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DIVISION OF MINES AND MINERALS

GEOLOGICAL SURVEY

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MINING ACTIVITY

Southeastern - It has been reported that 300 claims have been staked in the vicinity of McLean Arm on the southeast end of Prince of Wales Island. The claims were staked by James Walper who has been prospecting in southeastern Alaska for the past three years. The news release indicated that Dynasty Explorations Ltd., 335 Burrard Street, Vancouver, B.C., is interested in the staking, which is in the vicinity of two old copper prospects and one old gold mine. The geology of the claimed area is shown on Plate 1 of U.S. Geological Survey Bulletin 1154 as Cretaceous quartz monzonite and granodiorite intruded by Tertiary andesite dikes.

Northwestern - Kennecott Copper Company has installed additional pumps and is in the process of dewatering the shaft which flooded last October. The water flooded the shaft as the last round was fired and after 8,000 sacks of cement and gel had been set in the relatively soft rock encountered at 980 feet. The water entered the shaft at the rate of 10,000 gallons per minute but slacked to 7,000 gallons in a short while.

OIL AND GAS NEWS

Three applications for permits to drill were approved by the Division's Petroleum Branch during the month as follows:

Kalgin Island State #2 - Hunt Oil Company, Operator - 2352' FSL and 1983' FEL, Sec. 19, T4N, R15W, S.M. This Cook Inlet location is adjacent the east coast of the central portion of Kalgin Island. Conservation Order #34 grants a footage spacing exception for this well.

Starichkof State #1 - Pennzoil Company, Operator - 760' FNL and 1880' FEL, Sec. 33, T3S, R15W, S.M. This Cook Inlet location is about twenty miles northwest of Homer.

Cottonwood State #1 - Shell Oil Company, Operator - 1410' FSL and 1973' FEL, Sec. 13, T11N, R14W, S.M. This upland location is about fifteen miles west of the Tyonek Indian village.

Conservation Order #34

RE: THE APPLICATION OF THE HUNT OIL)
COMPANY, operator of the Kalgin Island)
State #2, for an exception to Section)
2061.1 of the Alaska Oil and Gas Con-)
servation Regulations, Title 11, AAC 8)

(1) 10/1/67

*88/070

IT APPEARING THAT:

1. The Hunt Oil Company submitted a request dated December 14, 1966, for an exception to the 500 foot governmental quarter section boundary offset provision of Section 2061.1 of the Alaska Oil and Gas Conservation Regulations, Title 11, AAC, for the exploratory well Kalgin Island State #2 proposed to be located 1983' West of the East line and 2352' North of the South line, Section 19, T4N-R15W, S.M.
2. Notice of hearing on the petition was published in the Anchorage Daily News on December 17, 1966, pursuant to Section 2012 of the Alaska Oil and Gas Conservation Regulations, but no protest or request for hearing was received.

AND IT FURTHER APPEARING that after due consideration an exception to Section 2061.1 of the Alaska Oil and Gas Conservation Regulations permitting the Hunt Oil Company to locate the Kalgin Island State #2 within 500 feet of the governmental quarter section line should be granted because this location is best suited to the geology and topography.

NOW, THEREFORE, IT IS ORDERED that the Hunt Oil Company be permitted to locate the exploratory well Kalgin Island State #2 at the applied for location.

DONE at Anchorage and Juneau, Alaska, and dated December 28, 1966, (and signed by all four Committee members.)

<u>Operator</u>	<u>Well Name, and Number</u>	<u>Status 1-1-67</u>
Atlantic Richfield Company	Susie Unit #1	Abandoned
Cities Service Oil Company	Painter Creek #1	Location
Hunt Oil Company	Kalgin Island State #2	Location
Marathon Oil Company	Beaver Creek #1	Drilling
MOBIL OIL Corporation	Union-Mobil State 31-13	Drilling
Mobil Oil Corporation	Union-Mobil State 31-14	Drilling
Pan American Petroleum Corp.	Chuitna River State #1	Drilling
Pan American Petroleum Corp.	Cook Inlet State 17593 #1	Location
Pan American Petroleum Corp.	Granite Point State 17587 #3	Drilling
Pan American Petroleum Corp.	Granite Point State 17587 #4	Drilling
Pan American Petroleum Corp.	Granite Point State 18742 #3	Drilling
Pan American Petroleum Corp.	MGS 17595 #9	Drilling
Shell Oil Company	MGS A-33-1	Drilling
Standard Oil Co. of California	Ivan River #23-12	Testing
Texaco, Incorporated	Point Possession Unit #1	Drilling
Texaco, Incorporated	Trading Bay State #2	Location
Texaco, Incorporated	Trading Bay State #3	Location
Union Oil Co. of California	Kookpuk #1	Drilling
Union Oil Co. of California	Trading Bay State #A-3	Drilling

NOTE: Seven wells suspended in November are dropped from report until re-entered or abandoned.

