DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 4280

IDM-E1012

Application (Denied
(Withdrawn
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

Interim Royalty Audits
Reports of Royalty Review
Certification of Discovery
✓Certificate of Audit (Final)
Interim Audit(s)
Report of Review
Termination Notice or Agreement
Recision Notice
Assignment of Contract
✓Contract Amendments (latest on top)
✓Contract with all exhibits and annexes
Owner's Consent to Lien
Subordination Agreement
Leases and assignments of leases
✓Application and attachments
(3) Envelope for maps

Right Side

✓Project summary
✓Work completed analysis
All other material is filed in chronological order with correspondence including the following reports as checked:

✓Final Field Team Report (Tab)
✓Operator's Final Report
(2R) Interim Reports
(2R) Operator's monthly reports and all attachments (latest on top)
✓On-site Exam Report(s) (Tab)
(4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

Operator's Semi-Annual Report for Certified Project, Field Team Interim Reports, Operator's Monthly Report with transmittal, narrative, maps, and Field Team review.

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. Mr. Frank Johnson	JJ	12/2
2. Mr. George Selfridge		
3. Mr. F. L. Knouse		
4.		
5.		
FROM: Jay L. Chambers JC		12/2

FOR: Check items for action desired

____ Action ____ Reply for signature of _____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions xxx Your information

REMARKS:

EXTRA COPY
O. M. E.
RECEIVED Dec 1958

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

AUDIT CERTIFICATE

I have examined the records and transactions of:

Alfred G. Boyl and Associates
1727 Boulder Street
Denver 11, Colorado

pertaining to Exploration Contract Idm-E1C12, Docket BMEA 4280, including Amendments Nos. 1 through 4, covering a project of exploration for Thorium, Monazite, Columbium and Tantalum, located in Custer County, Idaho, and commonly known as Big Meadows Placer district near Warm Springs Creek, for the period September 20, 1956 through September 30, 1957.

My examination was made in accordance with generally accepted standards applicable in the circumstances.

The audit disclosed the following facts in regard to the amount to be paid the contractor:

Total cost as billed by the contractor			$14,476.01
Less: Proceeds from disposition of property			0.00
Net Claimed Costs			$14,476.01
Exceptions: (See audit report for details)			
Prior to this audit	$3,604.78		
Less: Reinstatements	1,095.41	$2,509.37	
During this audit		245.52	2,754.89
Total Accepted Costs			$11,721.12

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Eight thousand, seven hundred ninety and 84/100ths Dollars is valid and proper.

Amount payable to Operator	$8,790.84
Amount reimbursed	7,653.43
Balance due Operator	$1,137.41 Pd. to Appr. 12/17/58

This certificate is issued on the provision that the Regional Executive Officer, th e Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Donald T. Finch
Donald T. Finch,
OME Auditor

November 12, 1958

AUDIT REPORT

I. Introduction

On November 6, 1958, a final audit (covering operations for the period of September 20, 1956 through September 30, 1957) was made of the records and transactions pertaining to Exploration Project Contract No. Idm-E1012, Docket No. RMEA 4280, including Amendments Nos. 1 through 4, with:

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

covering a project for exploration of Thorium, Monazite, Columbium and Tantalum, located in Custer County, Idaho, and commonly known as Big Meadows Placer district near Warm Springs Creek.

The accounting records applicable to this contract are located in the residence of Mr. Frank R. Komats, Supervisor of the project, 752 Elizabeth Street, Denver 18, Colorado. They were examined by the auditor at the office of Contract Engineering Company which is operated at 1727 Boulder Street, Denver 11, Colorado, by Mr. Alfred G. Hoyl.

During the course of the audit, Mr. Hoyl and Mr. Komats were consulted when necessary. Their cooperation and assistance greatly facilitated this audit.

II. General Information On Records

The Operator's records were very informal and consisted of copies of invoices, cancelled checks, memorandum notes of cash disbursements, copies of letters, etc. with summary statements for copies of monthly MF-104 reports. Disbursements were made from the joint venture bank account and from personal bank funds of Komats and Hoyl. In some cases disbursements were made in cash. This audit therefore involved, in general, a check of all items of claimed costs against invoices, memoranda receipts for cash disbursements and cancelled checks.

III. Scope of Audit and Findings

The audit was limited to ascertaining the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of September, 1957. Prior to the on-site audit, considerable time was spent in the CMK office at Denver, Colorado, on pre-audit analysis and outline of working papers. The Exploration Contract originally provided that work would be performed in two stages; however, with the approval of the Field Team no work was performed under Stage II. The extent of the audit and the findings under each of the "items of cost" applicable to Stage I follow:

(1) Independent Contracts: Actual Costs

978 feet of churn drilling at $5.2045 per foot was performed by Russell Cove and Company of Boise, Idaho. During the audit an invoice for

$5,090.00 was examined and the following checks drawn on an account in the American National Bank of Denver were examined for amounts, payee and endorsements: -

July 16, 1957	No. 6	$ 200.00	
Aug. 31, 1957	No. 20	1,500.00	
Aug. 17, 1957	No. 29	1,740.00	
Aug. 23, 1957	No. 41	1,650.00	
Accepted Total			$5,090.00

The interim inspection report of William M. Romischer, Mining Engineer, USBM, dated September 24, 1957, verified the existence of 19 drill hole locations.

(2) Labor and Supervision

(a) Labor

All charges for labor were examined and amounts claimed under the contract were reconciled with checks issued to the employees. Analysis of the labor account follows:

	Hours		Average Rate	
Shando Lambert	265	at	$1.744	$ 462.25
Andrew William Aag	276		2.229	615.25
William Corbett	190		1.941	368.75
Paul Goodard	90		2.000	180.00
Accepted Total				$1,626.25

The Operator's payroll did not show any hourly rates of pay and the average rate was computed during the audit. This labor was engaged in the collection of samples.

The Operator had included in the total claim for labor an amount of $324.00 for 108 man day rations, including the foregoing labor and also supervisor and two consulting engineers. The OME Field Team, Region I, disalloved this amount because subsistence of personnel was not provided for in the contract. The Auditor concurs with this disallowance.

(b) Supervision

The charge for supervision was in payment for the services of Frank R. Kunats for 1½ months at $600.00 per month. During the audit it was confirmed that payroll records showed Mr. Kunats devoted full time to the operation, and cancelled checks totaling the above amount were examined. The amount claimed for supervision of $900.00 is considered an acceptable cost to the project.

(c) Technical Services

The Operator claimed an amount of $600.00 for technical services of six engineering days at $100.00 per day for the services of Richard Moody and Alfred G. Mayl. Support for this claim was an an invoice from the Contract

Engineering Company of Denver. Both Mr. Moody and Mr. Moyl were members of the "Joint Venture."

The OMB Field Team, Region I, has disallowed this charge of $600.00 because the contract did not provide for Government participation in technical services. The Auditor concurs with this disallowance.

(3) Operating Materials and Supplies

An analysis of the acceptable charges by the Operator to Materials and Supplies consisted of the following, which were supported by documentary proof that was examined during the audit: -

6 Steel boxes for drying placer samples	$153.30
8 Eveready Batteries for scintillator	7.62
1 Hoe	2.75
1 Shovel	4.45
1 Scraper	.55
1 Brush	.60
1 Ball of twine	1.70
2 Pair welding gloves	3.40
Lumber	19.96
Nails, lumber and oilcloth	4.30
Coleman lantern, mosquito net and mantles	18.17
Starter cord for chain saw	1.75
Axe handle	1.60
1 Scale	16.85
2 Umbrella tents at 50% invoice cost plus tax	84.77
319 Sample bags including tax and parcel post	224.74
2 Pieces Wire screen	17.16
2 Tubs	7.96
1 Galvanized pail	.98
2 Chalk lines	.58
1 Twine	.49
1 Belt axe	5.79
Discount	2.28
Tincture of Benzoin	.35
1 Camp stove	13.95
1 Lock	1.00
Nails and window stop	1.07
2 Quarts chain saw oil	.80
1 Gas can	1.50
5½ Gal. gas for chain saw	2.50
Accepted Total Cost of Materials and Supplies	$595.36

The OMB Field Team, Region I, has waived the Government's interest in the 6 steel boxes at original cost of $153.30 because these are a specialty item for drying placer samples and have no salvage value. The 2 umbrella tents were charged to the project by the Operator at 50 percent of the invoice cost, and the Field Team waives the Government's equity in this 50 percent charge.

Prior disallowances by the Field Team, reinstatements, and disallowances made during the audit are listed below:

Prior Disallowances

Charged to Project by Operator at 50 Percent of Invoice Cost

	INVOICE COST	CHARGED TO PROJECT
1 Air mattress	$ 26.20	
1 Air pump	5.82	
1 10' x 12' Tarp	20.10	
1 10' x 10' Umbrella Tent	82.30	
50 Sample bags	25.67	
1 Sleeping bag	49.96	
Sales Tax at 3%	6.30	
1 10' x 10' Umbrella tent	82.30	
2 Uprights	4.88	
1 10' x 10' Tarp	20.10	
1 Air Mattress	52.40	
1 Air Pump	5.82	
1 Sleeping bag	49.96	
2 Quarts Set Fast	4.72	
100 Sample Bags	30.66	
Sales Tax at 3%	7.52	
1 Bag for tent	3.60	
50 Sample bags	25.68	
Parcel Post	1.03	
52 Sample bags	67.60	
48 Sample bags	62.40	
19 Sample bags	4.56	
Parcel Post	5.45	
Totals	$644.05	$322.00

The foregoing were disallowed by the Field Team because all items, except the umbrella tents and sample bags, were not provided for by the Exploration Contract, and there was no explanation as to why the allowable items were charged at 50% of invoice cost.

Charged to Project at 100 Percent of Invoice Cost

1 300 Ft. Chicago steel tape (Provided for in rental of surveying equipment)	$ 37.97
2 Bathroom scales (Not essential to project)	13.66
Overcharge Burson's Hardware invoice (error in addition)	1.00
Film (Used as Engineering Supplies; inadequate explanation)	2.70
Labels, leads & postage (Not considered Mat'ls & Sup's.)	.94
Paper " " " " "	.48
Accounting Supplies " " " " "	1.33
10 Legal Forms " " " " "	.50
Total Prior Disallowances	$380.60

Deduct: Reinstatements During Audit

2 Umbrella tents (50% of invoice cost including tax) (Reinstated because of Contract provisions and Field Team's letter to Auditor October 22, 1958)	$ 84.77	
Operator's original charge at 50% was based on desire to retain the equipment when project completed		
319 Sample bags (100% of invoice cost including tax) (Reinstated because of terms of Contract and Field Team's letter.)	224.74	

The following disallowed items are reinstated and transferred to engineering and accounting office expense: -

Film (Used in presenting Engineering Reports)	$2.70		
Labels, pencils and leads	.94		
Paper	.48		
Payroll Sheets	1.35		
Legal forms	.50	5.97	
Total Reinstatements			$315.48
Net Prior Exceptions			$ 65.12

Add: Disallowances During Audit

1 Skillet (Cooking equipment not provided for by contract)	6.95	
Freight on Materials and Supplies to Denver and Boulder, Colorado, at completion of project (Not applicable to exploration contract)	38.57	45.52
Total Net Disallowances Materials and Supplies		$110.64

In addition to the materials reinstated and transferred to Engineering and Accounting of $5.97 above, the following items were transferred during the audit to the same account:

1 Roll section paper	$7.89	
1 Rubber stamp	2.68	
Pencil, lead and ink	.75	
Total Additional Transfers		$ 11.32

The Executive Officer, GSS Field Team, Region I, and the Auditor concur with the foregoing disallowances and reinstatements.

(4) Operating Equipment

(a) Rental

All charges to rental category were supported by documentary proof which was examined during the audit.

The allowable charges for equipment rental consisted of the following items:

Surveying equipment rented from William Corbett for 2 mos.	$100.00	
Jeep rental (Rented from Shando Lambert for 2 mos.)	50.00	
Chain saw rental (Rented from Shando Lambert for 2 mos.)	5.40	
Total Accepted Cost of Equipment Rental		$155.40

The Field Team disallowed charge of $40.04 claimed for jeep rental on a mileage basis and charge of $9.60 for chain saw rental. Both of these charges were in excess of the allowable maximum provided by the contract at page 3, Exhibit A, as amended by Amendment No. 4. The Executive Officer of the OME Field Team and the Auditor concur with these disallowances.

(6) New Buildings, Improvements, etc.

Charges to this category were construction of roads and trails. All charges to this category were supported by documentary proof which was examined during the audit. The acceptable costs of this category consisted of the following elements of cost:

51 Hrs. Bulldozing at $12.00 per hr., supported by signed invoice from Robert G. Steffanic			$612.00	
Supervision 1/2 month full time by Frank R. Komatz			300.00	
Labor				
76 Hours by Shando Lambert		$114.00		
56 Hours by Ronald F. Komatz		84.00		
56 Hours by Karl E. Komatz		84.00	282.00	
Payroll Taxes				
F.I.C.A. at 2.25%	$13.10			
Unemployment Insurance at 2.7%	15.71	$ 28.81		
Workmen's Compensation Insurance		17.75	46.56	
Total Accepted Cost				$1240.56

Prior Disallowances by the OME Field Team

Bulldozing by Uhrig Bros. (Work not acceptable)	$ 75.00		
51 Hours Bulldozing by Steffanic (Not authorized by contract at time of disallowance)	612.00		
Duplicate charge for Frank Komatz as supervisor (Included in Labor Total as well as under supervision.)	300.00		
50 Man Day rations (Not provided for by contract.)	150.00		
Total Prior Disallowances		$1137.00	
Less: Reinstatement			
51 Hours Bulldozing at $12.00 per hour authorized by Amendment No. 3 to the Exploration Contract		612.00	
Net Disallowances			$525.00

The Executive Officer of the OHE Field Team and the Auditor concur with this disallowance and reinstatement.

(5) Miscellaneous

(a) Engineering and Accounting Office Expenses

The Operator's total claim of $300.00 for engineering and accounting office expenses was not supported by any itemized detail. Accounting consisted of informal records maintained by the Supervisor, Mr. Frank E. Kenets. The Operator has submitted no detailed statement of engineering office expenses. During the audit the following charges to Materials and Supplies were transferred to Engineering and Accounting Office Expenses:

Film (Used in preparing Engineer's Reports)	$ 2.70
Labels, pencils and leads	.94
Paper	.48
Payroll sheets	1.35
Legal forms	.50
1 Roll auction paper	7.89
1 Rubber stamp	2.68
Pencil, lead and ink	.75
Total Accepted Costs of Engineering and Accounting Expenses	$17.29

Prior to the audit the Field Team had disallowed $100.00 engineering and office expenses claimed by the Operator on the September, 1957 MF-104 on the grounds the charge was excessive because the project work on Stage I was completed prior to September. During the audit the balance of $200.00 as claimed by the Operator was disallowed because of lack of itemized support to substantiate the charge. The itemized amount of $17.29 transferred during the audit to this account was the only supported costs for engineering and accounting expenses.

The Executive Officer of the OHE Field Team, Region I, and the Auditor concur with this disallowance.

(b) Payroll Taxes and Workmen's Compensation Insurance

Charges to this category were made by the Operator on the basis of 8 percent of payroll and salaries. During the audit, after a review of the Operator's files of tax returns and workmen's compensation insurance correspondence, the following analysis of these charges was made:

Acceptable Labor Charge	$1,686.25
Acceptable Supervision	900.00
Total	$2,586.25
F.I.C.A. at 2.25%	$ 56.84
Unemployment Insurance 2.7%	68.20
Allocation of Workmen's Compensation 3.05%	77.06
Total Accepted Cost	$ 202.10

(c) Hauling Samples

Memorandum notes and cancelled checks in support of this charge were examined during the audit and consisted of the following reported payments for hauling samples:

	CHECK NO.	AMOUNT
Andrew William Asp	34	$ 35.00
Glen Brewer	25	60.50
	30	60.50
	31-K	60.50
	48	60.50
Cecil Broomfield	43-K	80.00
Total Claimed Cost of Hauling Samples		$297.00

The OSE Field Team had previously disallowed this entire amount because of inadequate support of the charge.

During the audit it was determined that 6.313 tons of samples were hauled approximately 266 miles from the project to Boise, Idaho. After discussion of the item with the Executive Officer, OSE Field Team, Region I, it was the joint opinion of the Executive Officer and the Auditor that the total charge was unreasonably excessive. It was agreed that the contract estimate of 10¢ per ton mile would be a fair and reasonable charge to the project. Based on this opinion, a reinstatement of (266 miles x 6.313 tons x 10¢) $167.93 is made as an acceptable cost of this item.

(d) Concentration of Samples

This charge consisted of the cost of concentrating of 198 samples by Baumhoff-Marshall, Inc. of Boise, Idaho. The invoice for this charge is dated August 27, 1957, and showed the following detail:

Services for tabling and sampling 198 samples
from 19 drill holes from the Big Meadows:

76 hours at $10.00/hr.	$760.00
434 sample envelopes at 1.23¢	5.34
Postage on samples	7.89
Acceptable Cost	$773.23

(e) Supervisor's Expenses

Hotel and meals of Frank R. Konats	
June, July and August, 1957	$235.95
August Telephone	63.80
Mileage of Frank R. Konats	
Denver-Stanley-Denver (no detail)	384.88
Total Claimed Supervisor's Expenses	$684.63

The OSE Field Team, Region I, had previously disallowed this charge as not being allowable under the contract. The auditor concurs with this disallowance.

(f) Assay of Samples

The charges for this item were supported by the following invoices from Rare Metals Corporation of America at Salt Lake City. These invoices were examined during the audit.

Sept. 5, 1957	12 samples @ $50.00/eac.	$600.00
Sept. 3, 1957	7 " " " "	350.00
Accepted Cost of 19 Assays		$950.00

(g) Telephone and Telegraph

Telephone charges totaling $31.91 during August and September, 1957, were disallowed by the CME Field Team, Region I, as not being essential to the project. The Executive Officer and the Auditor concur with this disallowance.

IV. Conclusions

The audit disclosed that all costs charged to this project, with the exception of disallowances net of reinstatements aggregating $2,754.89 as itemized in the preceding section of this report, are reasonable and proper under the terms of the contract.

The adjustments between "Items of Cost" as shown on the September, 1957 Form MP-104, the disallowances, reinstatements, and the accepted costs as disclosed by this audit are summarized in Exhibit "A" attached hereto.

At the conclusion of the audit, on November 6, 1958, the findings were discussed with Mr. Frank R. Ennatz, Supervisor of the project. They were also reviewed by telephone conference with Mr. A. E. Weissenborn, Executive Officer, CME Field Team, Region I, on November 7, 1958.

Donald F. Finch
Donald F. Finch,
CME Auditor

November 12, 1958

EXHIBIT A

AUDIT SUMMARY

CONTRACT NO. Idm-M1012

DOCKET NO. EMBA-4280

ALFRED G. HOYL AND ASSOCIATES

	Totals MP-104 Sept., 1957	Distribution Corrected	Prior Disallowances	Reinstatements	Disallowed by Audit	Accepted Totals
Independent Contracts						
Drilling	$ 5,090.00	$ 5,090.00				$ 5,090.00
Labor and Supervision						
Labor	1,950.25	1,950.25	$ 324.00			1,626.25
Supervision	900.00	900.00				900.00
Technical Services	600.00	600.00	600.00			-
Operating Materials and Supplies						
Screens, Pans, etc.	726.29	709.00	380.60	$ 315.48	$ 45.52	598.36 c
Operating Equipment						
Rental	205.04	205.04	49.64			155.40
New Buildings, Improvements, etc.	1,765.56	1,765.56	1,137.00	612.00	RT	1,240.56
Miscellaneous						
Engineering and Accounting Office	300.00	317.29	100.00		200.00	17.29
Payroll Taxes and Workmen's Compensation Ins.	202.10	202.10				202.10
Hauling Samples	297.00	297.00	297.00	167.93		167.93 c
Concentration of Samples	773.23	773.23				773.23 c
Supervisor's Expenses	684.63	684.63	684.63			-
Assay of Samples	950.00	950.00				950.00 c
Telephone and Telegraph	31.91	31.91	31.91			-
TOTALS	$14,476.01	$14,476.01	$3,604.78	$1,095.41	$245.52	$11,721.12

Government's copy

Ruth
Dunyia
Murphy
Ellis
Chambers
Selfridge

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 4.

It is agreed this 1st day of November, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, as amended, is further amended effective July 1, 1957, as follows:

In Exhibit "A" under Estimated Costs of Project, Actual Costs, Category (4) Operating Equipment, Stages I and II, the subcategory (c) Depreciation is deleted and the items and costs shown under this subcategory are transferred to subcategory (a) Rental.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the amount of any item designated as maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals
Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By Alfred G. Hoyl
Alfred G. Hoyl

By Richard D. Moody
Richard D. Moody

By T. F. Adams
T. F. Adams

By A. B. Manning
A. B. Manning

By Douglas V. Watrous
Douglas V. Watrous

By Arthur G. Wood
Arthur G. Wood

By Frank R. Komatz
Frank R. Komatz

By Stanford L. Jackson
Stanford L. Jackson

By Charles J. Cerf
Charles J. Cerf

Government's copy

DMEA
RECEIVED JUN 9 1958

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 3

It is agreed this 14th day of October, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, as amended, is further amended effective July 1, 1957, as follows:

1. In Article 5 of the Contract, figures "$26,652.00" and "$19,989.00" are substituted for the figures "$26,986.00," and "$20,240.00," respectively.

2. In Exhibit "A" under "Estimated Costs of Project, Actual Costs (*Indicates maximums), Stage I," Category (6) is revised as follows:

"Category (6) New Buildings, Fixtures, and Installations

1 General Supervisor, ½ month @ $600.00/mo.	$300.00*	
1 Miner, 10 days	270.75	
1 Helper, 10 days	216.60	
Explosives, caps, fuse, drill bits	406.40	
Rental of following equipment:		
105 cubic foot compressor, 2 weeks @ $58.95/wk.	117.90*	
1 jackhammer and drill steel, 2 weeks @ $26.19/wk.	52.38*	
1 D-6 Caterpillar tractor, 51 hours @ $12.00/hr.	612.00	
Payroll taxes and insurance @ 8%	63.00*	$2,039.03"

3. The Estimated Total Cost - Stage I is revised from "$15,048.93" to $14,714.57."

4. The Summary at the end of the estimate is revised as follows:

Chambers
Selfridge
Murphy
Ellis
Johnson

"S U M M A R Y

"Estimated Total Cost - Stage I $14,714.57
Estimated Total Cost - Stage II 11,937.07

Estimated Total Cost of Project (rounded)	$26,652.00
Government Participation @ 75%	$19,989.00

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C F Mittendorf
Administrator, Defense Minerals
Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By Alfred G. Hoyl
Alfred G. Hoyl

By Richard D. Moody
Richard D. Moody

By T. F. Adams
T. F. Adams

By A. B. Manning
A. B. Manning

By Douglas V. Watrous
Douglas V. Watrous

By Arthur G. Wood
Arthur G. Wood

By Frank R. Komatz
Frank R. Komatz

By Stanford L. Jackson
Stanford L. Jackson

By Charles J. Cerf
Charles J. Cerf

Government's Copy

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 4 1957
DATE | INITIALS | CODE

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 2

It is agreed this 18th day of September, 1957 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Alfred G. Hoyle and Associates, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E-1012 (Docket No. DMEA-4280), dated September 20, 1956, as amended, hereinafter called the "Contract," is further amended as follows:

1. (a) Work under the Contract shall be suspended during the period beginning September 1, 1957, and ending not later than July 1, 1958.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, except those relating to concentrating, testing, and analyzing the samples recovered during the Stage I drilling; and the Government shall not contribute to any cost of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. The time fixed for the completion of the work in Amendment No. 1 is extended from October 20, 1957, to October 20, 1958.

3. The maximum period for royalty payments and lien to secure the payment thereof, provided for in Article 8(b)(2) of the Contract is extended from ten (10) years to eleven (11) years.

Long
Hoffman
"Appd. Sol. Off."
Murphy
Elliott
Talbutt
Selfridge

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the amount of any item designated as maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By Alfred G. Hoyl
Alfred G. Hoyl

By Richard D. Moody
Richard D. Moody

By T. F. Adams
T. F. Adams

By A. B. Manning
A. B. Manning

By Douglas V. Watrous
Douglas V. Watrous

By Arthur G. Wood
Arthur G. Wood

By Frank R. Komatz
Frank R. Komatz

By Stanford L. Jackson
Stanford L. Jackson

By Charles J. Cerf
Charles J. Cerf

Docket copy
DMEA
RECEIVED MAR 11 1957
DATE | TRANS | CODE
3-12 | C | 226
225

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL and ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 1

It is agreed this 25th day of January, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, is amended as follows:

1. The date fixed in Article 3 for completion of the work is extended from August 1, 1957, to October 20, 1957.

2. In Exhibit "A," under the heading Description of the Work, the second paragraph of Stage I is revised to read:

"The exploration work under Stage I shall consist of churn drilling not in excess of 20 holes to an average depth of 50 feet at the approximate locations shown on the map referred to in Annex I. However, the location of the holes shown at coordinates 8 North-0.5 East and 3 North-3.5 East may, upon written approval by the Government, be changed to any other locations which are not closer than 500 feet to any other hole drilled under the contract. The holes shall be spaced on approximately 1000-foot centers. It is estimated that 1000 feet of drilling will be sufficient to complete the 20 holes to bed rock, or to an established cut-off horizon. However, if more than 1000 feet of drilling are necessary to accomplish the Stage I work, such additional footage and funds shall be transferred to Stage I from the churn drilling footage allowed under Stage II, and an equivalent deduction made in Stage II."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as maximum.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense Minerals
Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By Alfred G. Hoyl
Alfred G. Hoyl

By Richard D. Moody
Richard D. Moody

By T. F. Adams
T. F. Adams

By A. B. Manning
A. B. Manning

By Douglas V. Watrous
Douglas V. Watrous

By Arthur G. Wood
Arthur G. Wood

By Frank R. Komatz
Frank R. Komatz

By Stanford L. Jackson
Stanford L. Jackson

By Charles J. Cerf
Charles J. Cerf

Inherity 1/22/57
Hughes
Murphy
Ellis
Chambers
Selfridge
Jones

Docket Copy

MF-200
(Revised June 1954)

Docket No. DMEA 4280
Commodity Thorium-Monazite-Columbium-Tantalum

Contract No. Idm-E 1012

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this SEP 2 0 1956 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Alfred O. Hoyl and Associates, a Joint Venture (See Annex I for list of members of the Joint Venture.), whose mailing address is 1727 Boulder Street Denver 11, Colorado, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and one map (See Annex I)

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Idaho, County of Custer, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] Owner of [5] Entire interest in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ~~recorded in Book~~, ~~page~~, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: None

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.), are attached, as follows: .....

.....

.....

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Thorium, monazite, columbium, tantalum. The work to be performed is described in Exhibit "A." The Operator on or before July 1, 1957 shall commence the work, and on or before August 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $ 26,986.00 .....
The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $ 20,240.00 .....: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums. **See Article 13.**

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. **See Article 13.**

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and related costs incurred.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value therof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

(For instance: the royalty on an amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—

(a) In Category (1) of Article 6(a), the phrase "the estimated cost of each unit of work" shall be construed to mean, for the purposes of this Contract: "the average cost per foot of drilling."

(b) In Article 6(c), the words "Article 9" are changed to "Article 8."

Executed in sextuplicate the day and year first above written.

ALFRED G. HOYL & ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

Richard D. Moody

Richard D. Moody

T. F. Adams

T. F. Adams

By A. B. Manning

A. B. Manning

Douglas V. Watrous

Douglas V. Watrous

Arthur G. Wood

Arthur G. Wood

THE UNITED STATES OF AMERICA

By C. O. Mittendorf

Administrator, Defense Minerals Exploration Administration

Indrtg 9/4/56

Dunger

"Appd. Sol. Off."

Frank R. Komatz

Frank R. Komatz

Stanford L. Jackson

Stanford L. Jackson

Charles J. Cerf

Charles J. Cerf

Murphy

Ellis

Talbot

Selridge

Fitzgerald

I, ..., certify that I am the ..... secretary of the corporation named as Operator herein; that ..... who signed this contract on behalf of the Operator, was then ..... of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

ANNEX I

The land referred to in Article 2 of the Contract consists of ten groups of unpatented placer mining claims. The notices of location of the claims are recorded in the Office of the County Recorder, Custer County, Idaho, and the area covered by the claim groups, are as follows:

Name of Claim Groups		Book	Pages	Land Covered
In T. 10 N., R. 15 E., B. M., Custer County, Idaho:				
Amul Group	160 acres	5 5	624 643	SE¼, sec. 32
In T. 9 N., R. 15 E., B. M., Custer County, Idaho:				
Pinto Group	160	5 6	630 6	NE¼, sec. 5
Rojo Group	160	5 6	629 5	SW¼, sec. 5
Verde Group	160	5	623 642	SE¼, sec. 5
Esperdo Group	160	5	622 641	NW¼, sec 8
La Veta Group	160	5 6	627 3	NE¼, sec 8
Alvarado Group	160	5	621 640	SE¼, sec. 8
Cortez Group	160	5 6	626 2	NE¼, sec. 17
Luz Group	40	5 6	625 1	SW¼ NW¼, sec. 16
Coronado Group	160	5 6	628 4	SW¼, sec. 16

The claim groups are owned by Alfred G. Hoyl and Associates, a Joint Venture consisting of Alfred G. Hoyl, Richard D. Moody, T. F. Adams, A. E. Manning, Douglas V. Watrous, Frank R. Kosnts, Stanford L. Jackson, Charles J. Cerf, and Arthur G. Wood. The locations of the groups are shown on the map entitled "Big Meadows Placer Area, Custer County Idaho," attached hereto and made part hereof.

