveries in lands heretofore considered nonmineral in character, the public domain should be kept open to mineral exploration and location of new discoveries except in those cases where there is a compelling national interest for closing them.

13. Congress should not, nor should it permit administrative agencies to, lock up buried and unknown mineral deposits by patenting surface rights and then withdrawing mineral deposits from location under the mining laws or leasing under the mineral leasing laws.

14. One who discovers a mineral deposit should have the right to acquire, adjacent to a mineral discovery, a reasonable acreage of ground for plant facilities and waste disposal areas on paying the fair market value for the ground.

15. Existing federal statutes authorizing land exchanges should be amended in order to facilitate exchanges of public lands required for uses incidental to mining for other lands acceptable for government use.

16. The Classification and Multiple Use Act, as amended, should be permitted to expire on December 31, 1970, and, as of that date, all classifications and segregations made under the act should be terminated except to the extent that they meet criteria recommended by the Public Land Law Review Commission.

17. Congress should explicitly and with care spell out the limits within which administrative agencies are permitted or required to act in administering public lands, and, to the extent possible, make all mining and mineral leasing laws self-executing (applicable to all legislation).

18. In order to encourage exploration for and development of leasable mineral resources in public lands, the federal mineral leasing laws should be amended in the following respects:

(a) To prohibit imposition of new and burdensome obligations on lessees whether by regulation or by amendment of the lease contract.

(b) To establish legislative guidelines requiring classification of public lands for issuance of prospecting permits except where workability and minability of a valuable commercial deposit is known.

(c) To make reasonable increases in acreage limitations where required to provide an adequate resource base to justify the required investment.

(d) To require that the preference right outlined in a prospecting permit set forth fully the terms and conditions of the lease which will be issued under the permit, and to provide that these terms and conditions cannot be subsequently changed except with consent of the permittee.

(e) To establish reasonable statutory time limits for adjudication of applications for permits, and require the Secretary to issue permits and leases on vacant lands not withdrawn or otherwise appropriated if the application is in order.

19. Interior Department procedures and practices in public land matters should be changed in the following respects:

(a) A full Administrative Procedure Act-type hearing be made available in every public land case where there is a genuine issue of material fact.

(b) Appeal to the director of the Bureau of Land Management be abolished.

(c) All judicial functions, both trial and appellate, be placed directly under a judicial officer within the office of the Secretary of the Interior, entirely separate from the office of the solicitor.

- (d) The Rules of Practice of the Department of the Interior be modernized along the lines of the present rules of procedure of federal courts, as interpreted by those courts.
- (e) The right of review of the final decisions of the Secretary of the Interior by the United States District Court in accordance with existing venue statutes be clearly affirmed and modified in certain respects.
- (f) The time for decision by the Secretary be limited to not more than one year from the date of the examiner's decision.
- (g) The status of public land matters under the Administrative Procedure Act be clarified so that it can no longer be contended that they are exempt from that act.
- (h) The practice of selective certification in connection with appointment of hearing examiners be abolished.

20. The rule for discovery of a valuable mineral deposit is the prudent man test. In applying this test the Department of the Interior and the courts should give major weight to the prospective value of the deposit.

21. A correct definition of "common varieties," as used in section 3 of the Surface Resources Act (30 USC § 611), means a common variety of one of the classes enumerated in section 3, for example, stone, and does not mean a common variety of a particular type of stone, such as limestone.

NEW USGS PUBLICATIONS

The following open file report has been released by the USGS and is available for consultation in the Geological Survey Library, 1033 GSA Bldg., Washington, D.C. 20242; Bldg. 25, Federal Center, Denver, Colorado 80225; and 345 Middlefield Road, Menlo Park, California 94025. We are not advised, but open file reports ordinarily can be reproduced at private expense at the Menlo Park office.

Availability of palynological material from Naval Petroleum Reserve No. 4, XI: Meade Test Well No. 1, by Richard A. Scott. 1 p.