Production - December 1966

<u>Field</u>	<u>Zone</u>	<u>Prod. Wells</u>	<u>Oil, Bbls.</u>	<u>Gas, MCF</u>
Swanson River Field	Hemlock	41	1,171,784 61,970,938*	783,888 18,364,478* (1)

<u>Field</u>	<u>Zone</u>	<u>Prod. Wells</u>	<u>Oil, Bbls.</u>	<u>Gas, MCF</u>
	Injection, Hemlock	7		2,693,009
Middle Ground Shoal	Hemlock and Kenai	15 (Incl. 4 duals as 8 wells)	424,897 2,673,665*	179,626 (1) 1,208,791* (1)
Kenai	Kenai	17 (Incl. 6 duals as 12 wells)		3,060,347 48,651,378* (1)
Sterling	Kenai	1		18,257 406,652*

Swanson River gas at pressure base 15.025 psi. All other is 14.65 psi.

* Cumulative to January 1, 1967

(1) Corrections made in November figures

CANADIAN TRANSPORTATION STUDIES

Travacon Research Ltd., 809 Eighth Avenue, S.W., Calgary, has been granted a \$50,000 award by the Canadian Government to explore the practicability of constructing a road linking the Yukon Territory via Carcross with Skagway or Haines. The purpose of the study is to determine the cheapest way to transport mineral and other resources from various points in the Yukon to tidewater.

White Pass & Yukon Railway reports that surveys are in progress to extend, re-develop, and in some places relocate its main line. Results of studies indicate that mineral production in the Yukon Territory should rise to \$24 million annually by 1975.

The Clinton Creek asbestos property north of Dawson is expected to be in production by 1968, and New Imperial Mines, Ltd. near Whitehorse is scheduled to start shipping concentrates at the rate of 100 tons per day in the spring of this year. Both the Canadian Federal and Yukon Territorial governments have been generous in assisting in construction of tote roads and development roads and may be called upon to assist in improving and extending the White Pass and Yukon Railway system.

NEW TAX LAW

Public Law 89-570 bodes well for the future of Alaskan mining. It allows prospectors and mining companies to deduct all prospecting and exploration costs from taxable income. The limit on these deductions under the old law is \$100,000 per year and \$400,000 total. However, the new law requires that when a mine becomes productive, the amount previously deducted must be included as income or subtracted from the amount claimed as depletion allowance. The old law is still in effect, and the taxpayer may choose which law he wants to deduct his exploration expenditures under. Since the old law allows up to \$400,000 in deductions whether or not the mine becomes a producer, it probably is more advantageous to the small operator than the new law which has the "recapture" provision for all deductions made as explained above.

Because most of the larger mining companies have already spent the maximum of \$400,000 in exploration allowed under the old law, the new law will encourage them to spend more money than previously planned on exploration. This money is most likely to be spent in areas which have not yet been thoroughly investigated. This will be especially applicable in Alaska because (1) Alaska's geology is favorable for the deposition of mineral deposits, (2) huge areas of Alaska have not been well prospected, and (3) Alaska is adjacent to British Columbia and Yukon where many recent important discoveries have been made and new mines developed by prospectors and companies alike. The new Act places Alaska in closer competition for the great amount of mineral activity in Canada by giving an incentive that helps overcome the talking point of the Canadian three-year exemption of new producing properties.

Under either law, prospecting or developing a mining property may be cheaper than many people realize. The savings in taxes and resultant actual cost of exploration are interesting. A table is shown below that indicates savings and costs in various examples, showing in each case the tax on an income before prospecting deductions, and then what the tax and savings, etc., would be if \$10,000 were spent on prospecting. For instance, it is shown that an Alaskan corporation with \$35,000 in taxable profits can save \$1,392 in taxes if it spends \$10,000 for prospecting, thereby doing its prospecting at an actual cost of only about 86¢ for every dollar so spent. A single taxpayer of \$50,000 taxable income can prospect for only about 65¢ for each dollar spent prospecting or developing a mine. The savings are less for smaller incomes, but even a single man with a \$12,000 taxable income will find he can make bona fide prospecting expeditions for around 75¢ on the dollar. The prospecting expenditure figure of \$10,000 is used in each case for ease in calculations, but approximately the same low costs per dollar for prospecting can be obtained by lesser expenditures. The figures in the table are approximate slide-rule computations, but are substantially correct to the best of the Division's knowledge.

A strong note of caution must be sounded here. We do not want anyone to get the idea from this discussion that he can take a camping vacation with a pick and gold pan and then deduct the expenses from his taxable income. The Bureau of Revenue will have to be convinced that the expenses were for bona fide prospecting for profit. Like other ventures for which taxpayers seek to deduct expenses, the prospecting must be entered into as a business venture for profit, and not as a hobby or for pleasure. That is the criterion by which the Bureau will judge each case.