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMSA-4200

EXHIBIT "A"

Description of the Work

General Provisions

The object of this project is to explore the Meadows Placer deposit, near Warm Springs Creek, by means of churn drilling, for thorium, uranium, rare earths, columbium, and tantalum. To facilitate the exploration work an access road to the property and trails to the drill sites shall be constructed.

A competent supervisor shall be employed full time to assist in the performance of the work. His duties shall also include the surveying, mapping, and preparation of reports required under this contract.

During the churn drilling, the material penetrated shall be recovered after each 2½ feet of drive. However, until the final drive in each hole, enough material shall remain above the drive shoe to insure that there will be no run in from the sides of the hole. On the final drive all material down to the cutting edge of the drive shoe shall be recovered. The material recovered from two (2) drives (each 2½ feet in depth) shall be combined to form one sample.

The samples, properly identified as to drill hole number and depth represented, shall be transported to a suitable laboratory where the samples shall be concentrated. After each sample has been concentrated, a determination of the weight of the concentrate in relation to the placer gravel shall be made, and then one-half of the concentrate from all the samples shall be combined to form a composite sample representing the hole. The other half of the concentrate from each sample shall be retained separately for Government use. The composite samples shall be chemically analyzed for thorium, uranium, rare earths, columbium, and tantalum content. However, if the Government first approves in writing, the percentages of rare earths, columbium, and tantalum in the samples may be determined by a standard X-ray-fluorescent method.

The work is divided into two stages. The Operator shall perform all the Stage I work and as much of the Stage II work as is approved in advance in writing by the Government.

A representative sample of the concentrate shall be analyzed to determine the classification of the minerals it contains. This analysis may be performed at any time during Stage I or Stage II, as approved in writing by the Government.

The churn drilling shall be performed using not less than 6-inch casing.

No hole shall be drilled closer than 200 feet to any area known by the Operator to be in conflict with the claims included in this Contract, nor closer than 200 feet to any area not owned by the Operator.

The direction and extent of the work under this Contract shall be subject to Government approval.

Stage I

Stage I shall consist of constructing an access road approximately 3 miles in length. The road shall start at the end of the present Stanley-Pig Tail Creek road and end near the center of the Esperdo Group on Warm Springs Creek. Also, access roads or trails to the various drill sites on the property shall be constructed.

The exploration work under Stage I shall consist of churn drilling not in excess of 20 holes to an average depth of 50 feet at the approximate locations shown on the map referred to in Annex I. The holes shall be spaced on approximately 1000-foot centers. It is estimated that 1000 feet of drilling will be sufficient to complete the 20 holes to bed rock, or to an established cut-off horizon. However, if more than 1000 feet of drilling are necessary to accomplish the Stage I work, such additional footage and funds shall be transferred to Stage I from the churn drilling footage allowed under Stage II, and an equivalent deduction made in Stage II.

Stage II

The work shall consist of churn drilling an additional 18 holes in the area drilled during Stage I. The approximate locations of the Stage II holes are shown on the map referred to under Stage I. No hole drilled under this Stage II shall be closer than 500 feet to any other hole drilled under the Contract.

Estimated Costs of Project

Actual Costs
(* Indicates maximums)

Stage I

Category (1) Independent Contracts

1000 feet churn drilling @ $5.25/ft. (Average cost per foot)	$5,250.00

Category (2) Personal Services

Subcategories (a) and (b) Supervision and Technical Services, respectively

1 General supervisor 1½ months @ $600.00/mo.	$ 900.00	
Subcategory (c) Labor		
3 samplers, 45 days	2,924.10	$3,824.10

Category (3) Operating Materials and Supplies

Screens, pans, scales, tents, sample sacks, small tools, etc.		555.12

Category (4) Operating Equipment

Subcategory (a) Rental

Surveying equipment, 2 months @ $50.00/mo.	$ 100.00	

Subcategory (b) Purchases

None

Subcategory (c) Depreciation

1 1-ton pickup truck, 2 months @ $25.00/mo.	50.00	
1 16" chainsaw, 2 months @ $2.70/mo.	5.40	155.40

Category (5) Initial Rehabilitation and Repairs

None

Category (6) New Buildings, Fixtures, and Installations

1 General supervisor ½ month @ $600.00/mo.	$ 300.00*	
1 Miner, 10 days	270.75	
1 Helper, 10 days	216.60	
Explosives, caps, fuse, drill bits	406.40	

Rental of following equipment:

105-cubic feet compressor, 2 weeks @ $58.95/wk.	$ 117.90*	
3 Jackhammer and drill steel, 2 weeks @ $26.19/wk.	52.38*	
1 D-8 Caterpillar tractor (or equivalent) 2 weeks @ $384.30/wk.	768.60*	
1 Angle dozer, 2 weeks @ $88.88/wk.	177.76*	
Payroll taxes and insurance @ 8%	63.00*	$ 2,373.39

Category (7) Miscellaneous

Engineering and accounting office expenses, 2 months @ $50.00/mo.	$ 100.00	
Payroll taxes and insurance @ 8%	305.92	
Hauling samples, 10 tons 485 miles @ $0.10/ton/mi.	485.00	
Concentration and determination of weight, 200 samples @ $5.00/sample	1,000.00	
Chemical or X-ray fluorescent analyses for thorium, uranium, rare earths, columbium, and tantalum content of 20 samples (each sample representing one hole) @ $50.00/sample	1,000.00	2,890.92
Estimated Total Cost - Stage I		$15,048.93

Stage II

Category (1) Independent Contracts

900 feet shaft drilling @ $5.25/ft. (Average cost per foot)		$ 4,725.00

Category (2) Personnel Services

Subcategories (a) and (b) Supervision and Technical Services, respectively

1 General supervisor, 2 months @ $600.00/mo.	$1,200.00	

Subcategory (c) Labor

3 samplers, 45 days	2,924.10	4,124.10

Category (3) Operating Materials and Supplies

For churn drilling

180 large sample bags @ $1.00/each	$ 180.00	
Hand tools (replacements)	100.00	$ 280.00

Category (4) Operating Equipment

Subcategory (a) Rental

Surveying equipment, 1½ months @ $50.00/mo.	$ 75.00	

Subcategory (b) Purchases

None

Subcategory (c) Depreciation

1 1-ton pickup truck, 1½ months @ $25.00/mo.	37.50	
1 16" Chain saw, 1½ months @ $2.70/mo.	4.05	116.55

Category (5) Initial Rehabilitation and Repairs None

Category (6) New Buildings, Fixtures, and Installations None

Category (7) Miscellaneous

Engineering and accounting office expenses, 2 months @ $50.00/mo.	$ 100.00	
Payroll taxes and insurance @ 8%	389.98	
Hauling samples (9 tons), 485 miles @ $0.10/ton/mi.	436.50	
Concentration and determination of weight, 180 samples @ $5.00/sample	900.00	
Chemical or X-ray fluorescent analyses for thorium, uranium, rare earths, columbium, and tantalum content of 18 samples (each sample representing one hole) @ $50.00/sample	900.00	

Mineralogical analyses of one representative sample @ $25.00/sample	$ 25.00	$ 2,691.42
Estimated Total Cost - Stage II		$11,937.07

SUMMARY

Estimated Total Cost - Stage I	$15,048.93
Estimated Total Cost - Stage II	11,937.07
Estimated Total Cost of Project	$26,986.00
Government Participation @ 75% (rounded)	$20,240.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
MAY 7 - 1956

May 1, 1956

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: New application (Monazite, etc.)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application submitted by Alfred G. Hoyl & Associates, Contract Engineering Company, Denver, Colorado, for the exploration of "The Meadows" placer deposit, Warm Springs Creek, Custer County, Idaho. As indicated in their forwarding letter this property was examined previously by the U. S. Bureau of Mines. Holt made the examination in August 1954 and a report entitled "The Big Meadows Placer, Warm Springs Creek, Custer County, Idaho" was submitted to the Bureau on January 4, 1955. Holt estimates that there is a possibility of there being as much as 30,000,000 cubic yards of material on Warm Springs Creek with some additional yardage on Pig Tail Creek. Samples vary between .96 and 3.47 pounds per cubic yard monazite equivalent, and average 1.82 pounds per cubic yard monazite equivalent.

Radioactivity is largely due to radioactive blacks--euxenite, samarskite, etc.--and values are low in thoria but are high in neobium Niobium and tantalum. Holt's report should be available in the files of the Rare and Precious Metals Branch of the Bureau of Mines in Washington, D. C. Additional information is available in the Bureau office here in Spokane.

Sincerely yours,

A. E. Weissenborn/bex

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosure

cc: USBM (2)
Nickelson

PHONE GRANT 7-[illegible]

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

DENVER, COLORADO

1727 BOULDER STREET

RECEIVED

MAY 7 - 1956

April 24, 1956

U. S. Department of the Interior
Defense Minerals Exploration Administration
Region I
South 157, Howard Street
Spokane 4, Washington

Gentlemen:

Enclosed is our application in quadruplicate for aid in an exploration project, Exploration of "The Meadows", Warm Springs Creek, Custer County, Idaho.

This project was scheduled for exploration by the Bureau of Mines under their Western Radioactive Minerals Program during the summer of 1955. As funds for this program were withdrawn, the work was not done. Attached is a photostat of a letter referring to the project.

We were advised that D.M.E.A. assistance might be possible for the project and accordingly are submitting our application.

The Bureau of Mines, Spokane Field Office, Region I, undoubtedly has a file on "The Meadows". If further information is desired, please advise.

Yours very truly,

ALFRED G. HOYL & ASSOCIATES

Alfred G. Hoyl

AGH:dsh
Enclosures

RECEIVED
APR 30 1956
U.S.G.S.
SPOKANE, WASH.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED
MAY 7 - 1956

RECEIVED
APR 30 1956
U. S. G. S.
SPOKANE, WASH.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. 4280
Metal or Mineral Monazite
Date Received May 4, 1956
Estimated Cost $ 13,970.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: ALFRED G. HOYL AND ASSOCIATES, (See attached list of associates)
1727 Boulder Street
Denver 11, Colorado

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract T9N, R15E, Custer County, Idaho; Alvarado Group, SE ¼ Sec.8; Esperdo Group, NW ¼ Sec 8; Verde Group, SE ¼ Sec 5; Luz Group, SW ¼ of NW ¼ Sec 16; Cortez Group, NE ¼ Sec 17; La Veta Group, NE ¼ Sec 8; Coronado Group, SW ¼ Sec 16; Rojo Group, SW ¼ Sec 5; Pinto Group, NE¼ Sec 5; In T10N, R15E, Azul Group, SE ¼ Sec 32

(*b*) State any mine name by which the property is known. The Meadows, Warm Springs Creek

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See attached list

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. See Attached Sheet

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. Readily available from Stanley, Idaho, or Ketchum, Idaho. Adequate water, no power at present.

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Monazite, Thorium, Titanium, Uranium, Heavy Minerals.

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See attached sheet and maps.

(*c*) The work will start within 60 days and be completed within 3 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. A. G. Hoyl, Mining and Geological Engineer, Graduate of Colo. School of Mines, 20 yrs technical & practical exp.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated April 24, 1956

ALFRED G. HOYL & ASSOCIATES
(Applicant)

By Alfred G. Hoyl

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

ALFRED G. HOYL & ASSOCIATES
1727 Boulder Street
Denver 11, Colorado

DMEA APPLICATION, THE MEADOWS, IDAHO

RECEIVED
MAY 7 - 1956

1. (a) List of associates: Richard D. Moody
c/o Allis-Chalmers Mfg. Co.
Railway Exchange Bldg., Denver, Colo.

T. F. Adams
672 South Monroe Way
Denver, Colorado

A. B. Manning
337 Ash Street
Denver 20, Colorado

Douglas V. Watrous
Idaho Springs, Colorado

Frank R. Komatz
400 Steele Street
Denver, Colorado

Stanfurd L. Jackson
1110 Encanto Drive
Arcadia, California

Charles J. Cerf
342 South Parkwood Ave.
Pasadena, California

Arthur G. Wood
11755 West 20th Avenue
Lakewood, Colorado

3. (f) Alvarado Group, Book 5, Pages 621 and 640
Esperdo Group, Book 5, Pages 622 and 641
Verde Group, Book 5, Pages 623 and 642
Azul Group, Book 5, Pages 624 and 643
Luz Group, Book 5, Page 625, and Book 6, Page 1
Cortez Group, Book 5, Page 626, and Book 6, Page 2
La Veta Group, Book 5, Page 627, and Book 6, Page 3
Coronado Group, Book 5, Page 628, and Book 6, Page 4
Rojo Group, Book 5, Page 629, and Book 6, Page 5
Pinto Group, Book 5, Page 630, and Book 6, Page 6

4. Physical Description (a) - (d)

The Meadows is a large monazite placer property in Townships 9 and 10, Range 15 East, Custer County, Idaho. The property is in the Challis National Forest. It can be reached from Stanley, Idaho, by surfaced road south, twelve miles to Fisher Creek, then by an unimproved but serviceable road, northeast, seven miles

ALFRED G. HOYL & ASSOCIATES
1727 Boulder Street
Denver 11, Colorado

(4. Physical Description Continued)

to the Aztec Mine; then by an easy trail north, three miles into the Meadows.

The placer is a flat meadow area approximately three and one-half miles long by one-half to one mile wide. Through the meadow Warm Spring Creek meanders. The area has not been mined in the past. The placer covers approximately 1,000 acres estimated to be forty feet deep. Some forty-eight to sixty million yards of placer gravel are estimated as mineable in the valley.

Preliminary checks of discovery pits indicate that commercial amounts of thorium and monazite may be present in the deposit. Down stream gold placer operations have shown heavy concentrations of black sand and heavy minerals.

Geologically, the placer is an old lake bed surrounded by quartz monzonite hills of the Idaho Batholith. The heavy mineral content of the placer was probably derived from the quartz monzonite and concentrated as the rock was reduced to alluvium by glacial and stream action.

5. The Exploration Project (b)

It is proposed to improve the three miles of trail with a dozer to allow drilling equipment and supplies to be trucked into the placer. Wide spaced holes would then be drilled to bedrock or practical dredging depths to determine the extent and character of the gravel and the kind and grade of ore minerals present.

It is proposed to use churn drilling equipment and drilling methods used by the U. S. Bureau of Mines in similar testing in nearby areas in past years.

All material removed from the drill holes would be screened, concentrated, dried and sent to an appropriate laboratory for analysis. Drill holes would be placed on 500' centers maximum.

Map No. 1 attached is the U. S. G. S. Custer Quadrangle showing the location of The Meadows. Map No. 2 is an enlarged portion of Map No. 1 showing the located claims owned by Alfred G. Hoyl and Associates.

5. (d) Mining and Geological Engineer, Graduate of Colorado School of Mines, 20 years technical and practical experience, Registered engineer in Colorado.

ALFRED G. HOYL & ASSOCIATES
1727 Boulder Street
Denver 11, Colorado

DMEA APPLICATION, THE MEADOWS, IDAHO

6. Estimate of Costs:

(a)	Independent Contracts	
	Churn Drilling, $2.00/ft., 3,000 ft.	$ 6,000.00
	Dozer Operation, 60 hrs. @ $12.00/hr.	720.00
(b)	Labor Supervision and Consultants	
	Engineer & Helper, 45 days @ $70.00/day	3,150.00
	Consultant, 10 days @ $100.00/day	1,000.00
(c)	Operating Materials and Supplies	
	Gas, Oil, Dynamite, Sample Bags	300.00
(d)	Operating Equipment	
	Compressor, (1 week)	100.00
(e)	Rehabilitation and Repairs, None	
(f)	New Buildings, Improvements, Installations, None	
(g)	Miscellaneous	
	Assays and Laboratory Work	1,500.00
(h)	Contingencies	1,200.00
	TOTAL ESTIMATE OF COSTS	$13,970.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

North 1201 Division Street
Spokane 2, Washington
March 18, 1955

RECEIVED
MAY 7 - 1956

Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Subject: Exploration of Big Meadows, Warm Springs Creek, Custer County, Idaho

Dear Mr. Hoyl:

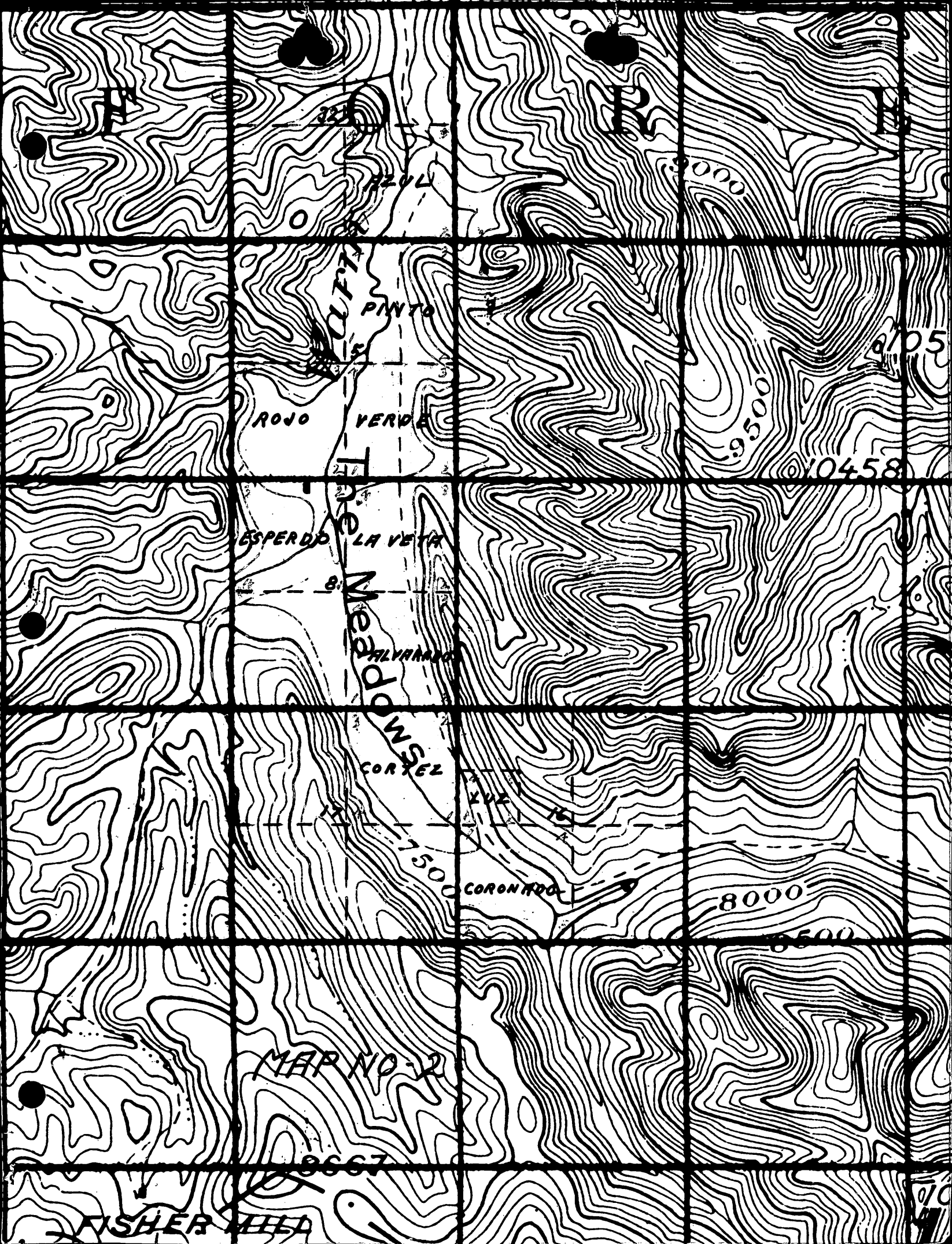
In answer to your letter of March 15, the Big Meadows area to which you referred was scheduled for exploration. It now appears, however, that funds are not to be made available for continuance of the Western Radioactive Minerals Program. For that reason, it is unlikely that any work will be done in that area this year by the Bureau of Mines.

Very truly yours,

Wing G. Agnew

Wing G. Agnew, Chief
Spokane Field Office, Region I

PHOTO - COPY
BY PICK
FOR EXTRA COPIES, CALL KE. 2876
APR 24 1956
PICK PHOTOGRAPH & BLUEPRINT CO.
1015 - 17th ST. DENVER, COLO.
CERTIFIED ON REQUEST


R
R
AZUL
PINTO
ROJO
VERDE
9500
10458
ESPERDO
LA VETA
ALVARADO
CORTEZ
CRUZ
7500
CORONADO
8000
8500
MAP NO. 2
8667
FISHER HILL

RECEIVED
MAY 7 - 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

North 1201 Division Street
Spokane 2, Washington
March 18, 1955

RECEIVED
MAY 7 - 1956

Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Subject: Exploration of Big Meadows, Warm Springs Creek, Custer County, Idaho

Dear Mr. Hoyl:

In answer to your letter of March 15, the Big Meadows area to which you referred was scheduled for exploration. It now appears, however, that funds are not to be made available for continuance of the Western Radioactive Minerals Program. For that reason, it is unlikely that any work will be done in that area this year by the Bureau of Mines.

Very truly yours,

Wing G. Agnew, Chief
Spokane Field Office, Region I

DOCKET COPY

Kuhrs

PROJECT SUMMARY REPORT

By: F. M. Murphy April 16, 1959

1. Docket No. DMEA-4280 (Thorium-Monazite-Columbium-Tantalum)
Contract No. Idm-E1012

Operator: Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Note: Hoyl and all members of the Joint Venture signed the contract.

Operator's Property Rights:

Owner of ten (10) groups of placer claims covering 1,480 acres in Custer County, Idaho, as follows:

In T. 10 N., R. 15 E., Boise meridian - Azul group.
In T. 9 N., R. 15 E., B.M. - Pinto, Rojo, Verde, Esperdo, La Veta, Alvarado, Cortez, Luz, and Coronado groups.

2. Contract dated September 20, 1956.

The project work started in early July 1957. The drilling was completed by August 31, and the office work by September 30, 1957.

Amendments

No. 1, dated January 25, 1957, extended the completion date from August 1 to October 20, 1957. Also, allowed change of location for two holes and transfer of drilling footages from Stage II to Stage I.

No. 2, dated September 18, 1957, authorized recess from September 1, 1957, to July 1, 1958; extended completion date to October 20, 1958; and extended royalty period to 11 years.

No. 3, dated October 14, 1957, allowed use of D-6 dozer in lieu of D-8, and changed the total estimated cost of the project from $26,986.00 to $26,652.00.

Project Summary Report - DMEA-4280 (continued)

Amendments (continued)

No. 4, dated November 1, 1957, transferred some items under "Operating Equipment" from depreciation to rental.

Final Reports:

Operator's received in Washington August 25, 1958. The report is complete and acceptable.

Field Team's, dated April 1, 1959, transmitting the field examiners' final report, recommends that the project should not be certified.

3. Work Authorized:

Stage I: (1) Bulldozing approximately 3 miles of access road to property and drill sites.

(2) Churndrilling 20 holes to an average depth of 50 feet, the hole to be spaced on 1000 foot centers.

Stage II: Churndrilling (900 feet) an additional 18 holes in the area drilled during Stage I.

Estimated Costs
(See Amendment No. 2)

	Stage I		Stage II	
	Units	Cost	Units	Cost
Churn drilling	1,000	$ 5,250.00	900	$ 4,725.00
Bulldozer @ $12/hr.	51	612.00	-	-
Labor & Supervision	-	3,824.10	-	4,124.10
Operating Materials & Supplies	-	555.12	-	280.00
Operating Equipment (rental)	-	1,582.43	-	116.55
Operating Expenses - payroll taxes	-	405.92	-	429.92
Hauling, concentrating, and analyses of samples	-	2,485.00	-	2,261.50
Total Cost		$14,714.57		$11,937.07
Total Estimated Cost of Project (rounded)				$26,652.00
Government Participation @ 75%				$19,989.00

Work Completed (Stage I only)

	Actual Costs
Bulldozing - 51 hours	$ 612.00
Churndrilling 978 feet	5,090.00
Labor, Supervision (drilling)	2,526.25
" " (roads & trails)	628.56
Operating Materials & Supplies	598.36
Operating Equipment (rental)	155.40
Hauling, concentrating, and analyses of samples	2,110.55
Total Accepted Cost of Project	$11,721.12

4. Audit Certificate, November 12, 1958:

Total Cost as billed by Operator	$14,476.01
Proceeds from disposition of property	0.00
Exceptions by Field Team and Audit	2,754.89
Total Accepted Costs	$11,721.12
Government Participation @ 75%	$ 8,790.84

5. Certification is not recommended by Field Team, Commodity Members, or this Division.

6. Excerpts from Final Engineering and Geologic Report, dated March 1959, by R. D. Sample, USGS, and W. M. Romischer, USBM:

The Meadows placer area is an alluvial flat along Warm Springs Creek. Martin and Pig Tail Creeks are the two major tributaries. Results of sampling and analysis of the sand and gravel in The Meadows indicate that the only deposits containing significant amounts of radioactive black sands are laid down by Martin and Pig Tail Creeks, which drain areas covered by quartz monzonite almost exclusively. Deposits on Warm Spring Creek, which drain Paleozoic rocks and Tertiary volcanics, show smaller amounts of heavy minerals.

Nineteen (19) holes were drilled, using 6-inch inside diameter drive pipe equipped with a $7\frac{1}{2}$ inch drive shoe. The results obtained confirmed the above observation regarding heavy minerals distribution, namely:

1. The highest concentration of heavy minerals is along the shallow, reworked flood plains of Pig Tail and Martin Creeks along the west side of The Meadows, and

Project Summary Report - DMEA-4280 (continued)

2. The drilling indicated only insignificant quantities of rare earth metals. The possibility of enrichment at depth is remote due to dilution by barren rubble deposited by Warm Spring Creek.

Based on the above-mentioned results, the project was terminated at the end of Stage I, since there were no new areas that would warrant further exploration.

Comments:

The churn drilling was done in a competent manner and an experienced man did the sampling. The only operating difficulty was moving the drill rig from some drill sites to others over the marshy terrain.

Administration of the contract was difficult because Mr. Hoyl paid no attention to the contract terms, believing it could be amended to provide 75% Government participation in any cost he deemed necessary, such as rations for the men, technical services, etc., which were not mentioned in the contract. In view of this, another contract with the Operator, if requested, is not recommended.

F M Murphy

F. M. Murphy

FMMurphy/hb
4/22/59
Copy to: Director's Reading File
F. E. Johnson
F. M. Murphy

ME Form 17
Mar. 59

OFFICE OF MINERALS EXPLORATION

WORK COMPLETED ANALYSIS

___ Certified — After final audit or review report is received, prepare in duplicate. File original in official docket. Send copy to Code 210.

Operator: Alfred G. Hoyl & Associates
Actual Cost: x

State: Idaho
Agreed Unit Cost:

Final Report of Audit:
Commodity: Thorium, monazite, columbium-tantalum
Docket No. DMEA-4280

Final Report of Review: x
Contract No. Idm-E1012

Type of Work (Use these categories only)	Authorized by Contract and Amendments		Completed and Paid for		Net cost after sale of Gov't. Property
	Units	Cost 1/	Units	Cost 1/	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Churn	1900	20,787.65	978	8370.01	8370.01
Surface Excavation					
Underground Excavation					
Roads and Trails		2039.03		1240.56	1240.56
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Concentrating & analysis of cuttings		3825.00		2110.55	2110.55
Totals		$ 26,651.68 4/		$ 14,721.12	2/ $ 11,721.12

4/ Contract $26,652.00 (rounded)

1/ Round off to dollars.
2/ Net cost total must agree with final report of audit or review.

Stage I completed - Stage II not authorized.

Prepared by [signature] Date 8/17/59

52616

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
8/23	Murphy	500
	[illegible]	500
8/23	Talbert	800
8/23	[illegible]	130
		~~110~~
8/23	gad	220
		225

AUG 23 1960

AIR MAIL

Mr. R. N. Appling, Jr., Chief
Spokane Office of Mineral Resources
North 1201 Division Street
Spokane 2, Washington

Re: IMRA-4280 (Monazite-Thorium-Columbium-Tantalum)
Alfred G. Boyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract Ida-81012

Dear Mr. Appling:

Reference is made to your letter of August 16, 1960, in reply to letter dated July 26, 1960, of Mr. Floyd Iverson, Regional Forester, Forest Service, U. S. Department of Agriculture, Ogden, Utah, requesting information on the subject contract.

It is our policy to permit duly authorized representatives of U. S. Government agencies to review our files and take notes on information contained therein, with the understanding that it is for their confidential use only. We do not, however, permit them to remove anything from the files or make copies, such as photostats or other reproductions, of the materials in the files.