E. AND M. J. METAL MARKET PRICES

| | <u>January 27</u> | <u>Month Ago</u> | <u>Year Ago</u> |
|---------------------------|-------------------|------------------|-----------------|
| Copper, per lb. | 44.2¢ | 41.7¢ | Suspended |
| Lead, per lb. | 13.5¢ | 13.0¢ | 14¢ |
| Zinc, per lb. | 14.0¢ | 13.5¢ | 13.5¢ |
| Tin, per lb. | 163.25¢ | 163.25¢ | 148.5¢ |
| Nickel, per lb. | \$1.03 | 94.0¢ | 94.0¢ |
| Platinum, per oz. | \$120-125 | \$120-125 | \$109-114 |
| Mercury, per flask | \$532-540 | \$532-537 | \$538-540 |
| Antimony ore, per unit | \$6.47-6.56 | \$6.25-6.34 | \$5.00-5.95 |
| Beryllium powder, 93% | \$54-66 | \$54-66 | \$54-66 |
| Chrome ore, long ton | \$31-35 | \$31-35 | \$31-35 |
| Molybdenum conc., per lb. | \$1.62 | \$1.62 | \$1.62 |
| Titanium ore, per ton | \$20-21 | \$20-21 | \$21-24 |
| Tungsten, per unit | \$43.00 | \$43.00 | \$43.00 |
| Silver, New York, per oz. | 198.1¢ | 193.5¢ | 208.0¢ |
| Gold, per oz. | \$42.73 | \$41.90 | ----- |

* Price of gold is U.S. selling price, Engelhard buying price is no longer quoted.

OIL AND GAS NEWS

(Prepared by the Division of Oil and Gas, 3001 Porcupine Drive, Anchorage, Alaska 99504)

Eleven applications for drilling permits were approved by the Division of Oil and Gas as follows:

Permit No. 68-116. Union Oil Company of California #D-16 Trading Bay Unit, API No. 50-133-20165. Surface location: 680' FSL and 1,213' FWL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 1,780' FNL and 2,660' FEL, Sec. 4, T8N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 69-1. Mobil Oil Corporation #32-23 Granite Point State, API No. 50-133-20166. Surface location: 2,368' FNL and 1,269' FWL, Sec. 13, T10N, R12W, S.M. Bottom hole location: 1,980' FNL and 1,980' FEL, Sec. 23, T10N, R12W, S.M. This development location is in the Granite Point Field.

Permit No. 69-2. Union Oil Company of California #K-10 Trading Bay Unit, API No. 50-133-20167. Surface location: 727' FSL and 141' FEL, Sec. 17, T9N, R13W, S.M. Bottom hole location: 1,124' FNL and 1,075' FWL, Sec. 19, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 69-3. Union Oil Company of California #D-17 Trading Bay Unit, API No. 50-133-20168. Surface location: 759' FSL and 1,127' FWL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 660' FSL and 422' FEL, Sec. 6, T8N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 69-4. Union Oil Company of California #D-18 Trading Bay Unit, API No. 50-133-20169. Surface location: 675' FSL and 1,214' FWL, Sec. 6, T8N, R13W, S.M. Bottom hole location: 31' FNL and 401' FEL, Sec. 6, T8N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 69-5. Shell Oil Company #1 Johnson Slough, API No. 50-133-20170. 660' FSL and 1,320' FEL, Sec. 36, T8N, R16W, S.M. This exploratory location is 18 miles west of the southern part of the Middle Ground Shoal Field.

Permit No. 69-6. Union Oil Company of California #K-15 Trading Bay Unit, API No. 50-133-20171. Surface location: 611' FSL and 121' FEL, Sec. 17, T9N, R13W, S.M. Bottom hole location: 2,110' FNL and 1,000' FWL, Sec. 22, T9N, R13W, S.M. This development location is in the McArthur River Field.

Permit No. 69-7. Texaco Inc. #1 West Kavik Unit, API No. 50-223-20002. 1,320' FNL and 1,320' FEL, Sec. 20, T5N, R20E, U.M. This exploratory location is 50 miles southeast of the Prudhoe Bay discovery well.