	Taxable Income or Profit	U.S. Income Tax	Alaska Income Tax	Total Tax	Saving in Tax	Prospecting Cost Per \$
Alaska Corporation	\$35,000	\$ 7,700	\$ 1,232	\$ 8,932	\$ 1,392	\$0.86
after prospecting	25,000	6,500	1,040	7,540		
Single Taxpayer	50,000	13,819	2,211	16,030		
after prospecting	40,000	10,819	1,731	12,550	3,480	.65
Married Taxpayer	50,000	12,623	2,020	14,643		
after prospecting	40,000	9,623	1,540	11,163	3,480	.65
Single Taxpayer	30,000	7,819	1,251	9,070		
after prospecting	20,000	4,819	771	5,590	3,480	.65

	Taxable Income Or Profit	U.S. Income Tax	Alaska Income Tax	Total Tax	Saving In Tax	Prospecting Cost Per \$
Married Taxpayer after prospecting	\$30,000 20,000	\$6,623 3,723	\$1,060 596	\$7,683 4,319	\$ 3,364	.64
Single Taxpayer after prospecting	12,000 2,000	2,419 281	387 45	2,806 326	2,480	.75
Married Taxpayer after prospecting	12,000 2,000	2,008 260	322 42	2,330 302	2,028	.80

NEW PUBLICATIONS

U.S. Geological Survey, Professional Paper 550-D, contains many research articles of which the following pertain to Alaska: Cretaceous stratigraphy of the Kamishak Hills, Preliminary report on a plutonic belt in west-central Alaska, and Potassium-argon ages of Tertiary plutons in the Prince William Sound region, Alaska. Available from the U.S. Government Printing Office, Washington, D.C., 20402, price \$2.25.

U.S. Geological Survey, Open File Report, Location of Pingos and Pingolike Mounds observed from the Ground, from aerial reconnaissance, and on aerial photographs in Interior Alaska, by G.W. Holmes. Available for reading at the various U.S. Geological Survey and State Division of Mines and Minerals offices.

U.S. Bureau of Mines, Open File Report, Sampling the Moth Bay Zinc-Copper Deposit, Revillagigedo Island, Southeastern Alaska, by R.S. Warfield and R.R. Wells. Available for reading at U.S. Bureau of Mines and State Division of Mines and Minerals offices.

PROSPECTOR ASSISTANCE PROGRAM

Results of the Prospector Assistance Program during the 1966 season are shown on the following page. The report is not complete as two prospectors have not been heard from since their program was approved and may still report.

E. AND M.J. METAL MARKET PRICES

	January 30 1967	Month Ago	Year Ago
Copper, per lb.	38.2c	36.2c	36c
Lead, per lb.	14c	14c	16c
Zinc, per lb.	15c	15c	15c
Tin, per lb.	153.71c	153.71c	177.9c
Nickel, per lb.	85.25c	81-85.25c	77.75c
Platinum, per oz.	\$109-112	\$100	\$97-100
Mercury, per flask	\$493-500	\$475-485	\$508-515
Antimony ore, per unit	\$4.70-5.70	\$4.65-5.65	\$5.50-6.50
Beryllium powder, 98% per lb.	\$54-66	\$54-66	\$54-66
Chrome ore, per long ton	\$31-35	\$31-35	\$31-35
Molybdenum Conc., per lb.	\$1.62	\$1.55	\$1.55
Titanium ore per ton	\$21-24	\$21-24	\$21-24
Tungsten, per unit	\$43.00	\$43.00	\$32.75-33.25
Silver, New York, per oz.	129.3c	129.3c	129.3c
Silver, U.S. Treasury, per oz.	129.29c	129.29c	129.29c

1966 PROSPECTOR ASSISTANCE PROGRAM

Name	Locality Prospected	Man Days	Claims Staked	Samples Assayed	Actual Prospecting Expenditures					Reimbursed by State
					Travel	Food	Equipment & Misc.	Total Expense	Expense per Man Day	
Ed Farrell & Bert Higgins	Manley Hot Springs	180			1,411.04	408.30	3,583.92	5,403.26	30.02	4,000.00
Jim Fuksa	Kantishna	88		9	233.98	121.10		355.08	4.04	196.75
Harold Gilbertson	Richardson	35	4	7	50.00	249.09	130.52	429.61	12.27	322.21
Ed Hudson & Richard W. Geraghty	Livengood	104	2	41	395.00	497.49	3,119.79	4,012.28	38.57	3,009.21
Clifford H. Larsen	Kantishna	106	11	15	770.00	338.17	180.71	1,288.88	12.16	966.66
Robert W. Leslie	Fairbanks	120		9		231.56	163.78	395.34	3.29	296.51
Richard B. Palmer	Chatanika	99		3		351.96	2,330.53	2,682.49	27.10	2,000.00
Max M. Rusaw	Matanuska	68	4	4	575.40	90.70	24.10	690.20	10.15	228.71
Ora P. Schoonover	Talkeetna	30			102.50	69.34	129.92	301.76	10.06	226.32
Julius Sirilo	Kuskokwim	58	1	19	249.00	326.06	148.65	723.71	12.48	542.78
A.W. & K. Smith	Alaska Peninsula	176	46	4	2,323.87	1,188.49	441.50	3,953.86	22.47	2,965.40
Lauren F. Smith	Mankomen Lake	70		7	168.00	273.21	905.01	1,346.22	19.23	1,009.67
Carl C. Wikstrom	Kantishna	64	3	27	852.00	204.53	13.09	1,069.62	16.71	802.22
	Totals	1198	71	145	7,130.79	4,350.00	11,171.52	22,652.31		16,566.44
	Averages per man days				5.95	3.63	9.32	18.91		13.83