If a representative of the Forest Service cannot review the subject docket at the Spokane office, our field office could forward the docket to the U. S. Bureau of Mines office at Salt Lake City, giving it permission to show the docket to the Forest Service under the above-mentioned rules and then return it to OME, Region I. Copies of this letter are being sent to Mr. Iverson and to Mr. MacLaren, OME Acting Field Officer in Spokane.

Sincerely yours,

Frank E. Johnson (for)

Acting Director

cc: Mr. Floyd Iverson
Mr. D. R. MacLaren, OME Region I (2) w/2 cys incoming letters

FMMurphy/FEJohnson
8/23/60
cc to: Director's Reading File
Docket
Code 500
Chron

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 18 1960

DATE	INITIALS	CODE
8-18	gad	VVO
8/18	[illegible]	800
"	Murphy	500
		22 J

Region I

Spokane Office of Mineral Resources

North 1201 Division Street
Spokane 2, Washington

August 16, 1960

AIR MAIL

Mr. Floyd Iverson
Regional Forester
Forest Service
U. S. Department of Agriculture
Ogden, Utah

Dear Mr. Iverson:

This is in reply to your letter of July 26, concerning the results of a Government sponsored exploration project undertaken by Alfred G. Hoyl & Associates at The Meadows, on Warm Springs Creek, Custer County, Idaho, under Docket No. DMEA-4280 (monosite, thorium, columbium, tantalum.)

The Bureau of Mines in Region I is no longer connected with DMEA (now OME); however, we do have a complete file on the subject docket. We are prohibited by law from releasing information on the results of exploration project contracts.

Since this is a policy matter we are referring your request directly to Mr. Frank E. Johnson, Director, Office of Minerals Exploration, Department of the Interior, Washington 25, D.C., by copy of this letter.

Very truly yours,

R. N. Appling, Jr., Chief,
Spokane Office of Mineral Resources

cc: Mr. Frank E. Johnson

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
INTERMOUNTAIN REGION

ADDRESS REPLY TO
REGIONAL FORESTER
AND REFER TO

2810

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 18 1960

DATE	INITIALS	CODE

FOREST SERVICE BUILDING
OGDEN, UTAH

July 26, 1960

Mr. Wing G. Agnew
Chief, Spokane Field Office
U. S. Bureau of Mines
2407 West Pacific
Spokane, Washington

Dear Mr. Agnew:

Mr. Alfred G. Hoyl, Contract Engineering Company, 1727 Boulder Street, Denver 11, Colorado, has filed under provisions of Public Law 167 on several placer mining claims within the Challis National Forest in Idaho. These claims are located on Warm Springs Creek in sec. 32, T. 10 N., R. 15 E., and secs. 5, 8, 16, and 17, T. 9 N., R. 15 E., Boise Meridian.

During preliminary examination of these claims by our Mineral Section it was found that test drilling was done in 1957 with DMEA assistance. Mr. Ray Jaggers, who lives nearby at the old Aztec Mine, informed us that Mr. Dean C. Holt of your office represented the Bureau of Mines during this work.

It will be greatly appreciated if you can send us a map showing the location of the drill testing done, the hole logs or results of this testing, and any other pertinent information available. All such material will be kept confidential and returned to your office at your request.

Very truly yours,

FLOYD IVERSON
Regional Forester

By

cc: D
G. R. Plumb

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/3	Murphy	700
6/3	Kumle	700
6/3	Talbut	800
6/4	Selfridge	120
		110
6/5	C	220
		700

JUN 5 1959

Mr. Alfred G. Hoyl
Alfred G. Hoyl and Associates,
a Joint Venture
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium-Columbium-Tantalum)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Hoyl:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this project. Your attention, however, is called to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

cc: Richard D. Moody
T. F. Adams
A. B. Manning
Douglas V. Watrous
Frank R. Komatz
Stanfurd L. Jackson
Charles J. Cerf
Arthur G. Wood

FMMurphy/ama
June 2, 1959

Copy to: Docket
Director's Reading File
Contract Admin. & Audit Division
OME Field Team, Reg. I (2)
T. H. Kiilsgaard
F. M. Murphy

43683

OFFICIAL FILE COPY O. M. E. RECEIVED APR 15 1959		
DATE	INITIALS	CODE
4/15	C	220
	Murphy	700

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Washington 25, D. C.

Date April 14, 1959
DMA Docket No. 4280
DMA Contract No. Idm-E1221
Commodity Thorium, Monazite, etc.
Name of Applicant Alfred G. Hoyl & Associates
Location of property Custer County, Idaho
Estimated cost of project $11,721.21

Memorandum

To: Frederick L. Knouse, Acting Director, OME
Rare and Misc. Minerals Division

From: James Paone, Bureau of Mines Member JP
Uranium Commodity Committee

Subject: Review of Final Report
(Application, Field Team Report, etc.)

1. Date of subject document: 4/1/59. 2. Date received by reviewer: 4/13/59.

3. Prior reports on this property known to reviewer: Yes ☐ No ☐

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☐

5. Information available on past production: Yes ☐ No ☐

6. Other pertinent factors known to reviewer: Yes ☐ No ☐

7. Explain items marked 'yes' above:

8. Factors needing special consideration:

a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs
h. _____ ☐

9. Action advised:

a. Obtain information from applicant ☐
b. Refer to Field Team ☐
c. Denial ☐
d. Agree with Field Team ☒
e. Disagree with Field Team ☐
f. Suggest alternate plan ☐
g. Request another examination ☐
h. Approval ☐
i. Consult with Mr. _____ at _____ AEC Office.

10. Remarks: (Use back of page if necessary). Certification of discovery or development not recommended.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
So. 157 Howard Street
Spokane 4, Washington
April 1, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 9 1959

DATE	INITIALS	CODE
4-9		
4-9		220
"		130
4-14		130
4/14		220
4/15		700

Memorandum

To: Chairman, Operating Committee, OME

From: Field Team Region I, OME

Subject: Docket No. DMEA-4280 (Thorium, Monazite, Columbium, and Tantalum), Alfred G. Hoyl & Associates, The Meadows, Warm Springs Creek, Custer County, Idaho, Contract No. Idm-E~~1221~~ 1012

Enclosed are three copies of a Field Team final report on this project by R. D. Sample, Geologist, Geological Survey, and William R. Romischer, Mining Engineer, Bureau of Mines. This report was ready for final typing before receipt of the Special Notice in Operating Committee Minutes, No. 51, dated March 20, 1959.

FINAL F.T. REPORT

Gravel deposits at The Meadows flat on Warm Springs Creek, Custer County, Idaho, were explored for thorium, monazite, columbium, and tantalum by churn drilling 19 holes totaling 978 feet at a total cost of $11,721.21, of which the Government's share was 75 percent, or $8,790.84.

Assays of samples from the drill holes showed the radioactive and rare-earth contact to be below ore grade and the project terminated with the completion of Stage I.

It is recommended that no Certification of Discovery or Development be made.

A. E. Weissenborn
A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures
cc: USBM(2)
USGS(SRO)
Sample
AEC(2), Grand Junction

Reviewed by
OME OPERATING COMMITTEE
4-14-59
(date)

DEPARTMENT OF THE INTERIOR

OFFICE OF MINERALS EXPLORATION

FIELD TEAM, REGION I

FINAL REPORT

Contract Idm-E1012

by

R. D. Sample
Geologist
U. S. Geological Survey

William M. Romischer
Mining Engineer
U. S. Bureau of Mines

ALFRED G. HOYL AND ASSOCIATES
1727 Boulder Street
Denver 11, Colorado

Docket No.: DMEA-4280
Commodity: Thorium-Monazite
Columbium-Tantalum
Contract date: September 20, 1956
Completion date: September 30, 1957

OFFICIAL FILE COPY
RECEIVED APR 9 1959
DATE

4-14	JLB	130
		220

Reviewed by
OME OPERATING COMMITTEE
4-14-59
(date)

THE MEADOWS, WARM SPRINGS CREEK
Bayhorse Mining District
Custer County, Idaho

Spokane, Washington

March 1959

CONTENTS

	Page
INTRODUCTION	1
Summary	1
Recommendations	2
LOCATION AND ACCESSIBILITY	2
PROPERTY	3
History and Production	4
GEOLOGY	4
Regional Geology	4
Local Geology	5
THE PROJECT	6
Summary of Factual Data	11
Discussion of Conclusions	12
APPENDIX	After p. 12
Table 1. Churn drill hole sample data	
2. Summary - composite of churn drill hole sample data	
3. Summary - composite of analysis and rare mineral content per cubic yard	

ILLUSTRATIONS

Plate 1. Omitted	
2. Geologic map	In pocket
3. Claim map	In pocket
4. Map of the Pig Tail - Martin Creek area showing sample locations and analysis	In pocket

FINAL REPORT

ALFRED G. HOYL AND ASSOCIATES
The Meadows, Warm Springs Creek
Bayhorse Mining District
Custer County, Idaho

Contract Idm-E1012

* * * *

INTRODUCTION

This report describes a churn drilling project conducted jointly by the Defense Minerals Exploration Administration and Alfred G. Hoyl and Associates to explore for thorium, monazite, columbium, and tantalum at The Meadows placer deposit on Warm Springs Creek, Custer County, Idaho.

Summary

The purpose of the project was to explore the gravel deposits at The Meadows flat on Warm Springs Creek for radioactive and rare-earth minerals by churn drilling and systematic sampling. Exploration work consisted of access road building and two stages of churn drilling. The estimated total cost of the project was $26,652, of which the Government's participation was 75 percent or $19,989.

The project work completed included the improvement by dozer of an access road approximately 3 miles in length from near the Aztec mine down Pig Tail Creek to the placer property and drilling 19 churn drill holes aggregating 978 feet of drilling.

The total cost of the work was $11,721.12, of which the Government's participation was 75 percent or $8,790.84.

Assay results showed the radioactive and rare-earth mineral content to be below ore grade and the second stage of drilling was not authorized by the Government. Deposits of heavy minerals by Pig Tail and Martin Creeks have been so diluted by

deposits from Warm Springs Creek underlain by volcanic material that commercial concentrations are highly improbable.

Recommendations

Due to the subcommercial grade of mineralization found in the deposits by the first-stage work, no Certification of Discovery or Development is recommended. Government participation in further exploration is not warranted.

LOCATION AND ACCESSIBILITY

The Meadows placer claims are on Warm Springs Creek, Bayhorse Mining District, in secs. 5, 8, 16, and 17, T. 9 N., R. 15 E., and in sec. 32, T. 10 N., R. 15 E. Boise meridian, Custer County, Idaho (pl. 2). Stanley, Idaho, on the Salmon River is the nearest town and domestic trading center and lies about 12 airline miles to the northwest. The property may be reached from Stanley by traveling southward over U. S. Highway 93 for approximately 15 miles to Fisher Creek. Thence easterly and northerly up Fisher Creek over a rough dirt road for about 6 miles to the Aztec mine and mill. Thence northerly down Pig Tail Creek over a steep, narrow, rocky road to The Meadows flat. The road into the valley from the Aztec mine is in disrepair and would be impassable during winter months.

The Meadows flat, which is grass covered, lies in the mountainous country of south-central Idaho at an altitude of about 7,500 feet. The summers are cool and pleasant with only an occasional shower, but the winters are cold and severe with much snow. Surrounding the valley are rugged mountains with individual peaks reaching altitudes of more than 10,000 feet. They are, for the most part, covered with tall timber and dense underbrush.

PROPERTY

The property comprising the groups of claims included in the exploration project is recorded in the Office of the Custer County Recorder, Challis, Idaho. The claim groups are listed below:

Name	Book No.	Page No.
Azul	5	624 643
Pinto	5 6	630 6
Rojo	5 6	629 5
Verde	5	623 642
Esperdo	5	622 641
La Veta	5 6	627 3
Alvarado	5	621 640
Cortez	5 6	626 2
Luz	5 6	623 1
Coronado	5 6	628 4

The claim groups are owned by Alfred G. Hoyl and Associates of Denver, Colorado. This is a joint venture consisting of Alfred G. Hoyl, Richard D. Moody, T. F. Adams, A. B. Manning, Douglas V. Watrous, Frank R. Komatz, Stanfurd L. Jackson, Charles J. Cerf, and Arthur G. Wood. The properties consist of nine 160-acre claims and one 40-acre claim situated on unsurveyed lands in the Challis National Forest and covering an area of 1,480 acres.

Exploration by means of churn drilling was conducted on the Pinto, Rojo, Verde, Espordo, La Veta, Alvarado, and Cortes groups of claims.

There are no mine workings nor surface facilities of any kind on the property.

There is ample water for a dredging operation.

History and Production

The Meadows placer deposit is about 3.5 miles long and from 0.5 to 1 mile wide.

Almost the entire area along Warm Springs Creek was located as placer claims by Alfred G. Boyl and Associates in August 1954.

No known production has ever been taken from The Meadows Placer deposits. At one time some placer mining for gold was done along Pig Tail Creek, a tributary to Warm Springs Creek. It is reported the placering was done by Chinese and some evidence still remains of the old placer operations, but no mining was done in the main Meadows along Warm Springs Creek.

Much of The Meadows area is covered with a heavy growth of rich grass during the summer months, and for many years the land has been leased from the Federal Forest Service and used as a summer range for sheep and cattle.

GEOLOGY

Regional Geology

The Meadows placer area is an alluvial flat along Warm Springs Creek within the great mountain mass of Central Idaho. The general region is underlain by a thick sequence of Paleozoic sedimentary rocks which have been intruded by igneous masses (pl. 2). The most dominant intrusion is the Idaho batholith and associated stocks and dikes. This central granitic batholith of Idaho is one of the prominent igneous instrusions of the North American continent and covers a large portion of central and northern Idaho. Its general composition is that of a quartz monzonite. The Paleozoic strata are complexly folded and have been broken by thrust and normal faults.

Overlying both the Paleozoic sediments and igneous intrusives are various thicknesses of Tertiary volcanic strata and associated sedimentary rocks. During Pleistocene times the general region was intensely glaciated by Alpine glaciation. Most of the present topography is the result of erosion since glacial times.

Important contributions to the geology of this area have been made by:

Ross, C. P., Geology and ore deposits of the Bayhorse region, Custer County, Idaho: U. S. Geol. Survey Bull. 877, p. 1-161, 1939.

Ross, C. P., Correlation and interpretation of the Paleozoic stratigraphy in south-central Idaho: Geol. Soc. America Bull., v. 45, no. 5, 1934.

Umpleby, J. B., Westgate, L. G., and Ross, C. P., Geology and ore deposits of the Wood River region, Idaho: U. S. Geol. Survey Bull. 814, 1930.

Ross, C. P., Early Pleistocene glaciation in Idaho: U. S. Geol. Survey Prof. Paper 158, p. 123-128, 1929.

Local Geology

An important contribution to local geology of The Meadows placer area was made by Paul L. Williams in his study of radioactive placer deposits in Central Idaho. His report entitled "Reconnaissance geology of The Meadows on Warm Springs Creek, Custer County, Idaho," was prepared during the summer of 1956 and was not available when the Field Team examination report was prepared.

According to Ross' geologic map, the highlands surrounding The Meadows are composed of rocks of three distinct types: (1) quartz monzonite of the Idaho batholith, (2) sedimentary rocks of Paleozoic age, including argillite, limestone, quartzite, conglomerate, and chert, and (3) latite and andesite flows and pyroclastics of Oligocene age (pl. 2).

According to Williams, approximately two-thirds of the area draining into The Meadows is underlain by granitic rocks; the remaining third is underlain by Paleozoic sedimentary rocks and minor amounts of Tertiary volcanics. A heavy-minerals study by Williams showed that all of the economically important minerals in the placers are derived from granitic rocks; nongranitic rocks in the drainage basin dilute the placer values derived from the granitic rocks.

Because the deposits in The Meadows flat are composed almost entirely of glaciofluvial deposits interfingered with alluvium deposits, glaciation is a significant factor in accounting for the broad accumulation of sediments in the Warm Springs Valley (pl. 2). Williams states:

"During the Late Wisconsin glaciation a small glacier advanced down the valley of Bear Lake Creek into the narrow valley of Warm Springs Creek and dammed the major stream with morainal debris. In response to the sudden raising of its base level, Warm Springs Creek aggraded rapidly forming the broad alluvial flat known as The Meadows. Rapid aggradation was facilitated by large quantities of sand and gravel issuing from a glacier that advanced down Warm Springs Creek to the vicinity of the mouth of Pigtail Creek. The aggradation of Warm Springs Creek caused its tributaries to deposit their alluvium at the margin of The Meadows."

Martin and Pig Tail Creeks are the two major tributaries entering The Meadows from the west. The drainage of both these small streams is almost entirely in the quartz monzonite (pl. 2), and both carry sand and gravel eroded from quartz monzonite and deposit the material in The Meadows flat. Noticeable alluvial fans, which interfinger with the glaciofluvial deposits of Warm Springs Creek, have been built up along the west side of The Meadows by these two streams. Williams estimates that only about 20 percent of The Meadows fill came from Pig Tail and Martin Creeks.

During the relatively short post-glacial interval, Warm Springs, Martin, and Pig Tail Creeks have all reworked their deposits along their narrow meandering courses.

From Williams' reconnaissance sampling and analysis of the gravels in The Meadows, it appears evident that the only deposits that contain significant amounts of radioactive black sands are those laid down by Martin and Pig Tail Creeks, which drain quartz monzonite almost exclusively. Deposits of Warm Springs Creek, which drain Paleozoic rocks and Tertiary volcanics, show smaller amounts of heavy minerals.

A detailed map of The Meadows showing Williams' sample locations and results is shown in plate 4.

THE PROJECT

The Meadows placer deposit was examined first in the fall of 1953 and again in August and September 1954, by Bureau of Mines engineers. Laboratory tests on concentrates from samples taken from test pits and stream bars indicated that, although the concentrates contained only a relatively small amount of monazite, they had an excess radioactivity which, presumably, was due to the presence of radioactive opaque minerals. The placer deposit covers an area of about 900 acres, and by assuming a depth of 24 feet, an estimate of about 35,000,000 cubic yards of gravel was obtained. Testing of these gravels for possible concentrations of monazite and radioactive opaque minerals was warranted.

An application for Government aid from Alfred G. Hoyl and Associates, Denver, Colorado, to explore The Meadows placer deposit by means of churn drilling was received on April 30, 1956. The applicant's proposal included the improvement by dozer work of 3 miles of trail down Pig Tail Creek to the placer deposit to allow drilling equipment and supplies to be hauled to the placer, and exploring the deposit by 3,000 feet of churn drilling with holes spaced on a maximum of 500-foot centers. The cost of the proposed exploration project was estimated to be $13,970. The drilling costs submitted in the proposal were considered low.

From the examining engineer's recommendations along with those from the Washington office, a modified exploration program was recommended that would adequately test the gravels by churn drilling for thorium, uranium, rare earths, columbium, and tantalum.

The work was to be done in two stages upon an actual cost basis with maximums indicated in the contract. Upon the completion of Stage I, if in the opinion of the Government the results should indicate the advisability of further exploration work and upon written approval in advance by the Government, the work under Stage II was to be undertaken.

Stage I

1. Bulldozing of approximately 3 miles of access road to property and of access roads or trails to the drill sites.

2. One thousand feet of churn drilling consisting of 20 holes spaced on 1,000-foot centers with an average depth of 50 feet.

Stage II

1. Churn drilling (900 feet) an additional 18 holes in the area drilled during Stage I.

The estimated total cost of the project was $26,986 and the Government's participation at 75 percent was $20,240.

The contract, dated September 20, 1956, was signed by the Operator. Contract work was to begin if possible in the fall of 1956 and be completed on or before August 1, 1957. The Operator stated that he would not be able to begin work until the spring of 1957 and that he would be unable to complete the job by August 1. Amendment No. 1 extending the completion date to October 20, 1957, was authorized.

The project work was started in early July 1957. The 3 miles of access road was completed on July 12 and trails to drill hole sites a short time later. The project drilling was started July 22 and completed August 21, 1957. The field work under Stage I of the contract was completed by August 31, 1957, and office work by September 30, 1957.

A churn-drilling contract was negotiated with Russell Cove and Company of Boise, Idaho, and drilling commenced July 22, 1957, at the approved DMEA drill site for hole M-1 (pl. 3). Nineteen holes were drilled totaling 978 feet. The drilling of the last hole was completed on August 21. A list of the holes drilled and their depths is in the following table:

Hole	Depth of hole (feet)
M-1	27.5
M-2	82.5
M-3	50.0
M-4	52.5
M-5	45.0
M-6	52.5
M-7	45.0
M-8	54.0
M-9	35.0
M-10	45.0
M-11	54.0
M-12	52.5
M-13	55.0
M-14	55.0
M-15	55.0
M-16	42.5
M-17	45.0
M-19	45.0
M-20	85.0
Total	978.0

Plate 3 is a map of the area made in October 1958 on a scale of 1 inch equals 1,000 feet. The proposed holes for drilling under Stages I and II are shown as well as the actual locations of 15 of the 19 holes drilled under the project. Four of the holes, which had been inspected while the drilling was in progress could not be found when the map was made, even after a diligent search.

All the churn drilling was done using 6-inch inside diameter drive pipe equipped with a 7½-inch drive shoe.

Samples were taken over 5-foot intervals of hole. During the churn drilling, the material penetrated was recovered after each 2.5 feet of drive, and the material from two consecutive drives was combined to form a sample.

The procedure used in drilling and the collection of the samples is as follows: the casing was driven ahead of the bit in 2.5-foot runs by means of drive clamps attached to the tool string. The material within the casing was loosened with a chopper bit to within 0.5 foot above the bottom of the casing and the cuttings were removed by a suction bailer and dumped into a collecting trough; the bailer was carefully washed at the end of each run to get all the cuttings, which were flushed from the collecting trough into a large sheet-iron pan. The cuttings were then dried over an open fire, and the dried cuttings were combined in appropriate 5-foot runs for each sample.

Every sample was screened on a 1/8-inch screen. The oversize was weighed, checked for radioactivity, and discarded. None of the oversize was radioactive.

The minus 1/8-inch material was weighed and placed in sample sacks, which were properly identified as to drill hole number and depth represented and sent to a suitable laboratory where each sample was concentrated and the concentrate weighed. After each sample had been concentrated, a determination of the weight of the concentrate in relation to the placer gravel was made, and then half of the concentrate from each sample representing the drill hole was combined to form a composite sample. The other half of the concentrate from each sample was retained separately for Government use. The composite samples were chemically analyzed for thorium, uranium, rare earths, columbium, and tantalum content.

The results obtained from the project drilling confirmed those of the laboratory tests from the preliminary sampling that the gravels containing the largest amounts of the heavy minerals are situated near the junction of Pig Tail and Warm Springs Creeks and extend downstream past Martin Creek to the lower end of the valley. Holes M-1, M-2, M-5, and M-6 (pl. 3, and tables 1, 2, and 3 in appendix) penetrated gravels containing the largest amounts of the heavy minerals though only small amounts of valuable constituents.

The deposit of heavy minerals derived from the quartz monzonite from the west and transported by Pig Tail and Martin Creeks have been diluted by deposits from Warm Springs Creek that

contain much smaller amounts of black sands. Deposits transported from Warm Springs Creek have been eroded from areas consisting mostly of sedimentary and volcanic rocks where concentrations of commercial material are very unlikely to occur, and there is no reason to believe that the deposits become richer at depth.

Sampling data, showing chemical analysis, and mineral content per cubic yard for each hole drilled is given in three tables in the Appendix of this report.

The contract was amended four times. Amendment No. 1, dated January 25, 1957, extended the time for completion from August 1, 1957, to October 20, 1957, and authorized the location of two specific holes included in the Stage I drilling to be changed. This amendment also allowed the transfer of drilling footage from Stage II to Stage I, if necessary to complete the 20 holes.

Amendment No. 2, dated September 18, 1957 authorized a recess from September 1, 1957, to July 1, 1958, and extended the time for completion from October 20, 1957, to October 20, 1958. The period for the payment of Government's royalty was extended from 10 to 11 years.

Amendment No. 3, dated October 14, 1957, permitted the substitution of a D-6 caterpillar in lieu of a D-8. The estimated total cost of Stage I was revised from $15,048.93 to $14,714.57, which changed the estimated total cost of the project from $26,986 to $26,652.

Amendment No. 4, dated November 1, 1957, transferred some equipment items under Category (4), Operating Equipment, from depreciation to rental.

Summary of Factual Data

Work under Stage I was the only part of the contract completed. The allowable costs of the project were:

Stage I

	Authorized	Completed	Actual unit cost	Total cost
(1) Churn drilling	1,000 ft.	978 ft.	$5.2045/ft.	$ 5,090.00
(2) Labor and supervision for collection of samples	$2,526.25	--	--	2,526.25
(3) Operating materials and supplies, small tools, pans, etc.	598.36	--	--	598.36
(4) Rental for equipment, surveying equipment, 1-ton pickup truck, chainsaw	155.40	--	--	155.40
(5) Roads and trails				
(a) Bulldozing with D-6 caterpillar	612.00	51 hr.	12.00/hr.	612.00
(b) Labor, supervision, insurance and payroll taxes	628.56	--	--	628.56
(6) Miscellaneous Hauling samples, chemical analysis, etc.	2,110.55	--	--	2,110.55
Total cost				$11,721.12

Stage II (not started)

Total amount of contract	$26,652.00
Government's participation at 75 percent	19,989.00
Total amount expended	$11,721.12
Government's participation at 75 percent	8,790.84
Total amount unexpended	$14,930.88
Government's share unexpended	11,198.16

There was no production from the project during the exploration.

The Government waived its equity in supplies purchased for use on the project.

Discussion of Conclusions

The churn drilling was done in a competent manner and an experienced man did the sampling. The only operating difficulty experienced during the drilling program was getting the drill rig from some of the drill sites to others because of the marshy nature of the terrain. The Operator's insistence on making excessive charges for some contract items made closing the contract difficult.

The results of the drilling program indicate that:

1. The highest concentration of heavy minerals is along the shallow, reworked flood plains of Pig Tail and Martin Creeks along the west side of The Meadows.

2. The drilling indicated only insignificant quantities of rare-earth minerals. The possibility of enrichment at depth is remote due to dilution by barren rubble deposited from Warm Springs Creek.

3. There are no new target areas which would warrant further exploration.

The project was unsuccessful in discovering significant amounts of thorium, uranium, monazite, columbium, or tantalum. No Certification of Discovery or Development is recommended.