Permit No. 69-8. Union Oil Company of California #S-2 Trading Bay Unit, API No. 50-133-20172. Surface location: 2,606' FSL and 2,492' FEL, Sec. 26, T10N, R13W, S.M. Bottom hole location: 660' FNL and 660' FWL, Sec. 35, T10N, R13W, S.M. This development location is in the Trading Bay Field.

Permit No. 69-9. Mobil Oil Corporation #1-1 MUC, API No. 50-133-20173.
 Surface location: 2,391' FNL and 1,379' FWL, Sec. 13, T10N, R12W, S.M.
 Bottom hole location: 0' FNL and 500' FEL, Sec. 13, T10N, R12W, S.M. This
 development location is in the Granite Point Field and will be a water injection
 well.

Permit No. 69-10. Shell Oil Company #1 Middle Ground Shoal "C" line well,
 API No. 50-133-20174. Surface location: 498' FSL and 1,539' FEL, Sec. 23,
 T8N, R13W, S.M. Bottom hole location: 400' FNL and 2,300' FWL, Sec. 35, T8N,
 R13W, S.M. This development location is in the Middle Ground Shoal Field and
 will be a water injection well.

DRILLING ACTIVITY (as of January 24, 1969)

| <u>Operator</u> | <u>Well Names & Numbers</u> | <u>Type</u> | <u>Status</u> |
|------------------------------|---------------------------------|-------------|-------------------------|
| <u>Southern</u> | | | |
| Atlantic Richfield Company | N. Trading Bay State S-1 | D | Completing |
| Atlantic Richfield Company | N. Trading Bay State S-2 | D | Location |
| Gulf Oil Corporation | Middle Lake Unit #1 | E | Location |
| Mobil Oil Corporation | Granite Point #32-23 | D | Drilling |
| Mobil Oil Corporation | MUC #1-1 | E | Drilling |
| Pan American Petroleum Corp. | David River #1-A | E | Drilling |
| Pan American Petroleum Corp. | Granite Point State 18742 #14 | D | Abandoned |
| Pan American Petroleum Corp. | Granite Point State 18742 #22 | E | Abandoned |
| Pan American Petroleum Corp. | Granite Point State 18742 #27 | D | Comp. Oil Well |
| Pan American Petroleum Corp. | MGS State #12 | D | Completing as Wtr. Inj. |
| Phillips Petroleum Company | North Cook Inlet Unit A-1 | D | Temp. Susp. |
| Phillips Petroleum Company | North Cook Inlet Unit A-2 | D | Comp. Gas Well |
| Phillips Petroleum Company | North Cook Inlet Unit A-3 | D | Drilling |
| Shell Oil Company | Johnson Slough #1 | E | Drilling |
| Shell Oil Company | Kustatan River #1 | E | Abandoned |
| Shell Oil Company | MGS "C" Line #1 | D | Location |
| Shell Oil Company | MGS C-41-23 | D | Completing |
| Sinclair Oil Company | Sinclair BP Ugnu #1 | E | Location |
| Standard Oil Co. of Calif. | Moquawkie 44-8 | E | Drilling |
| Texaco Inc. | Trading Bay TS-5 | D | Temp. Susp. |
| Texaco Inc. | Trading Bay TS-6 | D | Location |
| Union Oil Co. of Calif. | Trading Bay State A-19 | D | Location |
| Union Oil Co. of Calif. | Trading Bay State A-20 | D | Location |
| Union Oil Co. of Calif. | Trading Bay Unit D-6 | D | Comp. Oil Well |
| Union Oil Co. of Calif. | Trading Bay Unit D-14 | D | Spud-Temp. Susp. |
| Union Oil Co. of Calif. | Trading Bay Unit D-15 | D | Comp. Oil Well |
| Union Oil Co. of Calif. | Trading Bay Unit D-16 | D | Location |
| Union Oil Co. of Calif. | Trading Bay Unit D-17 | D | Drilling |
| Union Oil Co. of Calif. | Trading Bay Unit D-18 | D | Drilling |
| Union Oil Co. of Calif. | Trading Bay Unit G-14 | D | Comp. Oil Well |
| Union Oil Co. of Calif. | Trading Bay Unit G-16 | D | Drilling |