Enclosures
Distribution:
OME(3)
USBM(5)
USGS(SRO)
Docket
Sample
AEC(2), Grand Junction

APPENDIX

CHURN DRILL HOLE SAMPLE DATA

le 1

Alfred C. Hall and Associates

THE MEADOWS [illegible] – [illegible], [illegible]

Docket No. DMEA-428C

CHUBAY DRILL HOLE SAMPLE DATA

	Drill hole sample numbers	Depth of sample in ft.	Sample weight lbs.	Weight % conc.	Black sand lb/cu.yd.	Estimate of mineral content in pounds per cu. yd. Magnetite	Ilmenite	Zircon	Rutile	Monazite	Combined mineral content
	M-1-1	0 - 5	25	0.270	24.2	12.3	9.1	1.3	0.7	0.29	1.06
	1-2	5 - 10	71	0.360	33.7	[illegible]	[illegible]	0.1	[illegible]	0.14	0.34
	1-3	10 - 15	68	0.200	17.9	[illegible]	0.5	Tr	0.08	0.08	0.29
	1-4	15 - 20	70	0.310	32.0	[illegible]	5.2	Tr	Tr	0.32	[illegible]
	1-5	20 - 25	56	0.090	4.3	[illegible]	0.1	Tr	[illegible]	[illegible]	0.13
	1-6	25 - 27½	30	0.110	9.9	[illegible]	[illegible]	Tr	[illegible]	[illegible]	[illegible]
Totals	6	27.5	320	1.4[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Arithmetic averages - - - - - - - - - -				12.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	M-2-1	0 - 5	50	0.360	19.[illegible]	[illegible]	0.8	0	Tr	0.39	0.[illegible]
	2-2	5 - 10	42	0.650	41.8	[illegible]	1.3	Tr	.8	[illegible]	[illegible]
	2-3	10 - 15	37	0.320	23.4	[illegible]	[illegible]	0	0.2	0.21	[illegible]
	2-4	15 - 20	76	0.230	8.2	[illegible]	[illegible]	0	[illegible]	0.06	[illegible]
	2-5	20 - 25	105	2.470	63.9	[illegible]	[illegible]	0	[illegible]	0.34	[illegible]
	2-6	25 - 30	82	2.450	80.7	[illegible]	[illegible]	0	Tr	0.21	[illegible]
	2-7	30 - 35	65	1.740	72.3	[illegible]	[illegible]	[illegible]	Tr	1.74	[illegible]
	2-8	35 - 40	99	2.390	70.5	[illegible]	1.[illegible]	0	Tr	Tr	1.65
	2-9	40 - 45	110	2.290	56.2	[illegible]	[illegible]	0	[illegible]	[illegible]	1.35
	2-10	45 - 50	83	0.330	12.[illegible]	[illegible]	1.0	0	0.2	0.12	0.30
	2-11	50 - 55	96	0.120	11.8	[illegible]	[illegible]	0	Tr	[illegible]	0.20
	2-12	55 - 60	130	0.270	18.1	[illegible]	1.0	0	Tr	Tr	0.12
	2-13	60 - 65	82	1.210	39.2	[illegible]	0.8	0	Tr	Tr	0.70
	2-14	65 - 70	117	1.330	30.7	11.1	[illegible]	0	0.1	[illegible]	[illegible]
	2-15	70 - 75	134	0.230	15.7	[illegible]	0.3	0	Tr	Tr	0.15
	2-16	75 - 80	146	0.320	[illegible]	[illegible]	[illegible]	0	0.1	0.06	0.14
	2-17	80 - 82½	61	0.250	8.3	[illegible]	0.7	[illegible]	[illegible]	[illegible]	[illegible]
Totals	17	82.5	1535	19.010	588.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Arithmetic averages - - - - - - - - - -				34.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	M-3-1	0 - 5	59	0.031	1.[illegible]	0.3	Tr	-	Tr	Tr	Tr
	3-2	5 - 10	42	0.050	3.2	[illegible]	Tr	-	Tr	Tr	Tr
	3-3	10 - 15	79	0.070	2.4	[illegible]	[illegible]	Tr	[illegible]	Tr	0.22
	3-4	15 - 20	94	0.220	6.2	[illegible]	[illegible]	-	Tr	Tr	0.14
	3-5	20 - 25	88	0.190	5.9	[illegible]	0.3	-	0.06	Tr	0.10
	3-6	25 - 30	50	0.020	1.1	[illegible]	Tr	-	Tr	Tr	Tr
	3-7	30 - 35	59	0.050	2.3	1.[illegible]	Tr	-	Tr	Tr	Tr
	3-8	35 - 40	25	0.030	2.1	[illegible]	Tr	-	Tr	Tr	Tr
	3-9	40 - 45	34	0.030	2.[illegible]	1.1	Tr	-	Tr	Tr	Tr
	3-10	45 - 50	67	0.100	6.7	[illegible]	[illegible]	-	0.1[illegible]	Tr	0.1[illegible]
Totals	10	50 ft.	598	0.7[illegible]	34.8	[illegible]	[illegible]	Tr	[illegible]	Tr	[illegible]
					3.5	[illegible]	0.3	Tr	[illegible]	Tr	0.06

CHURN DRILL HOLE SAMPLE DATA

	Drill hole sample numbers	Depth of sample in ft.	Sample weight lbs.	Weight P.S. conc.	Black sand lb./cu.yd.	Estimate of mineral content in pounds per cu. yd. Magnetite	Ilmenite	Garnet	Zircon	Monazite	Monazite Equivalent
	M-4-1	0 - 5	16	0.070	11.8	2.4	0.9	0	0.11	Tr	0.28
	4-2	5 - 10	17	0.020	3.2	0.7	Tr	0	Tr	Tr	Tr
	4-3	10 - 15	82	0.090	3.0	1.4	0.3	0	0.01	Tr	0.05
	4-4	15 - 20	41	0.030	1.3	0.5	Tr	0	Tr	Tr	Tr
	4-5	20 - 25	15	0.020	3.6	1.2	Tr	0	Tr	Tr	Tr
	4-6	25 - 30	41	0.330	20.4	2.7	3.5	0	Tr	Tr	0.29
	4-7	30 - 35	83	0.080	2.6	1.1	0.2	0	Tr	Tr	0.07
	4-8	35 - 40	100	0.090	2.4	1.3	0.24	0	0.1	Tr	0.06
	4-9	40 - 45	110	0.120	2.9	0.7	0.1	0	0.03	Tr	0.07
	4-10	45 - 50	100	0.090	2.4	1.3	0.3	0	0.02	Tr	0.05
	4-11	50 - 52½	42	0.140	10.5	1.9	2.2	Tr	0.1	Tr	0.21
Totals	11	52.5 ft.	674	1.110	64.0	14.0	10.2	Tr	0.37	Tr	1.08
		Arithmetic averages - - - - - - - - - - -			5.8	1.4	0.9	Tr	Tr	Tr	0.10
	M-5-1	0 - 5	24	0.740	83.3	56.6	1.7	0	Tr	0.83	1.58
	5-2	5 - 10	39	0.020	1.4	Tr	Tr	Tr	Tr	Tr	Tr
	5-3	10 - 15	70	0.090	3.5	1.33	0.1	0	0.04	Tr	Tr
	5-4	15 - 20	103	0.350	9.2	2.2	1.1	0	0.1	Tr	0.09
	5-5	20 - 25	99	0.310	8.5	4.1	1.7	0	0.1	Tr	0.13
	5-6	25 - 30	88	0.960	29.5	22.7	1.5	0	Tr	Tr	0.53
	5-7	30 - 35	79	0.010	0.34	Tr	Tr	Tr	Tr	Tr	Tr
	5-8	35 - 40	77	0.520	18.2	9.6	0.9	0	0.2	Tr	0.20
	5-9	40 - 45	79	0.190	6.5	1.3	0.5	0	Tr	Tr	0.08
Totals	9	45 ft.	658	3.190	160.4	107.8	9.5	Tr	0.44	0.83	2.51
	M-5-K	Arithmetic averages - - - - - - - - - - -			17.8	12.0	0.8	Tr	0.1	0.09	0.29
	M-6-1	0 - 5	20	0.060	8.1	2.0	0.8	0	Tr	Tr	0.16
	6-2	5 - 10	35	0.200	1.5	Tr	Tr	0	Tr	Tr	Tr
	6-3	10 - 15	48	0.170	9.6	6.2	0.6	0	0.1	Tr	0.18
	6-4	15 - 20	75	0.110	4.0	3.1	0.2	0	Tr	Tr	0.10
	6-5	20 - 25	83	0.580	18.9	11.9	1.9	0	Tr	0.19	0.57
	6-6	25 - 30	81	0.520	17.3	13.0	0.9	0	Tr	0.17	0.47
	6-7	30 - 35	68	0.090	3.6	2.0	0.3	0	Tr	0.04	0.11
	6-8	35 - 40	77	0.480	16.8	12.0	0.8	0	Tr	0.17	0.37
	6-9	40 - 45	73	1.240	45.9	36.7	1.8	0	Tr	0.46	0.87
	6-10	45 - 50	85	2.830	89.9	73.4	0.9	0	Tr	1.78	5.87
	6-11	50 - 52½	35	0.280	21.6	16.2	0.7	0	Tr	0.22	0.48
Totals	11	52.5 ft.	680	6.460	237.2	177.1	17.9	0	0.1	3.03	9.18
		Arithmetic averages - - - - - - - - - - -			21.6	16.1	1.6	Tr	Tr	0.28	0.83

CHURN DRILL HOLE SAMPLE DATA

	Drill hole sample numbers	Depth of sample in ft.	Sample weight lbs.	Weight P.C. conc.	Black sand lb./cu.yd.	Estimate of mineral content in pounds per cu. yd. Monazite	Ilmenite	Garnet	Zircon	Monazite	Monazite Equivalent
	M-7-1	0 - 5	41	0.160	10.5	[illegible]	0.1	0	0.1	0.21	0.42
	7-2	5 - 10	38	0.140	10.0	[illegible]	0.1	0	Tr	0.10	0.20
	7-3	10 - 15	69	0.090	3.5	[illegible]	0.2	0	0.1	0.07	0.19
	7-4	15 - 20	75	0.[illegible]20	7.9	[illegible]	0.2	0	Tr	Tr	0.13
	7-5	20 - 25	64	0.[illegible]10	12.1	[illegible]	0.1	0	0.1	0.13	0.26
	7-6	25 - 30	57	0.120	5.7	[illegible]	0.5	0	0.1	0.06	0.15
	7-7	30 - 35	62	0.110	4.8	[illegible]	0.2	0	0.1	0.05	0.17
	7-8	35 - 40	51	0.120	6.4	[illegible]	0.4	0	0.1	0.06	0.17
	7-9	40 - 45	81	0.[illegible]40	8.0	[illegible]	0.7	0	0.1	0.08	0.22
Totals	9	45 ft.	538	1.[illegible]10	49.9	[illegible]	2.5	0	0.7	0.76	1.41
		Arithmetic averages - - - - - - - - - - -			7.8	[illegible]	0.3	Tr	0.1	0.08	0.21
	M-8-1	0 - 5	29	0.090	8.4	1.8	0.2	0	0.1	0.08	0.26
	8-2	5 - 10	42	0.130	8.4	[illegible]	0.2	0	0.1	0.17	0.29
	8-3	10 - 15	48	0.120	6.8	2.7	0.1	0	Tr	0.07	0.22
	8-4	15 - 20	56	0.050	2.4	Concentrate sample too small to estimate - - - - - - - - - - -					
	8-5	20 - 25	54	0.050	2.5	"	"	"	"	"	"
	8-6	25 - 30	52	0.040	2.1	"	"	"	"	"	"
	8-7	30 - 35	34	0.040	3.2	"	"	"	"	"	"
	8-8	35 - 40	138	0.360	7.0	3.9	0.1	0	0.1	0.07	0.18
	8-9	40 - 45	76	0.220	7.8	[illegible].6	0.1	0	0.1	0.08	0.23
	8-10	45 - 50	46	0.160	9.4	4.7	0.1	0	0.2	0.09	0.28
	8-11	50 - 54	67	0.080	3.2	1.2	0.1	Tr	Tr	Tr	0.08
Totals	11	54 ft.	642	1.340	61.2	22.0	0.9	Tr	0.8	0.56	1.54
		Arithmetic averages - - - - - - - - - - -			5.6	2.0	0.1	Tr	0.1	0.05	0.14
	M-9-K-1	0 - 5	25	0.040	4.3	Concentrate sample too small to estimate - - - - - - - - - - -					
	9-2	5 - 10	57	0.070	3.3	[illegible]	0.1	Tr	0.1	0.07	0.12
	9-3	10 - 15	53	0.130	6.6	[illegible]	0.1	0	0.1	0.07	0.18
	9-4	15 - 20	63	0.150	6.4	[illegible]	0.1	0	0.1	0.06	0.20
	9-5	20 - 25	60	0.100	4.5	2.0	0.1	0	Tr	0.05	0.16
	9-6	25 - 30	83	0.190	6.2	[illegible]	0.1	0	0.1	0.06	0.17
	9-7	30 - 35	73	0.160	5.9	2.7	0.1	0	0.1	0.06	0.11
Totals	7	35 ft.	414	0.840	37.2	13.1	0.6	Tr	0.5	0.37	0.94
		Arithmetic averages - - - - - - - - - - -			5.3	2.2	0.1	Tr	0.1	0.05	0.13

CHURN DRILL HOLE SAMPLE DATA

Drill hole sample numbers	Depth of sample in ft.	Sample weight lbs.	Weight B.S. conc.	Black sand lb./cu.yd.	Estimate of mineral content in pounds per cu. yd.					
					Magnetite	Ilmenite	Garnet	Zircon	Monazite	Monazite Equivalent
M-10-K-1	0 - 5	40	0.010	0.7	Concentrate sample too small to estimate - - - - - - - - - - - - - - -					
10-2	5 - 10	71	0.090	3.4	1.0	0.1	0	Tr	0.07	0.11
10-3	10 - 15	100	0.150	4.1	1.7	0.1	0	Tr	0.08	0.13
10-4	15 - 20	80	0.070	2.4	0.6	0.1	0	0.1	0.02	0.07
10-5	20 - 25	64	0.020	0.8	Concentrate sample too small to estimate - - - - - - - - - - - - - - -					
10-6	25 - 30	31	0.040	3.5	" " " " " "			-	-	-
10-7	30 - 35	56	0.080	3.8	1.0	0.2	0	Tr	0.04	0.10
10-8	35 - 40	58	0.120	5.6	1.2	0.3	0	0.1	Tr	0.12
10-9	40 - 45	57	0.140	6.6	3.2	0.2	0	0.1	Tr	0.13
Totals 9	45 ft.	557	0.720	30.9	8.8	1.0	0	0.3	0.21	0.66
Arithmetic averages - - - - - - - - - - - - - -				3.4	1.0	0.1	Tr	Tr	0.02	0.07
M-11-K-1	0 - 5	34	0.040	3.2	Not estimated -					
11-2	5 - 10	64	0.110	4.6	1.0	0.1	0	Tr	0.05	0.13
11-3	10 - 15	44	0.100	6.1	1.5	0.2	0	0.1	0.06	0.17
11-4	15 - 20	56	0.020	1.0	Not estimated -					
11-5	20 - 25	15	0.010	3.6	"	"	-	-	-	-
11-6	25 - 30	44	0.046	2.8	"	"	-	-	-	-
11-7	30 - 35	92	0.120	3.5	1.3	0.1	Tr	0.1	0.04	0.09
11-8	35 - 40	72	0.120	4.5	1.2	0.1	0	0.1	0.05	0.12
11-9	40 - 45	85	0.120	3.8	1.7	0.2	0	Tr	0.04	0.10
11-10	45 - 50	82	0.130	4.3	2.2	0.4	0	Tr	0.09	0.13
11-11	50 - 54	100	0.260	7.0	2.4	0.3	0	Tr	0.03	0.07
Totals 11	54 ft.	688	1.076	40.4	10.3	1.4	Tr	0.3	0.36	0.81
Arithmetic averages - - - - - - - - - - - - - -				3.7	0.9	0.1	Tr	Tr	0.03	0.07
M-12-K-1	0 - 5	28	No sample concentrates -							
12-2	5 - 10	46	0.142	8.3	5.2	0.4	0	Tr	0.08	0.24
12-3	10 - 15	73	0.126	4.7	2.1	0.2	0	0.1	Tr	0.10
12-4	15 - 20	73	0.266	9.8	4.4	0.2	0	Tr	Tr	0.20
12-5	20 - 25	63	0.282	12.1	4.2	0.6	0	Tr	Tr	0.23
12-6	25 - 30	29	0.030	2.8	Tr	Tr	0	Tr	Tr	Tr
12-7	30 - 35	58	0.050	2.3	Tr	Tr	0	Tr	Tr	Tr
12-8	35 - 40	73	0.141	5.2	1.3	0.2	0	Tr	Tr	Tr
12-9	40 - 45	92	0.124	3.6	1.0	0.1	0	Tr	Tr	0.02
12-10	45 - 50	99	0.224	6.1	4.6	0.2	0	Tr	0.06	0.10
12-11	50 - 52½	50	0.218	11.8	5.9	0.6	Tr	Tr	Tr	0.14
Totals 11	52.5 ft.	684	1.603	66.7	28.7	2.5	Tr	0.1	0.14	1.03
Arithmetic averages - - - - - - - - - - - - -				6.1	2.6	0.2	Tr	Tr	0.01	0.09

CHURN DRILL HOLE SAMPLE DATA

	Drill hole sample number	Depth of sample in ft.	Sample weight lbs.	Weight R.S. cons.	Black sand lbs./cu.yd.	Estimate of mineral content in pounds per cu. yd. Magnetite	Ilmenite	Garnet	Zircon	Monazite	Monazite Equivalent
	M-16-K-1	0 - 5	51	0.010	0.5	Sample too small to estimate			-	-	-
	16-2	5 - 10	41	0.010	0.7	" " " " "			-	-	-
	16-3	10 - 15	69	0.078	3.1	1.7	0.4	0	Tr	0.03	0.12
	16-4	15 - 20	88	0.060	1.8	-	-	-	-	-	-
	16-5	20 - 25	117	0.120	2.9	1.5	0.4	0	Tr	0.03	0.08
	16-6	25 - 30	153	0.200	3.7	2.0	0.5	0	Tr	0.04	0.11
	16-7	30 - 35	101	0.160	4.3	2.2	0.5	0	Tr	Tr	0.15
	16-8	35 - 40	163	0.090	1.5	0.9	0.1	0	Tr	0.02	0.06
	16-9	40 - 42½	85	0.070	3.4	1.7	0.3	0	Tr	0.04	0.14
Totals	9	42.5	838	0.798	21.9	10.0	2.3	0	Tr	.16	0.66
	Arithmetic averages				2.4	1.1	0.3	Tr	Tr	0.02	0.07
	M-17-K-1	0 - 5	33	0.010	0.8	Sample too small to estimate			-	-	-
	17-2	5 - 10	53	0.050	2.5	" " " " "			-	-	-
	17-3	10 - 15	75	0.150	5.4	2.0	0.9	0	Tr	0.05	0.23
	17-4	15 - 20	53	0.160	8.2	2.6	0.8	0	0.1	Tr	0.16
	17-5	20 - 25	92	0.220	6.5	3.3	0.8	0	0.1	0.07	0.14
	17-6	25 - 30	105	0.080	2.1	1.1	0.1	Tr	Tr	Tr	0.07
	17-7	30 - 35	136	0.090	1.8	0.9	0.2	0	Tr	0.02	0.07
	17-8	35 - 40	215	0.380	4.8	1.9	0.7	0	0.1	Tr	0.07
	17-9	40 - 45	177	0.430	6.6	2.3	1.5	0	0.1	0.07	0.17
Totals	9	45 ft.	939	1.570	38.7	14.1	5.0	Tr	0.4	0.21	0.91
	Arithmetic averages				4.3	1.5	0.5	Tr	Tr	0.02	0.10

CHURN DRILL HOLE SAMPLE DATA

	Drill hole sample numbers	Depth of sample in ft.	Sample weight lbs.	Weight R.S. conc.	Black sand lbs./cu. yd.	Estimate of mineral content in pounds per cu. yd.					
						Garnetite	Ilmenite	Garnet	Zircon	Monazite	Monazite Equivalent
	M-19-K-1	0 - 5	37	0.030	2.2	Sample too small to estimate			-	-	-
	19-2	5 - 10	70	0.060	2.3	-	-	-	-	-	-
	19-3	10 - 15	53	0.030	1.5	-	-	-	-	-	-
	19-4	15 - 20	94	0.110	3.2	1.5	0.5	0	Tr	0.03	0.09
	19-5	20 - 25	104	0.090	2.3	1.2	0.2	0	Tr	Tr	0.05
	19-6	25 - 30	108	0.090	2.3	1.2	0.2	Tr	Tr	0.02	0.07
	19-7	30 - 35	123	0.070	1.5	0.8	0.1	Tr	Tr	Tr	0.04
	19-8	35 - 40	132	0.060	1.2	-	-	-	-	-	-
	19-9	40 - 45	125	0.070	1.5	0.8	0.1	0	Tr	0.02	0.05
Totals	9	45 ft.	846	0.510	18.0	5.5	1.1	Tr	Tr	0.07	0.30
	Arithmetic averages				2.0	0.6	0.1	Tr	Tr	0.01	0.03
	M-20-K-1	0 - 5	62	0.050	2.2	Sample too small to estimate			-	-	-
	20-2	5 - 10	58	0.030	1.4	" " " " "			-	-	-
	20-3	10 - 15	59	0.090	4.3	2.1	0.4	0	0.1	0.4	0.10
	20-4	15 - 20	60	0.090	4.1	2.1	0.3	0	0.1	0.04	0.12
	20-5	20 - 25	93	0.260	7.5	4.7	0.7	Tr	Tr	0.08	0.17
	20-6	25 - 30	98	0.200	5.3	3.3	0.6	Tr	0.1	0.06	0.16
	20-7	30 - 35	122	0.100	2.2	1.1	0.1	0	Tr	0.02	0.07
	20-8	35 - 40	58	0.090	4.2	1.7	0.3	0	0.1	0.02	0.10
	20-9	40 - 45	69	0.070	2.7	1.1	0.3	0	Tr	0.03	0.07
	20-10	45 - 50	108	0.080	2.0	1.0	0.1	0	Tr	Tr	0.04
	20-11	50 - 55	175	0.090	1.4	0.6	0.1	0	Tr	Tr	0.03
	20-12	55 - 60	129	0.090	1.9	0.8	0.1	0	Tr	Tr	0.04
	20-13	60 - 65	141	0.080	1.5	0.6	0.2	0	Tr	Tr	0.04
	20-14	65 - 70	127	0.070	1.5	0.6	0.1	0	Tr	0.02	0.04
	20-15	70 - 75	143	0.150	2.8	1.3	0.3	0	Tr	Tr	0.06
	20-16	75 - 80	126	0.150	3.2	1.2	0.3	0	Tr	Tr	0.06
	20-17	80 - 85	179	0.180	2.7	1.0	0.5	0	Tr	Tr	0.05
Totals	17	85 ft.	1807	1.370	51.1	23.2	4.4	Tr	0.4	0.31	1.15
	Arithmetic averages				3.0	1.4	0.3	Tr	Tr	0.02	0.07

Docket No. DMEA-4280
Contract No. Idm-E1C12

Table 2

Alfred G. Hoyl and Associates

THE MEADOWS PLACER AREA, CUSTER COUNTY, IDAHO

SUMMARY - COMPOSITE OF CHURN DRILL HOLE SAMPLE DATA

Drill hole number	Depth in ft.	Sample weight lbs.	Weight black sand conc. in lbs.	Black sand lbs./cu.yd.	Estimate of mineral content in lbs. per cu. yd. of gravel						
					Monazite	Tot. Eq.*	Ilmenite	Magnetite	Garnet	Zircon	Other
M-1	27.5	320	1.340	12.8	0.11	0.42	2.2	4.0	0.1	0.1	4.29
M-2	82.5	1535	19.010	34.6	0.31	0.80	1.5	21.3	Tr	0.1	11.29
M-3	50.0	598	0.791	3.5	Tr	0.06	0.3	1.7	Tr	Tr	1.50
M-4	52.5	674	1.110	5.8	Tr	0.10	0.9	1.4	Tr	Tr	3.60
M-5	45.0	658	3.190	17.8	0.09	0.29	0.8	12.0	Tr	0.1	4.81
M-6	52.5	680	6.560	21.6	0.28	0.83	1.6	16.1	Tr	Tr	3.62
M-7	45.0	538	1.510	7.8	0.08	0.21	0.3	2.2	Tr	0.1	5.12
M-8	54.0	642	1.340	5.6	0.06	0.14	0.1	2.0	Tr	0.1	3.35
M-9	35.0	414	0.840	5.3	0.05	0.13	0.1	2.2	Tr	0.1	2.85
M-10	45.0	557	0.720	3.4	0.02	0.07	0.1	1.0	Tr	Tr	2.28
M-11	54.0	688	1.076	3.7	0.03	0.07	0.1	0.9	Tr	Tr	2.67
M-12	52.5	684	1.603	6.1	0.01	0.09	0.2	2.5	Tr	Tr	3.29
M-13	55.0	689	1.598	6.1	0.07	0.26	0.2	2.6	Tr	Tr	3.21
M-14	55.0	715	2.511	15.9	0.14	0.30	1.8	3.1	Tr	Tr	10.86
M-15	55.0	1193	2.227	5.0	0.04	0.12	0.5	1.8	Tr	Tr	2.66
M-16	42.5	838	0.798	2.4	0.02	0.07	0.3	1.1	Tr	Tr	0.98
M-17	45.0	939	1.570	4.3	0.02	0.10	0.5	1.5	Tr	Tr	2.28
M-19	45.0	846	0.610	2.0	0.01	0.03	0.1	0.6	Tr	Tr	1.29
M-20	85.0	1807	1.870	3.0	0.02	0.07	0.3	1.4	Tr	Tr	1.28
TOTAL	978 ft.	15,015 lbs.	50.364 lbs.	166.7	1.37	4.15	12.0	81.5	0.1	0.6	71.13
Arithmetic average				8.77	0.07	0.22	0.63	4.29	Tr	0.03	3.74

*Monazite equivalent is a measure of the total radioactivity of a sample expressed as monazite. It is determined by comparing the radioactivity of an unknown sample with that of a monazite standard containing 4.2 percent ThO_2 and 0.13 percent U_3O_8 as determined chemically.

Table 3

Docket No. DMEA-4,280
Contract No. 1dm-E1012

Alfred G. Hoyl and Associates

THE MEADOWS PLACER AREA, CUSTER COUNTY, IDAHO

SUMMARY - COMPOSITE OF ANALYSIS AND RARE MINERAL CONTENT PER CUBIC YARD

Drill hole number	Chemical Assay %					Pounds of mineral per cu. yd. of 2700 pounds Calculations based on analyses by Rare Metals Corporation				
	U_3O_8	ThO_2	Cb_2O_5	Ta_2O_5	R.E. Oxides	U_3O_8	ThO_2	Cb_2O_5	Ta_2O_5	R.E. Oxides
M-1	0.005	0.046	0.02	<0.01	0.22	0.0006	0.0059	0.0026	<0.0013	0.028
M-2	0.017	0.038	0.02	<0.01	0.14	0.0060	0.0132	0.0069	<0.0035	0.048
M-3	0.006	0.036	0.05	<0.01	0.16	0.0002	0.0013	0.0018	<0.0004	0.006
M-4	0.006	0.026	<0.01	<0.01	0.12	0.0004	0.0015	<0.0006	<0.0006	0.007
M-5	0.004	0.049	0.01	<0.01	0.09	0.0007	0.0087	0.0018	<0.0018	0.016
M-6	0.012	0.100	0.03	<0.01	0.47	0.0026	0.0216	0.0065	<0.0022	0.102
M-7	0.005	0.075	0.05	0.01	0.38	0.0004	0.0059	0.0039	0.0008	0.030
M-8	0.009	0.065	0.04	0.01	0.30	0.0005	0.0036	0.0022	0.0006	0.017
M-9	0.008	0.070	0.04	<0.01	0.40	0.0004	0.0037	0.0021	<0.0005	0.021
M-10	0.004	0.044	0.04	<0.01	0.23	0.0001	0.0015	0.0014	<0.0003	0.008
M-11	0.007	0.076	0.05	<0.01	0.32	0.0003	0.0028	0.0019	<0.0004	0.012
M-12	0.010	0.039	0.04	<0.01	0.22	0.0006	0.0024	0.0024	<0.0006	0.013
M-13	0.007	0.074	0.04	<0.01	0.28	0.0004	0.0045	0.0024	<0.0006	0.017
M-14	0.007	0.026	0.04	<0.01	0.31	0.0011	0.0041	0.0064	<0.0015	0.049
M-15	0.007	0.010	0.04	<0.01	0.20	0.0004	0.0005	0.0020	<0.0005	0.010
M-16	0.006	0.015	0.04	<0.01	0.16	0.0001	0.0004	0.0010	<0.0002	0.004
M-17	0.006	0.017	0.04	<0.01	0.24	0.0003	0.0007	0.0017	<0.0004	0.010
M-19	0.011	0.005	0.04	<0.01	0.15	0.0002	0.0001	0.0008	<0.0002	0.003
M-20	0.010	0.004	0.04	<0.01	0.18	0.0003	0.0001	0.0012	<0.0003	0.005
						0.0156	0.0825	0.0496	<0.0168	0.406
Arithmetic average						0.001	0.004	0.003	<0.001	0.021

Standard Form No. 1034—Revised
Form prescribed by
Comptroller General, U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

D. O. Vou. No. _____

Bu. Vou. No. 2263

U. S. _____
(Department, bureau, or establishment)

Voucher prepared at Spokane, Washington 12/17/58
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idm-51012

To Alfred G. Hoyl and Associates
(Payee)

1727 Boulder St. Denver 11, Colorado
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	June, July & August 1957	Funds withheld under Voucher No. 2043, dated September 13, 1957, adjusted to final audit.				1,137	41
PAYMENT: Complete ☐ Partial ☐ Final ☐		FINAL PAYMENT					
		Use continuation sheet(s) if necessary					
Shipped from	to	Weight	Government B/L No.		Total	1,137	41

I certify that the above bill is correct and just and that payment therefor has not been received.

(Sign original only)

Date _____ *Payee _____
(This certificate not required when a like certificate is made by payee on attached bill or bills)

Per _____ Title _____

(Payee must NOT use this space)

Differences _____

Account verified; correct for 1,137 41

(Signature or initials) A.L.

Contract No. Date Req. No. Date Invoice Rec'd.

Pursuant to authority vested in me, I certify that this account is correct and proper for payment.

† Approved for $ _____

By _____

Title _____

SIGN ORIGINAL ONLY

† _____
(Authorized Certifying Officer)

Title _____

Date _____

THE REVERSE OF THIS FORM MUST BE EXECUTED WHEN PURCHASES ARE MADE OR SERVICES SECURED WITHOUT WRITTEN AGREEMENT IN ANY FORM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. _____ dated _____, 19____, for $_____ } on Treasurer of the United States in favor of payee named above.
{ Cash, $_____, on _____, 19____. Payee _____ (Sign original only)

* When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary", or "Treasurer", as the case may be.
† If the ability to certify and authority to approve are combined in one person, one signature only is necessary; otherwise the approving officer will sign on the line below "Approved for $_____", and over his official title.

Per _____

Title _____

16—22900-3

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. Advertising in newspapers Yes ☐ No ☐
2. (*a*) Advertising by circular letters sent to ..... dealers.
   (*b*) And by notices posted in public places Yes ☐ No ☐.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.
4. Without advertising in accordance with .....
5. Without advertising, it being impracticable to secure competition because of .....

.....

.....

.....

.....

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, as amended.)

16—22900-2 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950—O-75806

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 22 1958

DATE	INITIALS	CODE
12/22	C	220
	~~[illegible]~~	

So. 157 Howard Street
Spokane 4, Washington

December 17, 1958

Alfred G. Hagl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. [illegible] (Thorium-Euxenite-
Columbium-Tantalum
Big Meadows Placer
Custer County, Idaho
Contract No. Idm-21012

Gentlemen:

Enclosed for your information and files is a copy of an Audit Certificate and an Audit Report dated November 12, 1958, for the period September 30, 1956 through September 30, 1957, covering a project of exploration at the above-cited property.

The audit discloses that there is a balance of $1,137.41 due you. This has been scheduled for payment and you should be receiving a check in a few days.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer
OME Field Team Region I

cc: OME (3)✓
USEM (2)
USEM(AD)
Sample

EXTRA COPY O. M. E. RECEIVED DEC 22 1958		
DATE	INITIALS	CODE

1201 N. Division St.
Spokane 2, Washington

December 10, 1958

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. [illegible] (monazite-thorium)
Alfred G. Hoyl & Associates
Contract No. [illegible]

Dear Mrs. Long:

The work completed under the contract was done to the satisfaction of the Government. The field work under Stage I of the contract was completed by August 31, 1957, and office work by September 30, 1957. Additional work was not warranted and Stage II was not authorized. A final report evaluating the results of the exploration program has been presented by the Operator and accepted by the Executive Officer.

The Government waived its interest in supplies purchased for use on the project.

Certification of Discovery or Development will not be recommended by the Field Team.

A final Audit Report dated November 18, 1958 by OME Auditor Donald T. Finch has been received.

As all contract requirements have been met, it is requested that final settlement of our account with the Operator be made.

Sincerely yours,

A. E. Weissenborn, Exec. Officer
OME Field Team, Region I

cc: OME (2)
USGS (2)
Contract Admin. & Audit Div. (2)
Docket

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 16 1958
DATE | INITIALS | CODE
12/16 | C | 220
12/16 | | 800
| | 700

1201 N. Division St.
Spokane 2, Washington

December 10, 1958

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-4280(monazite-thorium)
Alfred G. Hoyl & Associates
Contract No. Idm-X1012

Dear Mrs. Long:

The work completed under the contract was done to the satisfaction of the Government. The field work under Stage I of the contract was completed by August 31, 1957, and office work by September 30, 1957. Additional work was not warranted and Stage II was not authorized. A final report evaluating the results of the exploration program has been presented by the Operator and accepted by the Executive Officer.

The Government waived its interest in supplies purchased for use on the project.

Certification of Discovery or Development will not be recommended by the Field Team.

A final Audit Report dated November 12, 1958 by OME Auditor Donald T. Finch has been received.

As all contract requirements have been met, it is requested that final settlement of our account with the Operator be made.

Sincerely yours,

A. E. Weissenborn, Exec. Officer
OME Field Team, Region I

cc: OME (2)
USGS (2)
Contract Admin. & Audit Div. (2)
Docket

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/2	G McCarthy	800
12/2	Tarbert	800
12/3	C	220
	Corr.	700

DEC 2 1958

Mr. Donald T. Finch
OME Auditor
224 New Customhouse
Denver 2, Colorado

Re: Docket No. DMEA-4280
(Thorium, Monazite, Columbium & Tantalum)
Alfred G. Hoyl and Associates
Contract No. Idm-E1012

Dear Mr. Finch:

Your Audit Certificate and Report covering the referenced project are acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers
Contract Administration
and Audit Division

GMcCarthy/GMcC
December 2, 1958

cc: Docket
Director's Reading File
Mr. Chambers
Mr. George Mavor

8623

Cy sent to EOU

OFFICIAL FILE COPY
O. [illegible]
RECEIVED [illegible] 1958

10/27 C 220
~~Murphy 442~~

1201 N. Division St.
Spokane 2, Washington

October 22, 1958

CERTIFIED MAIL

OME

Mr. Donald T. Finch
OME Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Associates
Contract No. Idm-E1012

Dear Mr. Finch:

Pursuant to instructions in Mr. Chambers' letter to you of November 8, 1957, concerning an audit of the referenced contract, we are transmitting the following material which you will need for the audit work:

1. Memorandum from Field Team, Region I, requesting final audit of the account.

2. Contract and Correspondence File (Includes Annex I, Exhibit "A", and Amendments Nos. 1 through 4)

3. Voucher File (MF-104's and 104A's, with attachments)

In addition to certain disallowances, we are withholding the sum of $500.00. This amount was withheld pending the resumption of work under Stage II. Stage II was not authorized.

Sincerely yours,

Dorothy F. Long
Authorized Certifying Officer

cc: OME (3)
USGS (2)
USBM (AD)

Cy sent to 800

OFFICIAL FILE COPY
O. T. E.
RECEIVED OCT 27 1958
10/27 C 220

1201 N. Division Street
Spokane 2, Washington

October 22, 1958

Mr. Donald T. Finch
OME Auditor
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Project No. [illegible] (monazite-thorium)
Alfred G. Boyl & Associates
Custer County, Idaho
Contract No. Ida-[illegible]

Dear Mr. Finch:

The field work under Stage I of the referenced contract was completed by August 31, 1957 and office work by September 30, 1957.

Amendment No. 2 provided for a recess of project work beginning September 1, 1957 and ending July 1, 1958. The purpose of the recess was to allow the Bureau of Mines time to test the samples taken during Stage I work in order to determine if Stage II work was warranted. Additional work was not warranted and Stage II was not authorized; consequently, all contract work is considered as having been completed by September 30, 1957. All the work performed was done to the satisfaction of the Government.

The interim inspection report of William M. Bomisher, dated September 24, 1957, serves as the final inspection report on this project. This report verifies the existence of 19 drill hole locations.

The Operator's final engineering and geological report was received on August 15, 1958. This report meets the requirements of Article 7(c) of the contract.

The project was unsuccessful in discovering significant amounts of thorium-monazite-columbium or tantalum. The Field Team final report will not recommend a Certification of Discovery or Development.

There have been some problems which have arisen in connection with the vouchers and with the disposal of some operating materials and supplies. These are as follows:

(1) Western Steel Manufacturing Co., Invoice No. 4227L. The Government waives its equity in 6 steel boxes costing $153.30. These are specialty items used in drying placer samples and have no salvage value.

(2) Colorado Tent & Awning Co., 4 invoices. The No. 660 air mattresses, HY-546 air pumps and Highlander sleeping bags should be disallowed. On such jobs as this employees usually are expected to supply their own bedding and evidently most of them did on this one. There was no provision for these items in the contract nor even any mention in the application that they would be required; we do not believe they can be justified.

(3) The umbrella tents are specifically provided for in the contract and are properly chargeable. The Operator has charged the project at only 50 percent of the value of the tents; this, in effect, is the same as offering the Government 50 percent for its equity in the remaining value of this item. Therefore, the Government waives its equity in the remaining value of the tents.

(4) The Operator charged for 200 sample sacks at 50 percent of cost. The sacks are properly chargeable at 100 percent of cost and are not salvageable.

Work units completed under the terms of the contract are as follows:

Item		Authorized	Completed
Stage I			
Churn Drilling		1,000 feet	978 feet 1/
Bulldozing	(Amendment No. 3)	51 hours	51 hrs.

1/ Hole 1 - 27.5'
2 - 82.5'
3 - 50.0'
4 - 32.5'
5 - 45.0'
6 - 32.5'
7 - 45.0'
Hole 8 - 54.0'
9 - 35.0'
10 - 45.0'
11 - 54.0'
12 - 52.5'
13 - 55.0'
14 - 55.0'
Hole 15 - 55.0'
16 - 42.5'
17 - 45.0'
18 - none
19 - 45.0'
20 - 85.0'

The total amount paid the Operator is $7,653.43.

It is now in order for you to make a final audit of this account.

By Field Team, Region I

cc: Mr. Chambers
CMK (2)
USGS (2)
AD

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Rowe, Director
U. S. Bureau of Mines

MEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/22/58	Murphy	700
9/22	Woodard	700
	Rutin	140
	Dinger	140
9/24	Tuckwood	800
9/26	Martin	130
"	Jones	110
"	Henderson	100
9/26	C	220
		700

SEP 26 1958

Mr. A. E. Weissenborn
Executive Officer
OME Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

INTERIOR DEPT.
SEP 23 1958
SOLICITOR

drop of in Oct 10-29-58

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

This is with reference to your letter of September 5, in reply to our teletype of September 4, 1958.

In view of the reasons given for the spacing of the holes in question, we agree that all 19 holes should be approved and the costs of drilling should be participated in by the Government.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (HB)

APPROVED:

Frank J. Cservenyak (HB)
Member, Bureau of Mines

N. E. Nelson (HB)
Member, Geological Survey

FMMurphy (9-12-58) 9-22-58
cc to: Director's Reading File
Operating Committee
THKiilsgaard, 5224
FMMurphy

RECEIVED
SEP 23 1958
ASSOC. SOLICITOR
MINERAL RESOURCES

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/12/58	Knowlsu	700
		225

September 12, 1958

Memorandum

To: The File

From: Michael Ching and F. M. Murphy,
Mining Engineers,
Division of Rare and Miscellaneous Metals

Subject: Payment For Poorly-Spaced Holes
Docket No. DMEA-4280 (Monazite-Thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

The Operator has completed 19 of 20 holes authorized in Stage I of the contract. Distance between holes shown on a map attached to the Operator's final report shows one spacing of 500 feet, one of 600 feet, three of approximately 725 feet, and all others amounting to 800 to 1,000 feet or more. Two holes were drilled closer than 200 feet to the outer boundary of the property.

The contract specifies that the holes shall be spaced on approximately 1,000-foot centers, not closer than 200 feet to any area not owned by the Operator, and drilled at the approximate locations shown on the map attached to the contract. However, two holes at coordinates 7N, 0.5E and 7N, 1.5 E are shown on the contract map as completely off the subordinated property.

Amendment No. 1 permits holes shown at coordinates 8N, 0.5E and 3N, 3.5E, upon written approval by the Government, to be changed to any other locations which are not closer than 500 feet to any other hole drilled under the contract. In a letter, dated July 26, 1957, the Field Team approved the moving of one hole from coordinate 3N, 3.5E to 7N, 0.5W.

In an interim inspection report, dated July 23, 1957, Dean C. Holt, USBM, reported that the proposed churn drill hole locations for the first stage of the contract were visited with W. M. Romischer, USBM, and Frank R. Komatz, Operator's supervisor. Mr. Holt made the following statement: "The marshy nature of some of the terrain

in the Meadows area makes it necessary to give the Operator some leeway in laying out the proposed churn drill holes. All drill hole locations visited met the approval of the examiners."

In a letter, dated September 5, 1958, to Mr. Selfridge, the Field Team notes that without an accurate map there was no way of knowing whether the spacing of the holes was strictly in accordance with the contract provisions; also, that although the contract map shows three holes outside the claim area, all holes were drilled within the claim boundaries, since the claims do not lie N-S as shown, but lie about N. 12° W. The Field Team will submit the corrected map.

In view of the examiners' approval of all the drill hole locations prior to drilling, the Government would find it difficult to justify a refusal to pay for this work. Furthermore, the results of the drilling indicate that the potential of the property has been adequately tested. The Field Team has recommended that the contract be terminated as no ore-grade material was penetrated by any of the holes.

Therefore, under the circumstances, it is recommended that no disallowance be made because of faulty location of the holes and the Operator be paid for the 19 holes drilled.

Michael Ching
Michael Ching

F M Murphy
F. M. Murphy

MChing/FMMurphy/gla
cc to: Mr. Ching
Mr. Murphy

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 11 1958
DATE | INITIALS | CODE
9/11 C 820
9/11 EO 820
Murphy 700

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Sq. 157 Howard Street
Spokane 4, Washington

September 5, 1958

SEP 9 1958
mailed

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

This is in reply to your teletype of September 4, concerning faulty spacing of holes under the cited docket.

Although the tentative hole locations were visited and approved by the field examiners without an accurate map of the area, there was no way of knowing whether the spacing was strictly in accordance with contract provisions. Since the intent was to adequately explore the placer area, which was done, we recommend that all 19 holes be approved for reimbursement.

Even though the contract map shows three proposed holes outside the claim area, all holes were drilled well within the claim boundaries. The claims do not lie N-S as shown on the contract map but lie about N. 12° W. We are preparing a map showing the hole locations with respect to the claim boundaries as surveyed by our field men and will send you copies as soon as they are completed.

If you concur in our recommendations, will you please inform us as soon as possible so that this contract can be audited.

By Field Team, Region I

A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Stephen W. Zolcak
for Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USBM (2)
AD
Turner

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/3/58	Ching	700
9/3	Kuonen	700
9-3	Chambers	800
9/3	GCS	130
"	Johnson	110
"	Cuttendge	100
9/4	C	220
		700

SEP 4 1958

Department of the Interior

DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior, (Transfer to Office of Secretary)

T E L E T Y P E

A. E. WEISSENBORN, EXECUTIVE OFFICER
DMEA FIELD TEAM, REGION I
SOUTH 157 HOWARD STREET
SPOKANE, WASHINGTON

RE AUGUST 21 TELEPHONE CONVERSATION BETWEEN ZOLDOK AND SELFRIDGE ON FAULTY SPACING OF HOLES DOCKET 4280, ALFRED G. HOYL AND ASSOCIATES. INTERIM REPORT BY DEAN C. HOLT, DATED JULY 23, 1957, INDICATES THAT PROPOSED HOLE LOCATIONS FOR FIRST STAGE WERE VISITED AND APPROVED BY THE EXAMINERS. IF HOLES DRILLED ON APPROVED SITES, WE SHOULD PAY FOR ALL HOLES DESPITE FAULTY SPACING. ALSO, CONTRACT MAP AMBIGUOUS, SHOWING TWO STAGE I HOLES TO BE DRILLED OFF PROPERTY. PLEASE REVIEW AND ADVISE ACTION RECOMMENDED.

MChing/gla 9-3-58
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Mr. Ching
Confirmation to Region I

George C. Selfridge

CHAIRMAN, OPERATING COMMITTEE

8623

Form 7
(-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/29/58	Ching	700
8/29	Knowlt	700
8/29	GLS	130
8/29	Johnson	110
"	Rutherford	100
9/2	C	220
		700

AUG 29 1958

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Regarding the last paragraph of the Field Team's letter of August 20, 1958, it will not be necessary to terminate by mutual agreement since the Government and the Operator are agreed that Stage I has been completed, and the Field Team's letter of June 5, 1958, notified the Operator that Stage II work would not be authorized. The Operator has responded by submitting its final report which was received by you on August 15, 1958.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

P. F. Yopes (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

MChing/gla
8/29/58

cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224
Mr. Ching

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/21	Selfridge	120
"	Johnson	110
"	Chittenden	100
		700

August 21, 1958

Memorandum

To: Administrator

From: George C. Selfridge, Special Assistant

Subject: Docket No. DMEA-4280 (Monazite-Thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Mr. Zoldok of Region I telephoned today to get our thoughts about paying for holes drilled on centers closer than stipulated by the subject contract. He mentioned that there were two holes drilled on 500-foot centers, two holes drilled on 600-foot centers, some drilled on 750-foot centers, the bulk drilled on 850-foot centers, and a few on 900-1000-1100 foot centers.

The writer asked him if the contract specifically called for centers not less than 1000 feet apart, and he stated the contract said approximately. The writer told him that the holes on 500-foot and 600-foot centers, numbers 8, 9, 10, and 11, were definitely too close and that at least two of them could not be paid for. Mr. Zoldok mentioned that the maps did not check and apparently the operator did not know how to survey. As the information was mailed to us a couple of days ago, the writer told Mr. Zoldok that as soon as we had received and studied it, we would wire our interpretation of "approximately." If one were to hew to the line of 1000-foot centers, seemingly most of the holes could not be paid for.

George C. Selfridge

GCSelfridge/hb (8/21/58)
Copy to: Docket
Admr.'s R. File
Mr. Murphy
G. C. Selfridge

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

So. 157 Howard Street
Spokane 4, Washington

August 20, 1958

ORIGINAL FILE COPY
DMEA
RECEIVED AUG 25 1958

DATE	INITIALS	CODE
8/25	C	220
8/26	EEF	800
(Murphy) "	Chiang	700

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

We are enclosing two copies of the Operator's final report on this project. This report is acceptable to the Field Team.

Stage I was completed except for one hole, No. 18, which was not drilled. Because of the low grade of the placer ground, indicated in the 19 completed holes, there was no reason to insist that hole No. 18 be drilled, and no justification for proceeding with Stage II work. The Operator was so advised by our letter of June 5, 1958.

We recommend that no Certification of Discovery or Development be issued and that a mutual Termination Agreement be prepared if one is necessary.

By Field Team, Region I

D R MacLaren

D. R. MacLaren, Alternate
Acting Executive Officer
U. S. Geological Survey

T E Howard

T. E. Howard, Acting Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)

OPR'S FINAL REPORT

GEOLOGICAL SURVEY
DENVER
RECEIVED AUG 25 1958
DATE | INITIALS | CODE

FINAL REPORT

DOCKET NO. D.M.E.A.-4280 (monazite-thorium)

ALFRED G. HOYL & ASSOCIATES

THE MEADOWS, CUSTER COUNTY, IDAHO

CONTRACT NO. Idm - E-1012

RECEIVED
AUG 15 1958
U. S. G. S.
SPOKANE, WASH.

THE MEADOWS MONAZITE, THORIUM PLACER PROPERTIES

INTRODUCTION:

The Meadows placer was prospected during the summer of 1954 by members of a group of mine mineral engineers; Alfred G. Heyl & associates. Subsequently the area was located, and recorded in accordance with the Laws of the United States and the State of Idaho. In 1956 conflicts arose through various parties over staking the same area. These conflicts were resolved by a quiet title suit and title has been quieted in Alfred G. Heyl & Associates. Assessment work has been duly accomplished and proofs filed.

In September of 1956 an Exploration Project Contract was signed between Alfred G. Heyl & Associates and the Defense Minerals Exploration Administration to explore the placer. The following summer Stage I of the Project was initiated. Field work was started June 28, 1957 and completed September 1, 1957. Details of procedure are covered in Exhibit "A" of the contract and narrative reports dated August 31, 1957 and November 10, 1957 already submitted to D.M.E.A.

CONCLUSIONS:

(1) The gravels and sands of the Meadows placer are deep and loosely consolidated. Bed rock was reached in only one of the 20 test holes drilled. The depth of bed rock could be expected to exceed 100 feet over most of the placer.

(2) Due to the loosely consolidated material and a water table almost to the surface, much of the heavy mineral content of the placer was not obtained by the test drilling. The heavy minerals were

forced down and to the side as the drill pipe was driven into the formation. The theoretical weight of sample per foot of drive was seldom obtained. Shafts and back-hoe pits should be sunk to correctly evaluate the placer and assist in analysis of the drill hole results.

(3) The preliminary test work was primarily to check the content of Thorium, Uranium, Columbium, Tantalum and Rare Earth Oxides in the placer. Magnetite, Ilmenite and Zircon were also checked. All of these minerals in significant amounts were present in the placer.

(4) The distribution and content of the heavy mineral portion of the placer is such that mining, processing and marketing should be directed toward recovering and utilizing the whole of the mineral content.

(5) The size of the gravel and sand and the water table of the placer are ideal for dredging purposes.

(6) Since only Stage I of the D.M.E.A. Contract was completed, no tonnages or reserves have been determined, however, due to the depth of the deposit the yardage may well be in excess of 80,000,000 cubic yards of alluvial material.

GEOLOGY:

The Meadows placer is a large alluvial deposit at the head waters of Warm Springs Creek. It represents an old lake bed which has been drained by erosion of the outlet. The gravels have been deposited by glacial, lake, and stream action in their present position and have been largely derived from the quartz monzonites of the Boulder Bathelith. The heavy mineral or black sand content which represents the present

mineral value of the placer is a result of the placer concentration of these minerals from the eroded quartz monzonite rocks.

EXPLORATION:

A map of the placer was drawn from aerial photographs, U.S.G.S. Custer quadrangle topographic map, and field reconnaissance. A grid of 20 holes was laid out on 1000 feet centers. The road and trail into the placer was improved by dozer. A contract was awarded to Russell Cowe of Boise, Idaho for the drilling. A Bucyrus Erie 22L churn drill was supplied. The drill was equipped with 6" drive pipe, 7½" O.D. drive shoe, and suction bailer. A driller and helper operated the drill. Three additional men handled the sampling. A surveyor laid out the drill sites in the field. Mr. Frank Komats supervised all of the work.

After each 2½ feet of drive the material penetrated was removed, taking care to keep enough material above the drive shoe to reduce run-in from the sides of the hole to a minimum. The material from (2) drives each 2½ feet in depth was combined to form one sample. The samples were dried, screened through a 1/8" mesh opening and weighed. After weighing, the plus 1/8" material was discarded and the minus 1/8" material sacked and labeled. The samples were trucked to Baumhoff-Marshall at Boise, Idaho. They were then tabled and the concentrate dried and weighed. One-half of each sample of concentrate was sent to the D.M.E.A. office at Spokane, Washington. The other half was sent to Rare Metals Corporation of America at Murray, Utah. The latter portion was combined into one sample per drill hole and assayed by

THE MEADOWS MONAZITE, THORIUM PLACER PROPERTIES

Rare Metals Corporation for U_3O_8, ThO_2, Cb_2O_5, Ta_2O_5, and Rare Earth Oxides. Copies of the assay results were furnished the D.M.E.A. Spokane office. No results from the sample portion furnished D.M.E.A. in Spokane have been made available to the owners. Check assays have not been made since it was assumed D.M.E.A. information would be made available.

EVALUATION:

Significant values of U_3O_8, ThO_2, Cb_2O_5, Ta_2O_5, Rare Earth Oxides, Ilmenite, Zircon and Magnetite were found in all drill holes. Heavy mineral concentrates ranged from 3#/yd. to 90#/yd. Higher values could be expected in actual dredging, as the poor sample recovery would indicate loss of sample. Most of this loss would be the high gravity portion.

The monazite, thorium portion, uranium, thorium, columbium, tantalum and Rare Earth Oxides are low in values and would be considered as by-products of the greater heavy mineral content. The placer has its chief value in its industrial mineral content.

The depth, sizing of particles and water table of the deposit are excellent for dredging.

CALCULATIONS:

Calculations on heavy mineral content per cubic yard of placer material have been made on portions of each drill hole and for each drill hole over-all. Sample data, assay data, map and calculation sheets are attached.

THE MEADOWS MONAZITE, THORIUM PLACER PROPERTIES

OWNERSHIP:

The list of associates owning the Meadows placer property is as follows:

Alfred G. Hoyl, Mining Engineer and Geologist
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Richard D. Moody, Mining Engineer
c/o Allis-Chalmers Mfg. Co.
655 Broadway
Denver, Colorado

T. F. Adams, Mining Engineer and Geologist
672 South Monroe Way
Denver, Colorado

A. B. Manning, Geologist and Geophysicist
337 Ash Street
Denver 20, Colorado

Douglas V. Watrous, Mining Engineer
Idaho Springs, Colorado

Frank R. Komatz, Oil Operator
752 Elizabeth Street
Denver 6, Colorado

Stanfurd L. Jackson, Metallurgical Engineer
1043 Beverly Avenue
Bethlehem, Pennsylvania

Charles J. Cerf, Petroleum Engineer
1409 Bedford Drive
Midland, Texas

Arthur G. Wood, Mining Engineer
11755 West 20th Avenue
Lakewood, Colorado

CLAIMS:

The claims, with the exception of one, were located in August of 1954. They are recorded in the following placer books and on the

THE MEADOWS MONAZITE, THORIUM PLACER PROPERTIES

pages in the Custer County courthouse in Challis, Idaho.

following work is up to date:

Alvarado Group, Book 5, Pages 621 and 640	160 Acres
Esperdo Group, Book 5, Pages 622 and 641	160 Acres
Verde Group, Book 5, Pages 623 and 642	160 Acres
Azul Group, Book 5, Pages 624 and 643	160 Acres
Lux Group, Book 5, Page 625, and Book 6, Page 1	40 Acres
Cortez Group, Book 5, Page 626, and Book 6, Page 2	160 Acres
La Veta Group, Book 5, Page 627, and Book 6, Page 3	160 Acres
Cerenado Group, Book 5, Page 628, and Book 6, Page 4	160 Acres
Rojo Group, Book 5, Page 629, and Book 6, Page 5	160 Acres
Pinto Group, Book 5, Page 630, and Book 6, Page 6	160 Acres
? Dee-One Group, Book 6, Page 121 (Located August, '56)	160 Acres
TOTAL ACREAGE	1,640 Acres

ALFRED G. HOYL & ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

Frank R. Kornatz

THE MEADOWS PLACER
CUSTER COUNTY, IDAHO
Table Concentrates

SAMPLE NUMBER	WEIGHT IN LBS.	
M-1-1-K	0.27	
2-K	0.36	
3-K	0.20	
4-K	0.31	
5-K	0.09	
6-K	0.11	1.34
M-2-1-K	0.36	
2-K	0.65	
3-K	0.32	
4-K	0.23	
5-K	2.47	
6-K	2.45	
7-K	1.74	
8-1-K #1	2.89	
8-1-K #2	2.89	
9-K	2.29	
10-K	0.33	
11-K	0.42	
12-K	0.87	
13-K	1.21	
14-K	1.33	
15-1-K	0.83	
16-1-K	0.32	
17-K	0.25	21.85
M-3-1-2-K	0.03	
3-2-2-K	0.05	
3-1-K	0.07	
4-2-K	0.22	
5-2-K	0.19	
6-1-K	0.02	
7-2-K	0.05	
8-1-K	0.03	
9-1-K	0.03	
10-1-K	0.10	.79
M-4-1-K	0.07	
2-K	0.02	
3-K	0.09	
4-K	0.03	
5-K	0.02	
6-K	0.31	
7-K	0.08	
8-K	0.09	
9-K	0.12	
10-K	0.09	
11-K	0.19	1.11
M-5-1-K	0.74	
2-K	0.02	
3-K	0.09	
4-K	0.35	
5-K	0.31	
6-K	0.95	

SAMPLE NUMBER	WEIGHT IN LBS.	
(Con't) M-5-7-K	0.01	
8-K	0.19	
9-K	0.52	3.18
M-6-1-K	0.06	
2-K	0.02	
3-K	0.17	
4-K	0.11	
5-K	0.58	
6-K	0.52	
7-K	0.09	
8-K	0.48	
9-K	1.24	
10-K	2.83	
11-K	0.28	6.38
M-7-1-K	0.16	
2-K	0.14	
3-K	0.09	
4-K	0.22	
5-K	0.31	
6-K	0.12	
7-K	0.11	
8-K	0.12	
9-K	0.24	1.51
M-8-1-K	0.09	
2-K	0.13	
3-K	0.12	
4-K	0.05	
5-K	0.05	
6-K	0.04	
7-K		
8-K	0.36	
9-K	0.22	
10-K	0.16	
11-K	0.08	1.30
M-9-1-K	0.04	
2-K	0.07	
3-K	0.13	
4-K	0.15	
5-K	0.10	
6-K	0.19	
7-K	0.16	.84
M-10-1-K	0.01	
2-K	0.09	
3-K	0.15	
4-K	0.07	
5-K	0.02	
6-K	0.04	
7-K	0.08	
8-K	0.12	
9-K	0.14	.72

THE MEADOWS PLACER
CUSTER COUNTY, IDAHO
Table Concentrates

SAMPLE NUMBER	WEIGHT IN LBS	
M-11-1-K	0.04	
2-K	0.11	
3-K	0.10	
4-K	0.02	
5-K	0.01	
6-K		
7-K	0.12	
8-K	0.12	
9-K	0.12	
10-K	0.13	
11-K	0.26	1.03
M-12-1-K	0.15	
2-K	0.15	
3-K	0.14	
4-K	0.26	
5-K	0.29	
6-K	0.03	
7-K	0.03	
8-K	0.14	
9-K	0.12	
10-K	0.24	
11-K	0.21	1.76
M-13-1-K	0.15	
2-K	0.15	
3-K	0.02	
4-K	Tr	
5-K	0.01	
6-K	0.05	
7-K	0.12	
8-K	0.10	
9-K	0.09	
10-K	0.20	
11-K	0.34	1.23
M-14-1-K	0.37	
2-K	0.08	
3-K	0.04	
4-K	0.20	
5-K	0.05	
6-K	0.00	
7-K	0.34	
8-K	0.33	
9-K	0.25	
10-K	0.27	
11-K	0.65	2.58
M-15-1-K	0.01	
2-K	0.26	
3-K	0.35	
4-K	0.38	
5-K	0.26	

SAMPLE NUMBER	WEIGHT IN LBS	
(Cont'd) M-15-6-K	0.22	
7-K	0.22	
8-K	0.19	
9-K	0.24	
10-K	0.10	2.23
M-16-1-K	0.01	
2-K	0.01	
3-K	0.07	
4-K	0.06	
5-K	0.12	
6-K	0.20	
7-K	0.16	
8-K	0.09	
9-K	0.07	.79
M-17-1-K	0.01	
2-K	0.05	
3-K	0.15	
4-K	0.16	
5-K	0.22	
6-K	0.08	
7-K	0.09	
8-K	0.38	
9-K	0.43	1.57
M-19-1-K	0.03	
2-K	0.06	
3-K	0.03	
4-K	0.11	
5-K	0.09	
6-K	0.09	
7-K	0.07	
8-K	0.06	
9-K	0.07	.61
M-20-1-K	0.05	
2-K	0.03	
3-K	0.09	
4-K	0.09	
5-K	0.26	
6-K	0.20	
7-K	0.10	
8-K	0.09	
9-K	0.07	
10-K	0.08	
11-K	0.09	
12-K	0.09	
13-K	0.08	
14-K	0.07	
15-K	0.15	
16-K	0.15	
17-K	0.18	1.87

RARE METALS CORPORATION OF AMERICA
P. O. Box 306
Murray, Utah

To: Contract Engineering Co.
1727 Boulder Street
Denver 11, Colorado

September 13, 1957

Description	Chemical Assay %					Remarks
	U_3O_8	TiO_2	Cb_2O_5	Ta_2O_5	R.E.O. (Calc.)	
M - 1	0.005	0.046	0.02	<0.01	0.22	Please note corrected U_3O_8 assays on M-1 thru M-5
M - 2	0.017	0.038	0.02	<0.01	0.14	
M - 3	0.006	0.036	0.05	<0.01	0.16	
M - 4	0.006	0.025	<0.01	<0.01	0.12	
M - 5	0.004	0.049	0.01	<0.01	0.09	
M - 6	0.012	0.100	0.03	<0.01	0.47	
M - 7	0.005	0.075	0.03	0.01	0.38	
M - 8	0.007	0.065	0.04	0.01	0.30	
M - 9	0.003	0.070	0.04	<0.01	0.40	
M - 10	0.004	0.044	0.04	<0.01	0.23	
M - 11	0.007	0.076	0.05	<0.01	0.32	
M - 12	0.010	0.039	0.04	<0.01	0.22	
M - 13	0.007	0.074	0.04	<0.01	0.28	
M - 14	0.007	0.036	0.04	<0.01	0.31	
M - 15	0.007	0.010	0.04	<0.01	0.20	
M - 16	0.006	0.015	0.04	<0.01	0.16	
M - 17	0.006	0.017	0.04	<0.01	0.24	
M - 19	0.011	0.005	0.04	<0.01	0.15	
M - 20	0.010	0.004	0.04	<0.01	0.18	

Chief Chemist

THE MEADOWS PLACER
CUSTER COUNTY, IDAHO

POUNDS PER YARD OF HEAVY MINERAL

DRILL HOLE	DRILL HOLE SECTION	DEPTH of SECTION	WT. OF SAMPLE	WT. OF B.S.** CONC'T.	LBS. OF CONC'T. PER YARD	% M. T.*	LBS. OF M. T.* PER YARD
M - 1	2-K	5'	71.5	.36	13.70	.301	.0412
M - 2	8-K #1 &#2	5'	99.0	2.89	78.82	.225	.1773
M - 3	4-2K & 5-2K	10'	182.0	.41	6.43	.262	.0168
M - 4	6-K	5'	41.0	.31	20.41	.172	.0352
M - 5	6-K	5'	88.0	.95	29.15	.163	.0475
M - 6	10-K	5'	85.0	2.83	89.71	.622	.5579
M - 7	5-K	5'	64.0	.31	13.08	.520	.0680
M - 8	8-K	5'	138.0	.36	7.04	.424	.0298
M - 9	6-K	5'	83.0	.19	6.18	.528	.0326
M -10	3-K	5'	100.0	.15	4.05	.328	.0133
M -11	11-K	5'	100.0	.26	7.02	.463	.0325
M -12	4-K & 5-K	10'	136.0	.55	19.85	.319	.0633
M -13	11-K	5'	144.0	.34	6.37	.411	.0262
M -14	11-K	5'	144.0	.65	12.18	.393	.0479
M -15	3-K & 4-K	10'	252.0	.73	7.82	.267	.0209
M -16	6-K & 7-K	10'	254.0	.36	3.83	.231	.0088
M -17	8-K & 9-K	10'	392.0	.81	5.58	.313	.0175
M -19	4-K & 5-K	10'	198.0	.20	2.73	.216	.0059
M -20	5-K & 6-K	10'	191.0	.46	6.50	.244	.0158

* M. T. = Monazite-Thorium
** B. S. = Black Sand Concentrate (Contains Zircon, Ilmenite, Magnetite)
Average weight of dry placer material is taken at 2700 pounds per cubic foot.