DRILLING ACTIVITY (cont'd)

| <u>Operator</u> | <u>Well Names & Numbers</u> | <u>Type</u> | <u>Status</u> |
|------------------------------|---------------------------------|-------------|----------------|
| <u>Southern</u> | | | |
| Union Oil Co. of Calif. | Trading Bay Unit G-17 | D | Drilling |
| Union Oil Co. of Calif. | Trading Bay Unit K-10 | D | Drilling |
| Union Oil Co. of Calif. | Trading Bay Unit K-12 | D | Comp. Oil Well |
| Union Oil Co. of Calif. | Trading Bay Unit K-13 | D | Drilling |
| Union Oil Co. of Calif. | Trading Bay Unit K-15 | D | Location |
| <u>Northern</u> | | | |
| Atlantic Richfield Company | Delta State #1 | E | Drilling |
| Atlantic Richfield Company | Toolik Federal #1 | E | Drilling |
| BP Exploration Co., Inc. | Put River #1 | E | Drilling |
| BP Exploration Co., Inc. | Put River BP 33-11-13 | E | Location |
| BP Exploration Co., Inc. | Sag Delta #1 | E | Location |
| Colorado Oil and Gas Corp. | Shaviovik #1 | E | Location |
| Mobil-Phillips | Kuparuk State #1 | E | Drilling |
| Pan American Petroleum Corp. | Kavik #1 | E | Location |
| Standard Oil Co. of Calif. | Socal 31-25 | E | Location |
| Texaco Inc. | West Kavik | E | Location |

PRODUCTION - December, 1968 (Gas pressure 14.65 psi)

| <u>Field</u> | <u>Oil-Bbls</u> | <u>Water-Bbls</u> | <u>Gas-MCF</u> | <u>*No. of Wells Prod.</u> | <u>Cum. Oil</u> | <u>Cum. Gas</u> |
|--------------------------|------------------|-------------------|-------------------|----------------------------|--------------------|--------------------|
| Granite Point | 786,524 | 15,690 | 710,564 | 42 (3) | 20,184,727 | 15,006,223 |
| McArthur River | 2,394,625 | 31,822 | 698,816 | 31 (3) | 22,533,156 | 6,129,231 |
| Redoubt Shoal | 0 | 0 | 0 | (1) | 1,596 | 456 |
| Middle Ground Shoal | 1,053,318 | 48,071 | 508,536 | 52 (3) | 24,221,676 | 11,081,850 |
| Swanson River | 1,153,415 | 219,185 | 2,424,446 | 35 (14) | 88,570,878 | 57,809,959 |
| Trading Bay | 575,364 | 7,737 | 379,023 | 23 (7) | 4,203,382 | 3,451,592 |
| Total | 5,963,246 | 332,505 | 4,721,385 | 183 (31) | 159,717,892 | 93,479,311 |
| Beluga River | | | 258,502 | 2 (2) | | **2,168,641 |
| Kenai | | | 5,280,132 | 21 (1) | | 130,765,825 |
| Kenai Deep | | | 753,614 | 2 | | 3,523,625 |
| McArthur River | | | 31,517 | 1 | | 31,517 |
| Moquawkie | | | 52,140 | 1 | | 384,150 |
| Nicolai Creek | | | 18,833 | 2 (1) | | 26,189 |
| Sterling | | | 27,407 | 1 (1) | | 784,859 |
| South Barrow | | | 52,089 | 3 (1) | | 3,885,308 |
| Trading Bay | 259 | 6 | 18,174 | 1 | 2,477 | 231,971 |
| Inactive Gas Fields | | | | | | 12,028,261 |
| Total Dry Gas | 259 | 6 | 6,492,408 | 34 (6) | 2,477 | 153,830,346 |
| STATE GRAND TOTAL | 5,963,505 | 332,511 | 11,213,793 | 217 (37) | 159,720,369 | 247,309,657 |

Average per day: Oil, 192,371 bbls; Csg. Head, 152,303 MCF; Dry Gas, 209,433 MCF;
Total Gas, 361,736 MCF

* Dual completions are included as two wells; triple, as three. () Number of wells not producing in December.

** Corrected.