Drive Shoe = 7½" O. D.

Volume per foot of drive = .3068 Cubic Foot.

THE MEADOWS PLACER
CUSTER COUNTY, IDAHO
COMPILATION OF RECOVERABLE VALUES PER YARD
BASED ON WEIGHTS OF CONCENTRATES FROM SAMPLE
RECOVERY AND CHEMICAL ANALYSIS

DRILL HOLE No.	Depth	LBS. OF Sample	LBS. B.S. CONC'T.	LBS. B.S. CONC'T. PER YARD	U_3O_8 % ASSAY ANALYSIS	U_3O_8 LBS PER YARD	ThO_2 % ASSAY ANALYSIS	ThO_2 LB PER YARD	Cb_2O_5 % ASSAY ANALYSIS	Cb_2O_5 LB PER YARD	Ta_2O_5 % ASSAY ANALYSIS	Ta_2O_5 LB PER YARD	RARE EARTH OXIDES % ASSAY ANALYSIS	RARE EARTH OXIDES LB PER YARD	TOTAL % M. T.*	LBS M. T.* PER YARD
M- 1	27.5'	320.5	1.34	11.29	0.005	.0005645	0.046	.0051934	0.02	.0022580	0.01	.0011290	0.220	.0248380	.301	.0339829
M- 2	82.5'	1535.0	21.85	38.43	0.017	.0065331	0.038	.0146034	0.02	.0076860	0.01	.0038430	0.140	.0538020	.225	.0864675
M- 3	50.0'	598.0	.79	3.57	0.006	.0002142	0.036	.0012852	0.05	.0017850	0.01	.0003570	0.160	.0057120	.262	.0093534
M- 4	52.5'	674.0	1.11	4.45	0.006	.0002670	0.026	.0011570	0.01	.0004450	0.01	.0004450	0.120	.0053400	.172	.0076540
M- 5	45.0'	658.0	3.18	13.05	0.004	.0005220	0.049	.0063945	0.01	.0013050	0.01	.0013050	0.090	.0117450	.163	.0212715
M- 6	52.5'	680.0	6.38	25.33	0.012	.0030396	0.100	.0253300	0.03	.0075990	0.01	.0025330	0.470	.1190510	.622	.1575526
M- 7	45.0'	538.0	1.51	7.58	0.005	.0003790	0.075	.0056850	0.05	.0037900	0.01	.0007580	0.380	.0288040	.520	.0394160
M- 8	54.0'	642.0	1.30	5.47	0.009	.0004923	0.065	.0035555	0.04	.0021880	0.01	.0005470	0.300	.0164100	.424	.0231928
M- 9	35.0'	414.0	.84	5.48	0.008	.0004384	0.070	.0038360	0.04	.0021920	0.01	.0005480	0.400	.0219200	.528	.0289344
M-10	45.0'	557.0	.72	3.49	0.004	.0001396	0.044	.0015356	0.04	.0013960	0.01	.0003490	0.230	.0080270	.328	.0114472
M-11	54.0'	688.0	1.03	4.04	0.007	.0002828	0.076	.0030704	0.05	.0020200	0.01	.0004040	0.320	.0129280	.463	.0187052
M-12	52.5'	684.0	1.76	6.95	0.010	.0006950	0.039	.0027105	0.04	.0027800	0.01	.0006950	0.220	.0152900	.319	.0221705
M-13	55.0'	689.0	1.23	4.82	0.007	.0003374	0.074	.0035668	0.04	.0019280	0.01	.0004820	0.280	.0134960	.411	.0198102
M-14	55.0'	715.0	2.58	9.74	0.007	.0006818	0.026	.0025323	0.04	.0038960	0.01	.0009740	0.310	.0301940	.393	.0382781
M-15	55.0'	1194.0	2.23	5.04	0.007	.0003528	0.010	.0005040	0.04	.0020160	0.01	.0005040	0.200	.0100800	.267	.0134568
M-16	42.5	838.0	.79	2.55	0.006	.0001530	0.015	.0003825	0.04	.0010200	0.01	.0002550	0.160	.0040800	.231	.0058905
M-17	45.0	939.0	1.57	4.51	0.006	.0002706	0.017	.0007667	0.04	.0018040	0.01	.0004510	0.240	.0108240	.313	.0141163
M-19	45.0	846.0	.61	1.95	0.011	.0002145	0.005	.0000975	0.04	.0007800	0.01	.0001950	0.150	.0029250	.216	.0042120
M-20	85.0	1807.0	1.87	2.79	0.010	.0002790	0.004	.0001116	0.04	.0011160	0.01	.0002790	0.180	.0050220	.244	.0068076

* M. T. = Monazite-Thorium

DMEA
RECEIVED AUG 25 1958

8/25 C 220
8/26 EEF 800
" Chm 700
(Murphy)

Rm. 157 Howard St.
Spokane 4, Washington

August 20, 1958

Alfred C. Hayl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Dotnet No. DMEA-1200 (monazite-thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. [illegible]

Gentlemen:

This will acknowledge receipt of five copies of your final report on this project. This report meets the requirements of Article 7(a) of your contract.

We will make a final audit of your account as soon as possible.

Sincerely yours,

D. R. Mankinen, Alternate
Acting Executive Officer
DMEA Field Team, Region I

cc: DMEA (2)
USBM (2)
USBM (AD)
Turner

So. 157 Howard Street
Spokane 4, Washington

July 29, 1958

DMEA
4 1958
8/5 H.G. 225
8/5 800
8/6 700

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Gentlemen:

We wrote to you June 5, 1958, calling your attention to Article 7(c) of your contract regarding submission of a final report. We will not be able to make a final audit until an acceptable final report is received.

Only an audit can determine the validity of some of the costs on which there has been a difference of opinion between yourselves and DMEA personnel. We would like to close our books on this project and therefore will appreciate receiving your final report as soon as possible.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team Region I

cc: DMEA (2)
USBM (2)
USBM(AD)
Prins

FILE COPY
DMEA
RECEIVED JUN 9 1958
DATE
6/9
6/9
6/16

So. 157 Howard Street
Spokane 4, Washington

June 5, 1958

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Gentlemen:

The results of the drilling done under Stage I of the contract indicate that the probability of making a significant discovery by doing additional work is poor. Under these circumstances Government participation in further work at the Meadows placer is not warranted and we cannot authorize Stage II work.

Your attention is called to Article 7(c) of your contract concerning the submission of a final report. Five copies of such a report, including maps showing the location of completed holes, should be furnished the Government. We will not be able to make an audit of your account until an acceptable final report is received.

The audit will determine the validity of some of the costs on which there has been a difference of opinion between yourself and DMEA personnel. Should the audit disclose any items of salvageable property that must be disposed of in accordance with Article 9 of the contract, we shall notify you in reference to disposal.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USBM (2)
USBM (AD)
Alvord

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 9 1958
6/9 C 220
~~Murphy~~ 700

June 5, 1958

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

This is in reply to your letter of May 8, 1958. We have delayed answering until we received some check assay returns on columbium from the Bureau of Mines laboratory at Albany, Oregon. These are shown opposite the Operator's samples on Figure 2, under "Remarks". The holes to be checked were chosen at random to cover the area drilled.

Attached for your information are:

Figure 1 - Estimate of mineral content in pounds per cubic yard of gravel.

Figure 2 - Chemical assay of possible commercial minerals in the composite of black sand concentrates from each hole drilled.

Figure 3 - Summary of chemical analyses (from Operator's Figure 2) reduced to pounds of mineral per cubic yard.

Based upon the results of Stage I drilling as tabulated in Figures 1, 2 and 3, the Field Team will not approve going into Stage II and we are informing the Operator of this decision; three copies of our letter are attached.

not attached

The Bureau of Mines has developed no data on the Meadows placer independent of DMEA work. The cost of the tests made in the Spokane field laboratory was paid for by DMEA.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 9 1958
DATE CODE

Alfred G. Hoyl and Associates - Custer County, Idaho

Docket No. DMEA-4280
Contract No. Idm-E1012

THE MEADOWS PLACER AREA

Summary of field estimates - Spokane Field Laboratory

Drill hole number	Depth in ft.	Sample weight lbs.	Weight black sand conc. in lbs.	Black sand lbs./cu.yd.	Estimate of mineral content in lbs. per cu. yard of gravel: Monazite	Mon. Eq.*	Ilmenite	Magnetite	Garnet	Zircon
M-1	27.5	320	1.340	12.8	0.11	0.42	2.2	6.0	0.1	0.1
M-2	82.5	535	19.010	34.6	0.31	0.80	1.6	21.3	Tr	0.1
M-3	50.0	598	0.791	3.5	Tr	0.06	0.3	1.7	Tr	Tr
M-4	52.5	674	1.110	5.8	Tr	0.10	0.9	1.4	Tr	Tr
M-5	45.0	658	3.190	17.8	0.09	0.29	0.8	12.0	Tr	0.1
M-6	52.5	680	6.560	21.6	0.28	0.83	1.6	16.1	Tr	Tr
M-7	45.0	538	1.510	7.8	0.08	0.21	0.3	2.2	Tr	0.1
M-8	54.0	642	1.340	5.6	0.05	0.14	0.1	2.0	Tr	0.1
M-9	35.0	414	0.840	5.3	0.05	0.13	0.1	2.2	Tr	0.1
M-10	45.0	557	0.720	3.4	0.02	0.07	0.1	1.0	Tr	Tr
M-11	54.0	685	1.076	3.7	0.03	0.07	0.1	0.9	Tr	Tr
M-12	52.5	684	1.603	6.1	0.01	0.09	0.2	2.6	Tr	Tr
M-13	55.0	689	1.598	6.1	0.09	0.26	0.2	2.6	Tr	Tr
M-14	55.0	715	2.511	15.9	0.14	0.30	1.8	3.1	Tr	Tr
M-15	55.0	1193	2.227	5.0	0.04	0.12	0.5	1.8	Tr	Tr
M-16	42.5	838	0.798	2.4	0.02	0.07	0.3	1.1	Tr	Tr
M-17	45.0	939	1.370	4.3	0.02	0.10	0.5	1.5	Tr	Tr
M-19	45.0	846	0.610	2.0	0.01	0.03	0.1	0.6	Tr	Tr
M-20	85.0	1907	1.270	3.0	0.02	0.07	0.3	1.4	Tr	Tr
TOTAL	978 ft.	13,015 lbs.	50.364 lbs.	1[illegible].7	1.37	4.16	12.0	81.5	0.1	0.1
Arithmetic average - - - - - - - -				8.3	0.07	0.22	0.6	4.3	Tr	Tr

* Monazite equivalent is a measure of the total radioactivity of a sample expressed as monazite. It is determined by comparing the radioactivity of an unknown sample with that of a monazite standard containing 4.2 percent ThO_2 and 0.13 percent U_3O_8 as determined chemically.

Figure 1

U.S.A. METALS CORPORATION OF [illegible] CA
P. O. Box 306
Murray, Utah

Docket No. DMA-4280
Contract No. Idm-R101

To: [illegible] Engineering Co.
1727 [illegible] Street
Denver 11, Colorado

September 19, 1957

BUREAU OF MINES ANALYSIS

Description	Chemical Assay %					Remarks % Cb_2O_5	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
M - 1	0.005	0.046	0.01	<0.01	0.28	M - 1	0.07
M - 2	0.017	0.031	0.01	<0.01	0.14		
M - 3	0.004	0.034	0.01	0.01	0.15		
M - 4	0.006	0.026	<0.01	<0.01	0.12		
M - 5	0.004	0.049	0.01	<0.01	0.07	M - 5	0.03
M - 6	0.012	0.100	0.03	<0.01	0.47	M - 6	0.02
M - 7	0.005	0.075	0.03	0.01	0.34	M - 7	0.08
M - 8	0.007	0.045	0.01	0.01	0.30		
M - 9	0.008	0.070	0.01	<0.01	0.40		
M - 10	0.004	0.044	0.01	<0.01	0.29		
M - 11	0.007	0.076	0.05	<0.01	0.32	M - 11	0.05
M - 12	0.010	0.039	0.01	<0.01	0.22		
M - 13	0.007	0.074	0.01	<0.01	0.28		
M - 14	0.007	0.026	0.01	<0.01	0.31		
M - 15	0.007	0.010	0.01	<0.01	0.20		
M - 16	0.006	0.015	0.01	<0.01	0.16		
M - 17	0.006	0.017	0.01	<0.01	0.24		
M - 19	0.011	0.003	0.01	<0.01	0.15		
M - 20	0.010	0.004	0.01	<0.01	0.14		

R. [illegible]

Chief Chemist

Figure 2

Alfred G. Hoyl and Associates - Custer County, Idaho

Docket No. DMEA-4280
Contract No. Idm-E1012

THE MEADOWS PLACER AREA

Summary of Chemical Analyses

Drill hole number	Pounds of mineral per cu. yd. of 2700 pounds — Calculations based on analyses by Rare Metals Corp.					Bureau of Mines analyses, percent		
	U_3O_8	ThO_2	Ta_2O_5	Nb_2O_5	R.E. Oxides	U_3O_8(c)	Ta_2O_5	Nb_2O_5
M-1	0.0006	0.0059	0.0026	< 0.0013	0.028	~~.018**~~	~~< 0.2**~~	~~< 0.5**~~
2	0.0060	0.0132	0.0069	< 0.0035	0.048			
3	0.0002	0.0013	0.0018	< 0.0004	0.006			
4	0.0004	0.0015	< 0.0006	< 0.0006	0.007			
5	0.0007	0.0087	0.0018	< 0.0018	0.016			
6	0.0026	0.0216	0.0065	< 0.0022	0.102			
7	0.0004	0.0059	0.0039	0.0008	0.030			
8	0.0005	0.0036	0.0022	0.0006	0.017			
9	0.0004	0.0037	0.0021	< 0.0005	0.021			
10	0.0001	0.0015	0.0014	< 0.0003	0.008			
11	0.0003	0.0028	0.0019	< 0.0004	0.012			
12	0.0006	0.0024	0.0024	< 0.0006	0.013			
13	0.0004	0.0045	0.0024	< 0.0006	0.017			
14	0.0011	0.0041	0.0064	< 0.0016	0.049			
15	0.0004	0.0003	0.0020	< 0.0005	0.010			
16	0.0001	0.0004	0.0010	< 0.0002	0.004			
17	0.0003	0.0007	0.0017	< 0.0004	0.010			
19	0.0002	0.0001	0.0008	< 0.0002	0.003			
20	0.0003	0.0001	0.0012	< 0.0003	0.005			
	0.0156	0.0825	0.0496	< 0.0168	0.406			
Arithmetic average - -	0.001	0.004	0.003	< 0.001	0.021			

ORIGINAL FILE COPY
DMEA
RECEIVED
1958

* .018% equals 0.006 lbs./cu.yd. of U_3O_8 which checks with the analysis made by Rare Metals Corp.

** The Albany laboratory does not give lower limits than these.

Figure 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

June 4, 1958

OFFICE OF THE COPY
DMEA
RECEIVED JUN 9 1958

	INITIALS	CODE
6-9	C	220
6/9	C	215
6/10	Murphy	700

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows
Custer County, Idaho

Dear Mr. Selfridge:

Enclosed are the Government and Audit copies of Amendments No. 3 and No. 4 to the contract.

Other copies of the amendments have already been distributed.

Sincerely yours,

for A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

1201 N. Division St.
Spokane 2, Washington

May 8, 1958

Mr. Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Hoyl:

This is in reply to your letter of May 1, 1958, regarding the method used in this office for calculating the black sand values in a deposit.

The average dry weight of placer material is taken at 2700 pounds per cubic yard as determined by tests run during previous drill programs. Having the dry weight of a sample, the weight of each sample concentrate and the percent of the individual constituents, the pounds per cubic yard of each mineral can be calculated as follows:

$$\frac{\text{Dry wt. of concentrate} \times 2700}{\text{Dry wt. of sample}} = \text{dry wt. of black sand per cu. yd.}$$

(wt. of black sand per cu.yd.) x (estimated percent of mineral) = pounds of mineral per cu. yd.

As an example, the dry weight of sample No. 8, drill hole No. 14, line 6, was 103 pounds. Dry weight of black sand concentrate was 0.328 pounds. Estimated amount of ilmenite was 25 percent. Therefore,

$$\frac{0.328 \times 2700}{103} = 8.60 \text{ lb. black sand/cu. yd.}$$

$$8.60 \times 0.25 = 2.15 \text{ lb. ilmenite/cu. yd.}$$

The average black sand content for drill hole No. 14, line 6, was 10.1 pounds per cubic yard. Assuming the sample listed as No. M14 on the Rare Metals assay sheet corresponds to the aforementioned drill hole, then

0.00707

$\frac{10.1 \times .007}{100}$ = ~~0.00707~~ lb. U_3O_8/cu. yd. me

0.00243

$\frac{10.1 \times .036}{100}$ = ~~0.0363~~ lb. ThO_2/cu. yd.

$\frac{10.1 \times .04}{100}$ = 0.0040 lb. Cb_2O_5/cu. yd.

$\frac{10.1 \times .31}{100}$ = 0.0313 lb. R. E. oxides/cu. yd.

These values as you may note are very low and drill hole No. 14, line 6, had higher black sand values than a majority of the remaining holes.

Results of Phase I work which you requested will be sent should permission be granted by Mr. Mittendorf.

Sincerely yours,

Wing G. Agnew, Member
DMEA Field Team, Region I

cc: DMEA (2)
USGS (2)

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

May 1, 1958

Mr. Wing G. Agnew
United States Department of the Interior
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Agnew:

During our conversations in Spokane last week with members of your organization, we discussed the method of calculation used by your engineers in arriving at heavy mineral values per yard as obtained by drilling in a placer such as "The Meadows".

We understand that Dick Storch or another of your placer engineers familiar with the Meadows Project would prepare some sample calculations on the Meadows drilling data which would help us in our calculations. We would very much appreciate having this information as soon as convenient.

We should also like a copy of your final calculations and conclusions on all of the Phase I work, and are writing to Mr. Mittendorf for his permission. A copy of this letter is enclosed.

Yours very truly,

ALFRED G. HOYL AND ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

AGH/dsh
Enclosure

RECEIVED
MAY 2 1958
D. E. M. E.
SPOKANE, WASH.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/7	Murphy	700
5/7	Ellis	700
5/7	Selfridge	130
"	Robinson	110
"	Mittendorf	100
5/8	C	220
		700

MAY 8 1958

Mr. Alfred G. Hoyl
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

5/7 Kilgoar (130)
5/7 Kamb (130)

Dear Mr. Hoyl:

This is to acknowledge your letter of May 1, 1958, pertaining to the release of DMEA calculations and results of the work performed under Stage I of the above-referenced contract.

I regret to inform you that such data are for Government information only; therefore, they cannot be released to you as requested.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/izm 5-6-58
cc: Mr. Murphy
Admr.'s Reading File
DMEA FT Reg. I (2)
Operating Committee
G. C. Selfridge

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/7	Murphy	700
5/7	[illegible]	700
5/7	GCS	130
5/7	[illegible]	110
"	[illegible]	100
		~~SHB~~
		220
		700

MAY 8 1958

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Enclosed are copies of the Administrator's response of today to Mr. Alfred G. Hoyl's letter of May 1, 1958. A copy of Mr. Hoyl's letter was forwarded to Wing G. Agnew.

If the Bureau of Mines has developed data relating to the project area independent of the DMEA work, then the decision to release such data rests with the Bureau.

We note in S. W. Zoldok's memorandum, dated April 24, 1958, that the Field Team's final decision on approving Stage II work is pending results of testing Stage I samples. Does this mean the Operator's findings, or are you having some check tests made?

Since Stage I work was completed in September 1957, it appears that the results of the drilling should soon be available to this office.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

Enclosures
APPROVED:

Frank D. Lamb (SHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (SHB)
Member, Geological Survey

FMMurphy/izm 5-6-58
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

May 1, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 5 1958

DATE	INITIALS	CODE
5/5	C	220
5	Com	100
"	Gma	700

Mr. C. O. Mittendorf
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Mittendorf:

We have recently concluded a conference with members of the Region 1 field team in Spokane, Washington, regarding the test results of Phase I of the subject contract.

Mr. Agnew has advised us that we can have copies of your calculations and results on this work if it is agreeable with you.

We would very much like to have this information in order to make our decision as to whether we wish to continue with Phase II of the project. It is also very important to us to have as much information as possible to enable us to decide on the overall value of the property and plan future development work.

Would you please advise your Spokane office to release information to us which they have developed to the present and which they will obtain as they complete their calculations.

Yours very truly,

ALFRED G. HOYL AND ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

AGH/dsh
cc: Wing G. Agnew
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

April 24, 1958

MEMORANDUM

To: DMEA Files

From: S. W. Zoldok, Mining Engineer, U. S. Bureau of Mines

Subject: Conference re Docket No. DMEA-4280 (monazite-thorium) Alfred G. Hoyl & Associates, The Meadows, Custer County, Idaho, Contract No. Idm-E1012

This memorandum formalizes my understanding of the results of a meeting between Alfred G. Hoyl and Frank R. Komatz, representing the Operator, and A. E. Weissenborn, W. G. Agnew, C. A. Turner (DMEA Auditor), and S. W. Zoldok, representing the Government. The meeting was held on April 22, 1958 at the Bureau of Mines office in Spokane, and lasted from 9:30 A.M. to 1:20 P.M. The following matters were discussed:

(1) The possibility of going into Stage II of the contract.

Mr. Hoyl was a little vague about his desire to go into Stage II but if he did, he would want to do further testing by trenching with a tractor equipped with a back hoe. His contention was that his experience indicated that churn drilling gave results about 100% lower than test pits or shafts. We stated that our preliminary conclusions on the results of Stage I work would not warrant going into Stage II but our final decision would await the results of testing Stage I samples.

Mr. Hoyl asked if the Government would certify. We stated that if Stage II was not authorized we would not recommend a certification; however, the final decision was up to Washington.

Mr. Hoyl asked if we could give him a letter stating that even though the "radioactive blacks" in the placer were not present in commercial amounts, they at least are present. We said we could not give him such a letter.

Mr. Hoyl wanted the results of the Bureau of Mines tests of Stage I samples. He was told that he would have to obtain authorization from the Administrator before we could do so.

(2) Deletions from the Operator's voucher.

The matter of deletions occupied much of the time taken for the meeting.

We arrived at an impasse on this matter. The Operator agreed it was a good idea that his contract be audited in the Denver office as his records were available there and to avoid any suspicion of prejudice on the part of Government representatives in the Spokane office.

Mr. Hoyl was asked if he intended to sign Amendments No. 3 and 4. He said that he would discuss these with his associates. It appeared that he would sign the amendments though he did not say so. He was informed that an audit could not be made until the amendments were signed and returned to us.

The meeting ended amicably.

S. W. Zoldok

Distribution:
DMEA (3)
USGS (2)
USBM (AD)
Turner
Docket
Romischer

Frank R. Komatz
OIL PROPERTIES

DENVER, COLORADO
Telephone Cherry 6476

PARSONS, KANSAS
Telephone 807

RECEIVED
BUREAU OF MINES
MAR 31 1958
SPOKANE, WASH

March 28, 1958
229 Midland Savings Building
Denver 2, Colorado

Mr. A. E. Weissenborn
Mr. Wing G. Agnew
U. S. Department of the Interior
Defense Minerals Exploration Administration
1201 North Division St.
Spokane 2, Washington

RE: Docket No. DMEA-4280
Alfred G. Loyl & Associates
The Meadows
Custer County, Idaho
Contract No. IDm-E1012

DMEA

Gentlemen:

We wish to acknowledge your letter of March 25, 1958.

We have not returned amendments to your office in accordance with our correspondence to you in which we stated that we would be visiting your office in Spokane to go over fully the required amendments for Stage I operations. We expect to call on you on or about April 28th. At this time, we would appreciate having an opportunity to discuss your preliminary findings of our testing of the Meadow [illegible] amendments for Stage II operations.

We will be in a position to have you audit our Stage I operation and discuss the justification of our expenditures to date.

Yours very truly,

ALFRED G. LOYL & ASSOCIATES

By Frank R. Komatz

RECEIVED MAR 27 1958

1201 N. Division St.
Spokane 2, Washington

March 25, 1958

Alfred G. Hoyl and Associates
229 Midland Savings Building
Denver 2, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-21012

Gentlemen:

On October 29, 1957 we sent to you for approval and signature the original and four copies of Amendment No. 3. This amendment permits the substitution of a D-6 cat in lieu of a D-8.

On November 12, 1957 we sent to you for approval and signature the original and four copies of Amendment No. 4. This amendment transfers some equipment items from depreciation to rental.

On January 7, 1958 we wrote you that if the amendments were unacceptable you should return the originals and all copies to this office with your comments. This has not been done.

The time is approaching when a decision must be made whether to undertake Stage II or close out the contract and make a final audit. Failure to sign the amendments will result in further disallowances when a final audit is made.

By Field Team, Region I

A. E. Weissenbern, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USGS (2)
USBM (AD)
Turner

Form 7
(6)

OFFICIAL FILE COPY

Date	Surname	Code
2/24/58	[illegible]	
2/26	Talbert	800
"	Chambers	800
		120
2/26	[illegible]	110
26	Corn	100
		700
2/27	C	200

February 24, 1958

MEMORANDUM FOR THE FILES

Subject: DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl & Associates
Idm-E1012

At Mr. Weissenborn's request I met with him and Mr. Hoyl to discuss the exceptions taken in the payment of the Operator's vouchers. These exceptions are stated in the Certifying Officer's memoranda of September 12 and November 20, 1957.

Although Article 6 of the contract limits the allowable costs, Mr. Hoyl believes that it can and should be amended to allow all costs claimed. He said he read the contract before signing but, thinking it to be so much Government "gobbledy-gook", believed that 75 percent of any necessary costs would be paid. This was in spite of the request in the last paragraph of Mr. Weissenborn's letter of September 26, 1956, that the contract be returned with proposed changes if any part was not acceptable.

I pointed out to Mr. Hoyl the situation he would be in if he had signed a contract based on his application. His estimates totalled $13,970 for 3,000 feet of drilling and related road work, whereas the contract allows $26,986 for 1,900 feet of drilling and related work. In other words, he was allowed twice his estimates for two-thirds of the work proposed by him. The increase in costs was based on Field Team findings that his estimates were far too low and necessary items had been omitted.

Mr. Hoyl insisted that the costs, which were suspended or disallowed, are properly allowable and stated that he would pursue the matter to that conclusion no matter what was necessary. The major items involved are:

(a)	Consulting engineers	$600.00
(b)	Supervision	300.00
(c)	Subsistence of labor	324.00
(d)	Subsistence of supervisor	150.00
(e)	Camp equipment	200.00 (est.)
(f)	Rental of D-7 tractor	75.00
(g)	Supervisor's expenses	684.63
(h)	Hauling samples	297.00
(i)	Engineering and office expenses	100.00

8623

My explanations to Mr. Hoyl on the above were as follows:

(a) The contract specifies that technical services are not allowable and are for the account of the Operator if omitted from Exhibit "A". They were omitted.

(b) The contract provides a supervision maximum of $1200 for Stage I ($900 for the drilling and $300 for road work). The exception of $300 for road work supervision is either an error (and allowable on audit) or the claim has been duplicated on the road work labor payroll.

(c), (d), & (e) Neither the application nor Field Team recommendation included estimates for board and lodging. Lacking a showing of such intent no justification exists for amending the contract to allow such costs. The tents listed in Category (3) of Exhibit "A" were estimated needs for core storage and field office.

(f) The claim of $75 for D-7 tractor is not included in the proposed Amendment No. 3. This disallowance by the Field Team (prior to recommendation for the amendment) was made because the work was not acceptable. The examining engineer's memorandum of July 12, 1957, states that, due to the inexperience of the operator and the condition of the machine, the D-7 was unable to build the road. The claim was for six hours time, five walking in and one of road work.

(g) Part of the supervisor's expenses, other than travel from Denver to the project, may be allowable if supported by adequate proof and found to be reasonable, necessary, and direct costs of the project.

(h) The cost of hauling samples is allowable without question upon submission of documentary evidence.

(i) A total of $300 (3 mos. @ $100) plus various items of supplies (approximately $25) was claimed for engineering and office expenses in Stage I. The contract estimate was $100 (2 mos. @ $50). The Field Team disallowed $100.00 as being in excess of reasonable and necessary costs. Adequate justification by the Operator is required for reinstatement. (I also expressed my doubts as to the validity of the flat $100 a month charged for 2 months, but Mr. Hoyl did not offer an explanation.)

Mr. Hoyl is withholding execution of Amendments 3 and 4 by his associates, who are scattered in various parts of the country, because he believes that Amendment No. 3 should include the D-7 rental and Amendment No. 4 should provide for the actual rental costs ($105.04) for the jeep and chainsaw rather than the maximum allowable under the contract ($55.40).

I told him that an audit to determine the actual amount validly payable under the contract is being delayed until the amendments are executed. Audit without inclusions of the amendments would result in additional disallowances.

E. D. Talbert

E. D. Talbert

EDTalbert/wb
February 25, 1958

Copy to: Docket
Admr. Reading File
Field Team, Region I (2)- Delivered to Mr. Weissenborn in person in the Washington office 2-26-58.
Dorothy F. Long
Jay L. Chambers
Donald T. Finch

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 17 1958
Date | Initials | Code
1-17 | C | 220
Murphy 700

Frank R. Komatz

OIL PROPERTIES

DENVER, COLORADO
Telephone Cherry 6476

PARSONS, KANSAS
Telephone 807

January 14, 1958
229 Midland Savings Building
Denver 2, Colorado

The Honorable Gordon Allott
United States Senator
State of Colorado
U. S. Senate Office Building
Washington, D. C.

RE: Dockt No. DMEA 4280
Contract No. Idm-E1012

Dear Senator Allott:

We appreciate the interest you have taken in our effort to have our DMEA contract amended as well as payments due us on work performed under the terms of the above contract.

After carefully considering this matter we feel that it would be advisable to make a trip to Spokane, at which time we can sit down and discuss our expenditures pertinent to the testing of the Big Meadow. We feel a personal discussion of our problem with the Spokane officials will resolve most of our problems.

In any case, we will advise you the results of our conference.

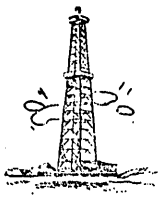
Sincerely,

Frank R. Komatz

Frank R. Komatz

FRK:lm

CC: C. O. Mittendorf
Wing G. Agnew



OFFICIAL FILE COPY
DMEA
RECEIVED JAN 10 1958

DATE	INITIAL	AMOUNT
1/10	C	220
1/10	[illegible]	800
"	~~Murphy~~	~~700~~

So. 157 Howard Street
Spokane 4, Washington

January 7, 1958

Alfred G. Hoyl and Associates
229 Midland Savings Building
Denver 2, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Gentlemen:

This will acknowledge receipt of Mr. Frank Komatz's letter of December 27, 1957, concerning certain deletions in your first form MF-104 report. Undoubtedly this is in reply to our letter to you dated October 22, 1957.

Until we receive the signed copies of Amendments No. 3 and No. 4, we cannot continue to further process your vouchers. These amendments were mailed to you for signature on October 29, 1957 and November 12, 1957, respectively.

We would appreciate receiving these amendments as soon as possible. If the proposed amendments are not acceptable, would you please return the originals and all copies of both amendments to this office with your comments.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3) w/3 copies of incoming
USBM (2)
USBM (AD)
Turner
Alvord

Frank R. Komatz

OIL PROPERTIES

DENVER COLORADO

Telephone Cherry 6-[illegible]

EXTRA COPY
DMEA
RECEIVED [illegible]758
DATE | CODE

[illegible] 7, 1957
[illegible] Savings [illegible]
[illegible] Colorado

[illegible]

[illegible] Supervision for one half month at $[illegible].00 per month. This item was [illegible] another and we are at a loss to understand [illegible]. Actually more time than one half month was required to carry [illegible] of making [illegible] work, securing [illegible] permit, set[illegible] and layin[illegible] [illegible] required before actual drilling [illegible].

As we [illegible] the U. S. Government.

Yours very truly,

[illegible]:lm

Enclosure: Telephone bill inadverte[illegible] from [illegible]
Please process with [illegible].

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/30	Murphy	700
"	Ellis	700
12-	Chambers	800
"	Mattendorf	100
12/30	C	220
		700

DEC 30 1957

Hon. Gordon Allott
United States Senate
Washington 25, D. C.

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Senator Allott:

This is with respect to your letter of December 20, 1957, regarding a request for an amendment to the subject contract.

The contract is one of our long-form agreements in which the allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, and necessary, and that are estimated by specific categories in the contract. Many of these estimated amounts represent the maxima allowable under their respective categories and the Government cannot contribute to costs in excess of the estimated amounts.

The Operator has billed the Government for some expenses that are not authorized by the contract and for some that exceed the maxima allowable. In some instances, legitimate expenses have not been supported by the necessary documents. For these reasons, certain expenses were disallowed and the Operator has requested that the contract be amended to cover such costs.

Two amendments to the contract were sent to the Operator on October 29 and November 12, 1957, for execution with the view of clarifying certain aspects of its claims. Further clarification will be dependent upon an audit of the Operator's accounts which the Government is preparing to make. Upon completion of the audit by the Government and the execution of the submitted amendments by the Operator, it appears that most if not all the problems which have arisen under this contract could be solved. The Government audit was postponed because it was to the best interest of the Operator to have the amendments effective prior to the audit.

FRS 4572

8623

For your information, I am enclosing a copy of a letter under date of October 22, 1957, from the Executive Officer of Region I to the Operator.

I trust this information will assist you to understand this particular case.

Sincerely yours,

C. O. Mittendorf
(for)
Administrator

Enclosure

MChing/FMMurphy/gla
12-30-57
cc to: Secretary's Reading File
Admr.'s Reading File
DCCO
MR
DL
Mr. Murphy
DMEA Field Team, Region I (2) w/2cc Senator Allott's letter

JAMES E. MURRAY, MONT., CHAIRMAN
CLINTON P. ANDERSON, N. MEX.
HENRY M. JACKSON, WASH.
JOSEPH C. O'MAHONEY, WYO.
ALAN BIBLE, NEV.
RICHARD L. NEUBERGER, OREG.
JOHN A. CARROLL, COLO.
FRANK CHURCH, IDAHO
GEORGE W. MALONE, NEV.
ARTHUR V. WATKINS, UTAH
HENRY DWORSHAK, IDAHO
THOMAS H. KUCHEL, CALIF.
FRANK A. BARRETT, WYO.
BARRY GOLDWATER, ARIZ.
GORDON ALLOTT, COLO.

RICHARD L. CALLAGHAN, CHIEF CLERK

United States Senate

COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS

PRS
DEC 23 1957 4572

TO: MDM	
REPLY TO BE PREPARED BY:	MDM
FOR SIGNATURE OF:	MDM
COPY OF LETTER FURNISHED	
MR	
SEND REPLY COPY TO ABOVE	

December 20, 1957

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 4280
(Monazite-Thorium)
Contract No. Idm-E1012

Dear Mr. Mittendorf:

I understand that Alfred G. Hoyl and Associates, 1727 Boulder Street, Denver 1, Colorado, have requested an amendment of the above-mentioned contract in a letter of September 23 to the office in Spokane.

According to the information I have, it seems that the request for the amendment merits your earnest and serious consideration. The contention made by the Hoyle Company is that their testing caused substantial savings of expenses in personnel which otherwise would have had to be expended by the Department. Their statement that they were able to test this placer for $14.50 per foot, without any deletions of their cost, which is considerably under $20.00 per foot, the generally accepted footage cost, certainly merits thoughtful evaluation.

I will appreciate a report on this case at the earliest possible date.

Sincerely yours,

Gordon Allott, U.S.S.

GA: pmr

OFFICIAL FILE COPY DMEA RECEIVED DEC 23 1957		
DATE	INITIALS	CODE
12/23	C	220
		700

So. 157 Howard Street
Spokane 4, Washington

November 21, 1957

OFFICE OF THE CITY
DMEA
RECEIVED NO
DATE
11/25 C 220
700

VIA AIR MAIL

Mr. Donald T. Finch
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4260 (monazite-thorium)
Alfred C. Hayl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Ida-21012

Dear Mr. Finch:

Reference is made to your letter of November 14 and to Mr. Chambers' letter of November 6 to you concerning an audit of the referenced contract.

The Operator has not yet returned signed Amendments No. 3 and 4 to the contract, and it will probably be better to wait with the audit until this is done. It is likely that there will be some delay in getting the amendments signed and returned to us because of the many signatures required on the Operator's part.

Under the circumstances it appears that the audit of this account should be postponed until you return from your annual leave. The files will then be sent to you.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

cc: Mr. J. L. Chambers
Mr. C. A. Turner
DMEA (2)
USEM (2)
USEM (AD)
Alvord

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERAL [illegible] ADMINISTRATION

[illegible]

[illegible]

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957

DATE	INITIALS	CODE

[illegible], Executive Officer
[illegible] Team Region [illegible]
[illegible] Howard Street
[illegible] Washington

Re: Docket [illegible] (Lead-Zinc-Thorium)
[illegible]
[illegible] Associates
[illegible] Springs Creek

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] forward the files to [illegible] leave the [illegible] Director, should [illegible]

[illegible] Sears,

[illegible] T. Finch, [illegible]

[illegible] Chambers

[illegible]

/ DMEA (2)

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957

DATE	INITIALS	CODE
11/25	C	220
11/25	[illegible]	800
11	[illegible]	700

1201 N. Division St.
Spokane 2, Washington

November 20, 1957

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Contract No. Idm-E1012
Monthly operating report for
September 1957

Gentlemen:

This is to inform you the subject voucher could not be paid in the full amount claimed.

The deletions are explained in the attached copy of a memorandum to the Field Team from the Certifying Officer, Region I.

By Field Team, Region I

A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USGS (2)

DMEA Field Team, Region I

November 20, 1957

DMEA Certifying Officer, Region I

Monthly operating report for September 1957
Contract No. Idm-E1012

The subject operating report has been processed and forwarded to the Disbursing Officer for payment.

Deletions in the amount of $131.91 have been made as follows:

Mountain States Telephone and Telegraph (It is the opinion of the Field Team this charge was not necessary during the month of September inasmuch as Stage I work was completed and all personnel had left the project by the end of August. In addition, the claim was not supported).	$ 31.91
Engineering and Accounting Office Expenses (It is believed this amount is excessive in that Stage I work was completed by the end of August; also, the claim was not supported in any manner.	100.00

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957

DATE	INITIALS	CODE

Dorothy F. Long

cc: DMEA (2)
USGS (2)

DMEA
RECEIVED NOV 15 1957
DATE
11/15 C 220
11/15 1800
~~11/18 1700~~

So. 157 Howard Street
Spokane 4, Washington

November 12, 1957

Mr. Alfred G. Hoyl and Associates
c/o Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Hoyl:

Enclosed are the original and four copies of a proposed Amendment No. 4 to your DMEA contract which changes Category 4(c) Depreciation to Category 4(a) Rental.

As we stated in our letter of October 22, 1957, in order to make any payment for the Jeep pickup and the chainsaw on a rental basis such an amendment would be necessary. We explained the circumstances in our letter to Washington requesting the amendment but because the prices became established when you signed the contract, the amount allowed cannot be increased.

If the proposed amendment is acceptable, please have each individual listed sign the original and four copies, retain the copy marked Operator's copy and return the original and other three copies to this office.

If the proposed amendment is not acceptable, please return the original and four copies unsigned to this office with your comments.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: DMEA (2)
USBM (2)
USBM (AD)
Alvord

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/8	Talbert	800
11/8	gb	220
11/10	Murphy	200

NOV 8 1957

Mr. Donald T. Finch
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMFA-4280 (Monazite-Thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Finch:

During a visit to this office today Mr. Weissenborn expressed a desire to have an interim audit made of the referenced Region I project, the records for which are maintained in the Operator's office at 1727 Boulder Street, Denver 11, Colorado.

It was suggested that he send the Spokane office files to you together with a letter outlining the questions which have arisen relative to the costs claimed by the Operator. Then, after you have performed the audit work, you would either telephone him (or the examining engineer, if he so requests) or send the rough draft of your audit to him for concurrence before typing.

This is a simple contract involving a total cost of only $26,986.00 ($10,000.00 of which is independent contract drilling). An authorized recess started September 1, 1957, after an initial three month's (June, July and August) work, for which the Operator claimed $13,355.53 (including $5,090.00 for independent contract drilling). The Field Team, however, accepted a total of only $9,882.66 with disallowances being made in all categories except (1) Independent Contracts.

Please arrange to fit this relatively small audit job into your current schedule.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb 11/8/57

Copy to: Docket
Admr. Reading File
Mr. Weissenborn, Reg. I
Mr. Turner
Mr. Chambers

8623

Form 7
(6)

OFFICIAL FILE COPY

Date	Surname	Code
11/1	Murphy	700
11/1	Ellis	200
11-1	Chambers	500
11/1	GCS	130
"	Johnson	110
11/4	C	220
		200

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

NOV 1 1957

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-41012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed Amendment No. 4 to the subject contract, signed by the Administrator for the Government. Also, enclosed are two extra copies for Field Team use.

The amendment has been prepared with reference to your letter, dated October 23, 1957, and the other information enclosed with it.

If you and the Operator find the proposed amendment in order, please have the individuals listed sign the original and four copies. Thereafter, kindly distribute the copies in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

P. F. Yopes
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

FMMurphy/izm 11-1-57
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

P.S. Amendment No. 4 answers your inquiry in paragraph 3 of your letter of October 23, 1957.

8623

A 7

OFFICIAL FILE COPY

Date	Surname	Code
10/31	GCS	120
"	J Johnson	110
		~~700~~
11/5	C	220
"	~~Fmpy~~	~~700~~

October 31, 1957

Memorandum

To: Administrator

From: George C. Selfridge, Special Assistant

Subject: Docket No. DMEA-4280 (Monazite-Thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Mr. Weissenborn telephoned on October 29, 1957, to inform the writer that the operator was protesting certain voucher deletions and that these could probably be settled by an audit, which would entail a conference between the DMEA project engineer and the auditor.

The operator's office and books are in Denver. Mr. Weissenborn was wondering whether the engineer should go to Denver or whether the Denver auditor should first visit the engineer at Spokane. The writer informed Mr. Weissenborn that possibly in connection with another matter the Denver auditor might visit Spokane in the near future and, if he should, could consult with the project engineer while there. The writer informed Mr. Weissenborn he would discuss the matter with Mr. Chambers. Mr. Weissenborn informed the writer that he would be in Washington some time next week.

George C. Selfridge

George C. Selfridge (GCS)

GCSelfridge/hb (10/31/57)
Copy to: Admr. R. File
Mr. Chambers (Code 800)
GCSelfridge
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 4 1957

DATE	INITIALS	CODE
11/4	C	220
11/4	~~AMM~~	~~700~~

October 30, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are the Government and Audit copies of Amendment No. 2 to the contract.

By copy of this letter, other copies of the amendment are being distributed.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: Finance Office w/copy of encl.
USBM (2)
Alvord

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 1 1957
DATE | INITIAL | CODE
11/1 | C | 220
11/1 | | 800
11-4 | | 700

So. 157 Howard Street
Spokane 4, Washington

October 29, 1957

Mr. Alfred G. Hoyl and Associates
c/o Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
The Meadows
Custer County, Idaho
Contract No. Idm-R1012

Gentlemen:

Reference is made to previous correspondence with respect to the type of dozer used on the project and particularly to our letter of October 22, 1957 in which we told you that an amendment had been requested to authorize the use of the D-6 Caterpillar tractor.

Enclosed are the original and four copies of Amendment No. 3 to the contract. If this amendment meets with your approval, please sign all copies and return all but the copy marked for the Operator. If the amendment does not meet with your approval, please return all copies unsigned with your comments.

If the amendment is satisfactory, as soon as we receive the signed copies from you, we can reinstate your claim for the D-6 work.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: DMEA (2)
USBM (2)
USBM (AD)
Alvord

OFFICIAL FILE COPY

Date	Surname	Code
10/29	File	700

October 29, 1957

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Division of Rare & Misc. Metals

Subject: Justification for Amendment No. 4
Docket No. DMEA-4280 (Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

In recommending the project the Field Team understood that the Operator would supply the jeep pickup and the chainsaw, therefore, these items were placed on a depreciation basis. However, the Operator rented these items, and submitted invoices showing "Jeep pickup truck-fuel, and mileage, July and August, $90.04; and rental for chainsaw at $7.50 per month" (Field Team letter, dated October 23, 1957).

The depreciation costs allowed for these items under the contract are much less than the above figures. The items were necessary to complete the project work in a satisfactory manner, therefore, they should be made allowable under the contract. However, since the Operator agreed with the unit costs when the contract was signed, the same costs should be allowed under a rental basis instead of depreciation; and should not be increased as the Operator requests in his letter, dated September 23, 1957, to the Field Team.

F. M. Murphy

F. M. Murphy

FMMurphy/izm 10-29-57
cc: Mr. Murphy

8623

DRAFT
FMMurphy/izm
10-29-57

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 4

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, as amended, is further amended effective July 1, 1957, as follows:

1. In Exhibit "A" under "Estimated Costs of Project, Actual Costs, Category (4) Operating Equipment, Stages I and II, the subcategories (c) Depreciation are deleted and the items and costs shown under these subcategories are transferred to subcategories (a) Rental.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the amount of any item designated as maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

(list 9 individuals, see Amendment No. 3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

ORIGINAL FILE COPY
DMEA
RECEIVED OCT 25 1957

		CODE
10/25	gb	220
4	[illegible]	700

Air Mail

October 23, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are three copies of a letter dated September 23, 1957 from the subject operator and our reply.

It was our understanding that the operator would supply the jeep pickup and the chainsaw, and therefore it was recommended that an allowance be made to depreciate these items. It now appears that the operator did not provide these two items, as he has charged them as rentals. We cannot determine the actual rental paid for the jeep as the operator's invoice shows "Jeep pickup truck - fuel, and mileage, July and August, $90.04." Rental for the chainsaw has been vouchered at $7.50 per month.

We have advised the operator that we doubt that the amount allowed can be increased. Please advise us if this can be done and we will ask the operator for an invoice showing actual rental cost of the jeep.

If the amount cannot be increased, please prepare an amendment authorizing rental payment for the jeep pickup and the chainsaw at the respective rates now authorized for depreciation.

By Field Team, Region I

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren, Acting Member
U. S. Geological Survey

Enclosures

cc: USBM (2)
USBM (AD)
Alvord
Turner

Official
~~EXTRA~~ COPY
DMEA
RECEIVED OCT 25 1957

DATE	INITIALS	CODE

No. 157 Howard Street
Spokane 4, Washington

October 22, 1957

Air Mail

Mr. Alfred G. Noyl and Associates
c/o Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket DMA-4280 (Monazite-Thorium)
The Meadows property
Custer County, Idaho
Contract No. Ida-E1012

Gentlemen:

This is in reply to your letter of September 23, 1957, regarding certain deletions from your Operator's Monthly Report and Voucher for the period June-July-August 1957.

It is unfortunate that your objections to the various items of cost were not presented before you signed the contract, as we requested in the final paragraph of our letter of September 20, 1956, transmitting the proposed contract to you. After a contract has been signed, the various items of cost become established and seldom can they be changed. In other similar cases we have been advised that "an estimate of any category, subcategory or item that has been indicated as a maximum, cannot be justifiably exceeded." This applies to those items deleted by the Certifying Officer under Category (2) Personal Services and Category (4) Operating Equipment.

Regarding your claim under Category (2) for subsistence, there was neither any provision for subsistence in the contract nor is your claim for subsistence supported by invoices.

Under Category (3) Operating Materials and Supplies.

<u>Tents, etc.</u> Charges for tents, etc., are valid charges under the contract; however, there is a difference in some of your invoices between the total amount including sales tax and the amount on which you claimed 50 percent as chargeable to the project. Since no salvage value was agreed on in the contract, you should voucher the full cost of the tents, etc., and if at the termination

DMEA

of the contract the equipment has salvageable value, you should dispose of it as provided for in Article 9 (c) Disposal of Property.

Steel tape. William Corbett's invoice shows that this item was rented and payment is already included in the amount paid for rental of surveying equipment.

Film. Film is not an operating material. Your plan to use photographs to illustrate your final report is perfectly reasonable and the film could be charged as an engineering and office expense under Category (7) if the pictures taken are used in the report.

Scales. While we agree it would have been impractical to keep the drill waiting at each site until all samples had been dried, weighed, and sacked, and to carry one scale back and forth between sites, it has been our experience in many drilling projects that one scale is sufficient for weighing samples from one drill. The number of samples to be weighed after the drill has moved on is usually small, and by the time weighing is completed and the scales moved to the new site not many samples have accumulated. Our field engineers state that this apparently was the case at The Meadows and they therefore see no necessity for scales at two different locations for weighing samples.

Under Category (4) Operating Equipment.

Jeep Pickup and Chainsaw. We agree that the Jeep Pickup and the Chainsaw could not be rented at the rates stipulated in the contract; however, it was the understanding of our field engineers that these items would be furnished by the operator and therefore in the contract the sums stipulated are for depreciation and not for rental. As a matter of fact, it will require an amendment to the contract to place the Jeep and Chainsaw on a rental basis and we shall request DMEA to make it. We will explain the circumstances, but we doubt that the amount allowed can be increased. Claims for gas, oil, and incidental maintenance are appropriate under Category (3), Operating Materials and Supplies and have been allowed.

Under Category (6) New Buildings, Fixtures and Installations.

In your narrative report you gave several reasons why the D-7 tractor with a D-8 blade was not satisfactory and stated: "Operator Bill Uhrig was given reasonable time to replace this large equipment with a D-6 and was unable to do so. He did bring a D-2, which was too small, resulting in the necessity to hire another contractor." Our field engineer was at the property at the time the first tractor was in operation and reports that although 7 hours' time was charged against the project, 5 hours of this consisted of walking in the dozer and no useful work was accomplished. On the basis of your

narrative and our fieldman's report, we cannot consider the work done by the first tractor as acceptable by the Government.

We have requested an amendment to authorize the D-6 Caterpillar and as soon as we receive it, we will forward it to you for your consideration and signature if it is satisfactory. As soon as a signed amendment is received, we will reinstate your claim for the D-6 work.

Under Category (7) Miscellaneous.

Hauling samples. The attachment to your letter headed "DOCUMENT" has been filed with your other supporting invoices for use by the auditor when he makes an audit of your contract; however, in our opinion, this item is chargeable only if the hauling were done by equipment not provided for elsewhere in the contract. The Government would not pay the haulage charges if the hauling were done by equipment to the cost of which it is already contributing as this would constitute a double charge. If the samples were hauled by a haulage contractor you should present an invoice showing the date of the service, the amount of the charge, and the tonnage hauled.

We will refer your letter of September 23, 1957, to our Washington office for consideration and will have an audit made as soon as possible.

We regret the delay in replying to your letter, but in order to give full and fair consideration to your claims, we found it necessary to devote considerable time to reviewing data in our files.

As soon as we hear from Washington and as soon as we know when an audit can be made, we will advise you.

By Field Team, Region I

cc: DMEA (3) w/3 cys incom.
USGM (2)
USBM(AD)
Turner
Alvord

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

RECEIVED
BUREAU OF MINES
SEP 26 1957
SPOKANE, WASH.

September 23, 1957

U. S. Department of the Interior
Defense Minerals Exploration Administration
1201 N. Division St.
Spokane 2, Washington

Alfred G. Hoyt & Assocs.

Re: Docket No. DMEA-4280 (monazite-thorium)
Contract No. Idm-E1012
Monthly operating report for
June, July and August 1957

Gentlemen,

With regard to your letter of September 12, 1957, concerning deletions from our voucher submitted for the months of June, July and August we wish to make the following comments: These comments are listed below in the same order as the memorandum from the certifying officer.

DMEA

Category (2) Personal Services

Supervision

This work was absolutely essential to the success of the project as it was necessary to co-ordinate the field work with the concentration of the heavy mineral content and with the assay laboratory. We originally included this in our estimate but realize now that it was deleted in our final contract. We request that the contract be amended to include this item.

Labor

The Meadows project was carried on 26 miles from the nearest possible source of housing and board. The access to the area was crude and movement in and out was difficult and slow. It was, therefore, absolutely essential to set up a camp at the project and feed the men ourselves. It would not have been feasible for each man to have maintained his own living and eating accomodations. It was, therefore, necessary for our supervisor to provide for this. It is desired to point out that through this arrangement wages were saved and our overall labor cost was considerably less than the estimate. A savings of approximately $1000.00 was made on labor and the efficiency of the workers was greatly improved. We request that this item be re-instated by an amendment to the contract if necessary.

Category (3) Operating Material & Supplies

Tents, etc.

This equipment was charged to the job at 50% of cost. It is impossible to rent this type of equipment so therefore it had to be purchased. We feel this is an equitable proportion, however, we would be willing to charge the full cost and return the depreciated and used equipment to the Government should they so desire. The final effect of this charge is that we have absorbed 62½% of the original cost of the equipment which we feel is a just proportion.

EXTRA COPY
DMEA
RECEIVED
DATE

Steel Tape

It was necessary for the success of the operation to maintain a surveyors chain on the project at all times. Again, the purchase of this equipment was less expensive than rental. A tape, due to the breaks it receives in use, is an expendable item and we feel should be accepted as an operating material or supply. It is requested that this item be re-instated.

Film

We feel that to prepare an adequate final report, pictures are essential. One picture can convey much more than many pages of writing. This is a minor item but should be recognized as a legitimate operating expense.

2 Scales

Inasmuch as drying and weighing were carried on at two different points during the testing operations, it was necessary to provide a scale for each point. It would have been impractical to have kept the drill waiting at each site until all samples had been dried, weighed and sacked. The drill holes were spaced sufficiently far apart to also have made it impractical to carry one scale back and forth between sites. These scales were inexpensive and minor items and certainly justified.

Paper, leads, legal forms

This item will be included under Miscellaneous in our final voucher.

Category (4) Operating Equipment
Subcategory (c) Depreciation

Jeep Pickup

It is obviously impossible to rent, lease or otherwise obtain a pickup truck for $25.00 a month. Our charge includes operating expense and rental of the vehicle. This is of course a legitimate charge and we request advice as to what heading we should charge this to in our final invoice and if necessary the contract should be amended to include this expense.

Chainsaw

The chainsaw is in the same position as the jeep. Ordinarily chainsaws rent for as much as $25.00 per week. We feel that we were able to obtain a chainsaw for a very modest rental as reflected by our charge of $15.00. We request the contract be amended if necessary to allow for this item or we be authorized to charge it under a different category.

Category (6) New Buildings, Fixtures & Installations
Rental of D-7 Tractor

Both the D-7 and D-6 tractors did an adequate job in the road building and drill site preparation, though it was finally decided the D-6 would be more effective, therefore the D-7 was replaced by the D-6. Please refer to our narrative report for the reason for this change. Both tractors did their respective share of the road work in proportion to the amounts paid each unit. It is to be noted that our actual payment for dozer work was approximately $260.00 less than the maximum estimate allowed by the contract. These charges were certainly legitimate and we request they be re-instated.

Labor

The contract allowed one-half month for road building and a month and one-half for drilling, for the general supervisor and two months at $600.00 per month maximum total. The project actually required over two months in the field including preparatory time. We have charged only the amount authorized and request the full amount be re-instated. Obviously we cannot expect the supervisor to operate in the field, completely removed from facilities for room and board, without furnishing transportation which would be far more expensive than the modest subsistence charged. We request that the subsistence be re-instated and if necessary the contract amended to provide for this.

Category (7) Miscellaneous

Supervisor's Expenses

The supervisor of the project simply could not operate without entailing considerable expense. We were fortunate in having a supervisor who kept these expenses to a minimum. This expense item is justified as it includes all the efforts made to supply, supervise, co-ordinate, acquire personnel, negotiate for equipment, obtain the necessary permission from the Forestry Service for roads, make reports to the DMEA, keep the payroll, etc. All of this work entails a continuing expense. This item should be re-instated and, if necessary, the contract amended to provide for this expense.

Hauling Samples

Attached is an itemized document showing the information requested for re-instatement. Please note that we have effected a considerable savings over the amount allowed by the contract.

We do not understand where any good is accomplished by arbitrarily withholding $500.00 pending resumption of work under Stage II. We have expended our funds to carry out the project and request that this amount be forthcoming. We feel that no purpose is served by this penalty.

In conclusion, we wish to point out that the project was carried on in the allotted time with every effort on our part made to co-operate fully with representatives of the Bureau of Mines and the U.S.G.S. Our expenses in the first stage are going to fall within the estimated total cost with the re-instatement of the items deleted. Our overall cost per foot of drilling is very good. We feel this project was managed and executed at a minimum of expense both to ourselves and the Government. Please give all consideration to our above explanations and we shall be glad to meet with you in person, if necessary, to further explain our position.

Yours very truly,

CONTRACT ENGINEERING CO.

Alfred G. Hoyl

Alfred G. Hoyl

AGH/bp
c.c. Frank R. Komatz

RECEIVED

"DOCUMENT"

Hauling Samples

I hereby certify 12,625 pounds of samples were hauled from our warehouse in Stanley, Idaho to Baumhoff-Marshall Laboratories in Boise, Idaho at a cost of $297.00. The mileage was 260 miles one way, or 520 miles round trip.

signed Frank R. Komatz

Frank R. Komatz

MEA Form-7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/14	Murphy	700
10/14	Ellis	700
10-14	Chamberlin	800
10/14	GCS	130
	Johnson	110
"	Rottenberg	100
10/15	C	220
		700

OCT 15 1957

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Enclosed are the original and four copies of proposed Amendment No. 3, signed by the Administrator for the Government. Also, enclosed are two extra copies for Field Team use.

The amendment eliminates the angle-dozer referred to in your letter of October 8, 1957.

If you and the Operator find the proposed amendment in order, please have the individuals listed sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

Frank D. Lamb
Member, Bureau of Mines

W. P. Williams
Member, Geological Survey

FMMurphy/gla
10-14-57
cc to: Admr.'s Reading File
Operating Committee
THKiilsgaard, Rm. 5224
Mr. Murphy

8623

Government's Copy

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 11 1957
DATE | CODE

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280

AMENDMENT NO. 3

It is agreed this 30th day of September, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, as amended, is further amended effective July 1, 1957, as follows:

$19,989.00

1. In Article 5 of the Contract, figures "~~$26,830.00~~ 26,652.00" and "$20,122.00" are substituted for the figures "$26,986.00," and "$20,240.00," respectively.

2. In Exhibit "A" under "Estimated Costs of Project, Actual Costs (*Indicates maximums), Stage I," Category (6) is revised as follows:

"Category (6) New Buildings, Fixtures, and Installations

1 General Supervisor, ½ month @ $600.00/mo.	$300.00*	
1 Miner, 10 days	270.75	
1 Helper, 10 days	216.60	
Explosives, caps, fuse, drill bits	406.40	
Rental of following equipment:		
105 cubic foot compressor, 2 weeks @ $58.95/wk.	117.90*	
1 jackhammer and drill steel, 2 weeks @ $26.19/wk.	52.38*	
1 D-6 Caterpillar tractor, 51 hours @ $12.00/hr.	612.00	
~~1 angle dozer, 2 weeks @ $88.88/wk.~~	~~177.76*~~	
Payroll taxes and insurance @ 8%	63.00*	~~$2,216.79~~" $2,039.03

Long
Hoffman
Murphy
Ellis
Talbert
Johnson

3. The Estimated Total Cost - Stage I is revised from "$15,048.93" to "~~$14,892.33~~." 14,714.57

4. The Summary at the end of the estimate is revised as follows:

"S U M M A R Y

"Estimated Total Cost - Stage I $~~14,892.33~~ $14,714.57
Estimated Total Cost - Stage II 11,937.07

Estimated Total Cost of Project (rounded) ~~$26,830.00~~ 26,652.00

Government Participation @ 75% ~~(rounded)~~ ~~$20,122.00~~ 19,989.00"

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C J Mitterdorf
Administrator, Defense Minerals Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By _____
Alfred G. Hoyl

By _____
Richard D. Moody

By _____
T. F. Adams

By _____
A. B. Manning

By _____
Douglas V. Watrous

By _____
Arthur G. Wood

By _____
Stanfurd L. Jackson

By _____
Frank R. Komatz

By _____
Charles J. Cerf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 11 1957

DATE	INITIALS	CODE
10/11	C	220
10/4	Murphy	700

October 8, 1957

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Returned herewith are all copies of proposed Amendment No. 3 for correction as follows:

Under Category (6), delete

1 D-6 Caterpillar tractor 51 hours @ $12.00/hr.	612.00
1 angle dozer, 2 weeks @ $88.88/wk.	177.76*

Substitute

1 D-6 Caterpillar tractor with dozer 51 hours @ $12.00/hr.	612.00

The total of Category 6, Stage I, and Estimated Total Cost should be changed accordingly.

We are sorry that our letter to you of September 11, 1957 was not clearer on this matter.

By Field Team, Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Thomas E. Howard

Thomas E. Howard, Acting Member
U. S. Bureau of Mines

Enclosures

cc: USGS (2)
USBM (AD)

ACTION ON INTE[illegible]
OR FINAL FIELD TEA[illegible] REPORT

Date 10/7/57

Referred to:

1. ~~Mr. Mistovich~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. [illegible] Division
6. Docket Control Mails and Files
7. 700 ~~Murphy~~

Note comments in report regarding:

1. Check docket

2. Stage I completed; recess until spring 1958 requested.

3.

4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

None

Robert E. Adams

gb

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

September 24, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 7 1957

DATE	INITIALS	CODE
10/7	B	220
7	[illegible]	160
10/8	Murphy	100

MEMORANDUM

To: DMEA Field Team, Region I

From: William M. Romischer, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-4280 (monazite-thorium), Alfred G. Hoyl and Asso., The Meadows, Custer County, Idaho, Contract No. Idm-E1012.

The property was visited on September 16 and 17. No one was present and drilling equipment had been removed. ?

Nineteen drill hole locations were found.

William M. Romischer

William M. Romischer

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Romischer

DMEA Field Team, Region I

November 20, 1957

DMEA Certifying Officer, Region I

DATE		
11/25		110
11		700

Monthly operating report for September 1957
Contract No. Idm-1012
DMEA-4280

The subject operating report has been processed and forwarded to the Disbursing Officer for payment.

Deletions in the amount of $131.91 have been made as follows:

Mountain States Telephone and Telegraph (It is the opinion of the Field Team this charge was not necessary during the month of September inasmuch as Stage I work was completed and all personnel had left the project by the end of August. In addition, the claim was not supported).	$ 31.91
Engineering and Accounting Office Expenses (It is believed this amount is excessive in that Stage I work was completed by the end of August; also, the claim was not supported in any manner.	100.00

Dorothy D. Long

cc: DMEA (2)
USGS (2)
Contract Admin. & Audit Div. (2)
WMR
AD

[redacted]-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED NOV 25 1957 DMEA

Month of September, 1957 Docket No. DMEA 4260 Contract No. [redacted] 012
Operator's Name Alfred G. Hoyl and Associates Minerals Thorium-Monazite
Address 1727 Boulder St., Denver 11, Colorado Columbium-Tantalum
Contract Amount, $ 28,980.00 Government Participation: 75 % Amount, $ 23,240.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: Short Form						
Drilling		5,090.00	5,090.00		5090.00	5090.00
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor		1,950.25	1,950.25		1626.25	1626.25
Supervision		900.00	900.00		900.00	900.00
Technical Services		600.00	600.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Freight on Supplies Screens, Sums, etc.	30.57	697.72	726.29	28.57	90.12	345.69
(4) Operating Equipment:						
Rental					155.40	155.40
Purchase						
Depreciation		206.04	206.04			
(5) ~~Initial Rehabilitation and Repairs~~					582.00	582.00
(6) New Bldgs., Improvements, etc.		1768.56	1,768.56			
(7) Miscellaneous:						
Repairs to Equipment						
Determination of Weight ~~Sampling and Analysis~~					773.23	773.23
Payroll Taxes					248.66	248.66
Liability Insurance						
See Schedule Analysis	950.00		950.00	950.00	—	950.00
See Schedule	131.01	2,158.86	2,288.87			
(8) Contingencies (specify): accounting service					200.00	200.00
TOTALS	1,020.48	13,356.56	14,476.01	988.57	9882.66	10871.23

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 11-10-57 *Payee Alfred G. Hoyl and Associates

Per Frank R. Kometz Title Project Supervisor

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 741.43

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 11/20/57 Vou. No. 2095

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E1012 in accordance with the terms of the contract.

Signature /s/ Stephen W. Goldak Title Mining Engr. Date 11-13-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Nov. 14, 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6. (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

MF-104A
(1 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED NOV 25 1957 D.M.E.A.

Month of September 195 7 Docket No. DMEA 4280 Contract No. IDI 020
Operator's Name Alfred G. Hoyl and Associates Minerals Thorium-Monazite
Address 1727 Boulder St., Denver 11, Colorado Columbium-Tantalum

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn				5,080.00				
Auger Supervision				900.00				
Stripping Sample Labor				2,580.28				
Trenching Category 4				206.04				
Test Pits Category 7		1,001.91		3,250.97				
Roads and Trails								
TOTAL DISTRIBUTED COSTS							TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased		83.57		726.29				
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.				1,765.56				
TOTAL COSTS		1,020.48		14,476.01				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 9/30/57 Operator Alfred G. Hoyl & Associates

Per [signature] Title Project-Supervisor

REMARKS: Represents first Stage Portion of Contract only with the exception of $180.00 all funds in second stage for sample sacks transferred to first stage since no allowances were shown under first stage for sample sacks needed and purchased for this contract.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

11-13-57

/s/ Stephen W. Zoldok
Mining Eng.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

BIG MEADOWS PROJECT
ALFRED G. HOYL AND ASSOCIATES
CUSTER COUNTY, IDA.

NARRATIVE

Field Work

Drilling of test hole work, field engineering work, field supervision completed per previous report submitted for month of September, 1957.

Engineering Work

Coordinating work of completing concentration of samples with Baumhoff-Marshall Laboratories of Boise, Idaho and transferring one-half of concentrates to U. S. Government and the shippment of one-half of concentrates to Rare Metals Corporation of America at Murray, Utah, for chemical analysis and the determination of weights.

OFFICE WORK

Preparation of initial report for the month of August, 1957 to the U. S. Government and for Alfred G. Hoyl and Associates. Payment of bills outstanding for the Meadows project. Correspondence with DMEA office at Spokane, Washington regarding questions of expenses and requests for the amendment of the contract to take care of items inadvertently omitted from the original contract that were necessary in the accomplishment of the testing program.

EA Form 7
12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/26	Murphy	700
9/26	Ellis	700
9/27	Fallert	800
9/30	[illegible]	130
"	[illegible]	110
"	Whitenberg	100
10/1	B	220
		700

SEP 30 1957

Mr. A. B. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed Amendment No. 3, signed by the Administrator for the Government. Also, enclosed are two extra copies for Field Team use.

If you and the Operator find the proposed amendment in order, please have the individuals listed sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

Sincerely yours,

George C. Selfridge
(By esf)
Chairman, Operating Committee

Enclosures

APPROVED:

Frank D. Lamb
(By esf)
Member, Bureau of Mines

W. P. Williams
(By esf)
Member, Geological Survey

FMMurphy/izm 9-26-57
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/26	Talbert	800
9/27	B	220
"	~~FMM~~	700

Mrs. Dorothy F. Long
Authorized Certifying Officer
1201 North Division Street
Spokane 2, Washington

SEP 26 1957

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl & Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mrs. Long:

Your memorandum dated September 12, 1957, to the DMEA Field Team, Region I, explaining the disallowances and suspensions made in the approval for payment of the referenced Operator's June-July-August 1957 MF-104, has been noted. Further information on some of these items would be appreciated.

As the fourth item under Category (3) a deletion of $13.66 is indicated with the explanation that one scale is approved for payment and a justification is necessary if additional scales are needed. The amount of this deletion does not agree with either of the amounts of $16.85 and $9.21 for purchases of scales on July 10, 1957, and July 15, 1957, respectively, as listed in the Operator's schedule attached to the MF-104. (Possibly the first amount is $18.85, as our copy of the schedule is indistinct; however, if this is so, the total for the category is incorrect.)

As the fifth item under Category (3) a deletion of $3.27 is indicated as a duplication of charges under Category (7), Engineering and Accounting Office Expenses. This amount apparently consists of listings in the Operator's schedule of labels and leads $0.94, paper $0.48, payroll records $1.35, and legal forms and paper $0.50. The question arises as to why charges, as listed by the Operator, of $7.89 for section paper and $2.68 for a rubber stamp were not also deleted for the same reason.

In connection with this Category (7) item of Engineering and Accounting Office Expenses, it is noted that you have allowed the full amount claimed by the Operator, i. e., 2 months @ $100.00, a total of $200.00, which is double the estimate stated in Exhibit "A" of the contract. While the contract estimate is not a "maximum", the question arises as to whether an amount twice such estimate may be

8623

considered reasonable and necessary. The Field Team should specifically approve as reasonable and necessary any costs which are so greatly in excess of estimates.

In connection with this same item it is noted that actual costs for office expenses were an even $100.00 a month, although the costs presumably included such odd amounts as stated in the third paragraph above. The $50.00 a month shown in Exhibit "A" is merely a rounded estimate and not an allowance in lieu of the actual office expenses, and must be supported by documentary evidence.

Under Category (7) the Operator's claim of $297.00 for hauling samples has been suspended for documentation showing "number of tons and number of miles hauled." This information is not necessarily required if the costs are otherwise properly supported by the haulage contractor's invoice or a certified copy thereof. In "Exhibit A" the figures of "10 tons 485 miles @ $0.10/ton/mi.", as well as the total of $485.00 are only estimates and not "maximums". Possibly the haulage was contracted on a job basis, or otherwise, rather than per ton mile.

The total of all the deletions listed in your memorandum is $3,471.87, whereas the difference between the claimed ($13,355.53) and approved ($9,882.66) totals shown on the MF-104 is $3,472.87. This discrepancy of $1.00 is in Category (3), for which your memorandum indicates deletions aggregating $379.60, whereas the difference between the claimed ($687.72) and approved ($307.12) totals for this category amounts to $380.60.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb
September 25, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers
Mr. Turner

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 30 1957
DATE | INITIAL | CODE
9-30 | C | 220
9/30 | | 800
EMM | | ~~700~~

So. 157 Howard Street
Spokane 4, Washington

September 24, 1957

Mr. Alfred G. Hoyl
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Hoyl:

As requested in your letter of August 29, 1957, our Washington office has prepared Amendment No. 2, the original and four copies of which are enclosed. If this amendment meets with your approval would you please sign all copies and return all but the copy marked for the Operator.

If the amendment does not meet with your approval, please return all copies with your comments.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: DMEA (2)
USBM (2)
USBM (AD)
Alvord

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 26 1957

DATE	INITIALS	CODE
9/26	C	220
9/26	[illegible]	800
~~11~~	~~[illegible]~~	~~700~~

1201 N. Division St.
Spokane 2, Washington

September 12, 1957

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Contract No. Idm-E1012
Monthly operating report for
June, July and August 1957

Gentlemen:

This is to inform you the subject voucher could not be paid in the full amount claimed.

The deletions are explained in the attached copy of a memorandum to the Field Team from the Certifying Officer, Region I.

By Field Team, Region I

Donald R. MacLaren
Alternate Act. Exec. Officer
U. S. Geological Survey

Thomas E. Howard, Acting Member
U. S. Bureau of Mines

cc: DMEA (2)
USGS (2)

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 26 1957
DATE | INITIALS | CODE

DMEA Field Team, Region I

September 12, 1957

DMEA Certifying Officer, Region I

Monthly operating report for June, July and August 1957
Contract No. Idm-E1012

The subject operating report has been processed and forwarded to the Disbursing Officer for payment.

Deletions made and reasons for same are listed below:

Category (2) Personal Services

Supervision

2 Consulting Engineers - 6 days @ $100.00/day — $ 600.00
(no Consultants are authorized in the contract)

Labor

Subsistence, 108 man days @ $3.00/day — 324.00
(There is no provision for subsistence under the contract)

Category (3) Operating Material & Supplies

Tents, sample bags, mattresses, sleeping bags, etc. — 322.00 ?
(a written statement giving reason and basis for prorating amounts).

Steel Tape — 37.97 ✓
(included in Category (4) Operating Equipment - Surveying Equipment)

Film — 2.70 ✓
(not considered necessary to operation)

2 Scales — 13.66 ✓
(1 scale approved for payment - justification necessary if additional scales are needed)

Paper, leads, legal forms — 3.27 ✓
(included in Category 7, Miscellaneous - Accounting Expenses)

Category (4) Operating Equipment
Subcategory (c) Depreciation

Jeep Pickup (this exceeded the maximum of 2 mos. @ $25.00/mo. $50.00 maximum has been approved)	$ 40.04
Chainsaw (this exceeded the maximum of 2 mos. @ $2.70/mo. $5.40 maximum has been approved).	9.60

Category (6) New Buildings, Fixtures & Installations

Rental of D-7 Tractor (the work performed is not considered acceptable by the Government)	75.00
Road Building with D-6 Cat (will be reinstated when Amendment is written)	612.00
Labor (included $300.00 previously claimed as General Supervisor; $150.00 subsistence not authorized under contract)	450.00

Category (7) Miscellaneous

Supervisor's Expenses (not allowable under the contract)	684.63
Hauling Samples (this item must be supported by document showing number of tons and number of miles hauled. Upon receipt of such information this item may be reinstated).	297.00
	$3,471.87

We are withholding an amount of $500.00 pending resumption of work under Stage II.

Dorothy F. Long

cc: DMEA (2)
USGS (2)

Form 7
(5)

OFFICIAL FILE COPY

Date.	Surname	Code
9-20	Ellis	700

September 20, 1957

Memorandum

To: The File

From: F. M. Murphy, Mining Engineer
Div. of Rare and Misc. Metals

Subject: Justification for Amendment No. 3
Docket No. DMEA-4280 (Uranium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

In a memorandum, dated July 12, 1957, Dean C. Holt reported to the Field Team, Region I, that on his visit to the property on July 9, 1957, the project supervisor Mr. Frank R. Komatz reported that the D-7 Caterpillar contracted from Uhrig Construction Co., was unable to build the access road because of the condition of the machine and an inexperienced operator.

On July 9, Mr. Komatz contracted a new D-6 bulldozer with an angle blade from Robert Stefanich of Hailey, Idaho, who completed the work in a satisfactory manner.

In a letter, dated August 12, 1957, the Operating Committee advised Mr. Weissenborn that in view of the change in bulldozer from the size specified in the contract, an amendment would be required. The Field Team was requested to submit its recommendations, cost, etc. This information was submitted in a letter, dated September 11, 1957.

F M Murphy

F. M. Murphy

FMMurphy/izm

8623

DRAFT
FMMurphy/izm
9-20 57

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA 4280

AMENDMENT NO. 3

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Alfred G. Hoyl and Associates, that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, is further amended effective July 1, 1957 as follows:

In Exhibit "A," Estimated Costs of Project, Stage I, Category (6) under Rental of following equipment: (page 4), the item - 1) 1 - D-8 Caterpillar tractor (or equivalent)

2 weeks @ $384.30/week $768.60* is deleted and replaced by the following:

1 - D-6 Caterpillar tractor

51 hours @ $12.00/hr. $612.00;

- 2) the subtotal for Category (6) is revised from $2,373.29 to $2,216.69
- 3) The Estimated Total Cost Stage I as shown on page 4 and in the SUMMARY (page 6) is revised from $15,048.93 to $14,892.33;
- 4) The Estimated Total Cost of Project and Government Participation @ 75% (rounded) as shown in the SUMMARY (page 6) are revised from $26,986.00 to $26,830.00 (rounded) and from $20,240.00 to $20,122.00 (rounded) respectively, with a corresponding change in Article 5 of the Contract to reflect these new figures.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By _____
Alfred G. Hoyl

By _____
Richard D. Moody

By _____
T. F. Adams

By _____
A. B. Manning

By _____
Douglas V. Watrous

By _____
Arthur G. Wood

By _____
Frank R. Komatz

By _____
Stanfurd L. Jackson

By _____
Charles J. Cerf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

OFFICIAL FILE COPY DMEA RECEIVED SEP 16 1957		
DATE	INITIALS	CODE
9-16	C	220
		130
"	FMM	700

September 11, 1957

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Asso.
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

The Operator under the referenced contract used a D-6 cat (Serial No. 9U 24137) at a cost (fully operated) of $12.00 per hour in lieu of a D-8 at $473.18 per week as specified in the contract. The Operator's billing was 51 hours @ $12.00/hr. or $612.00.

A series 9U caterpillar dozer rents for $13.36 to $14.49 per hour, fully operated. We recommend that an amendment to the contract be written, authorizing 51 hours of dozing with a D-6 dozer at $12.00 per hour fully operated in lieu of the D-8 as specified in the contract.

By Field Team, Region I

D.R. MacLaren

D. R. MacLaren, Alt. Acting Exec. Officer
U. S. Geological Survey

Thomas E. Howard

Thomas E. Howard, Acting Member
U. S. Bureau of Mines

cc: USGS (2)
USBM (AD)

PHONE GRAND 7-6394

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET
DENVER 11, COLORADO

RECEIVED
BUREAU OF MINES
SEP 6 - 1957
SPOKANE, WASH.

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 16 1957

DATE	INITIALS	CODE
9/16	C	220
9/16	[illegible]	800
9/17	FMM	700

September 4, 1957

United States Department of the Interior
~~Defense Minerals~~ Exploration Administration
1201 N. Division St.
Spokane 2, Washington

Attention: Mr. A. E. Weissenborn

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Assoc.
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Weissenborn,

In reply to your letter of August 23rd, we have already submitted our voucher for the field work completed by Frank Komats and the sample preparation done by Baumhoff-Marshall.

It will probably be several weeks before we receive the assay results from Rare Metals Corp. We shall then amplify our narrative report so that it could serve as a final report should it be decided not to continue with stage 2.

We have written for the serial number identification of the D6 bulldozer used on the project and will forward this information to you as soon as received.

Yours very truly,

CONTRACT ENGINEERING CO.

Alfred G. Hoyl

AGH/tp

Form 7
-56)

OFFICIAL FILE COPY

Date	Surname	Code
9-17	Murphy	700
9-17	Ellis	700
9/17	Talbut	800
9/18	GCS	130
9/4	Johnson	110
9/19	C	220
		700

SEP 18 1957

Mr. A. B. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280
(Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

With reference to your memorandum, dated September 3, 1957, enclosed are the original and four copies of a proposed Amendment No. 2 signed by the Acting Administrator for the Government. Also, enclosed are two extra copies for Field Team use.

If you and the Operator find the proposed amendment in order, please have the individuals listed sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures

APPROVED:

P. F. Yopes
Member, Bureau of Mines (JHB)

N. E. Nelson
Member, Geological Survey (JHB)

FMMurphy/izm 9-17-57
cc: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

Form 7
(56)

OFFICIAL FILE COPY

Date	Surname	Code
9-17	Murphy	700
"	Ellis	700

September 17, 1957

Memorandum

To: The Files

From: F. M. Murphy, Mining Engineer
Div. of Rare & Misc. Metals

Subject: Justification for Amendment No. 2
Docket No. DMEA-4280 (Monazite-thorium)
Contract No. Idm-E1012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Drilling and sampling of the 19 holes allowed under Stage I of the contract was completed late in August, 1957.

Testing of the samples will not be completed in time to evaluate the results of Stage I drilling before the property becomes inaccessible because of weather conditions. Therefore, it is recommended that Amendment No. 2, allowing a recess period during the winter months be approved.

If the results of Stage I drilling indicates the project area has favorable possibilities, the Field Team will approve Stage II drilling, otherwise, the contract will be terminated.

F M Murphy

F. M. Murphy

FMMurphy/izm 9-17-57

cc: Mr. Murphy

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY DMEA RECEIVED SEP 6 1957		
DATE	INITIALS	CODE
9-6	C	220
		130
"	~~CMA~~	~~100~~

September 3, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are three copies of a letter dated August 29, 1957 from Mr. Alfred G. Hoyl, operator of the subject contract, requesting that the contract be recessed.

By the time all samples from the holes completed under Stage I are assayed and an evaluation of the results of the work can be made it will be too late in the year to start Stage II drilling.

Should the evaluation indicate that Stage II work is not justified we will recommend that the contract be terminated. In the meantime we recommend that a recess be authorized to start September 1, 1957 and to terminate on or before July 1, 1958.

By Field Team, Region I

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

DMEA (3)

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 6 1957

DATE	INITIALS	CODE

CONTRACT ENGINEERING COMPANY
Engineering, Development, Research in the Mineral and Construction Industries
1727 BOULDER STREET
DENVER 11, COLORADO

[illegible]

[illegible] States Department of the Interior
[illegible] Minerals Exploration [illegible]
[illegible] Howard Street
[illegible] Washington

Attention: Mr. [illegible] W. Dolan

[illegible] (Mineral [illegible]
[illegible] Area
[illegible] Street
[illegible] Idaho

[illegible] Dolan:

[illegible] by telephone [illegible] from Boise, [illegible] we have temporarily [illegible] sampling [illegible] the Meadows [illegible] obtain [illegible] results of the [illegible] of [illegible]

We feel that no further work [illegible] decision [illegible] is to whether [illegible] we have [illegible] opportunity to [illegible] Stage 1.

We therefore request that the [illegible] Meadows be recessed [illegible] both parties involved and our group [illegible] to give full [illegible] to the [illegible]

[illegible]

CONTRACT ENGINEERING CO.

Alfred [illegible]

AHH/bp

Air mail

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

JUNE, JULY AND

Month of AUGUST, 1957 Docket No. DMEA 4280 Contract No. IDM-1012

Operator's Name Alfred G. Hoyl & Associates Minerals Thorium-Monazite-Columbium-Tantalum

Address 1727 Boulder Street - Denver 11, Colorado

Contract Amount, $ 26,986.00 Government Participation: 75 % Amount, $ 20,240.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short~~ Form Contracts:						
Drilling	5090.00		5090.00	5090.00	—	5090.00
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1950.25		1950.25	1626.25	—	1626.25
Supervision	900.00		900.00	900.00	—	900.00
Technical Services	600.00		600.00	—	—	—
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Screens-Pans-etc	687.72		687.72	307.12	—	307.12
(4) Operating Equipment:						
Rental	205.04		205.04	155.40	—	155.40
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs	1765.56		1765.56	582.00	—	582.00
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous: See Schedule	2156.96		2156.96			
Repairs to Equipment						
~~Sampling and Analysis~~ Determination of Weight				773.23	—	773.23
Payroll Taxes				248.66	—	248.66
Liability Insurance						
Accounting Expense				200.00	—	200.00
(8) Contingencies (specify):						
TOTALS	13355.53		13355.53	9882.66	—	9882.66

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 8/31/57 *Payee Alfred G. Hoyl & Associates

Per Frank R. Kornatz Title Supervisor-Associate

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 6912.00

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 9/13/57 Vou. No. 2043

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1012 in accordance with the terms of the contract.

Signature /s/ William M. Kowieler Title Mining Eng. Date 9/6/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Donald R. MacLaren Title alternate Acting Exec. Officer Date 9/13/57

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-101A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED SEP 20 1957 D.M.E.A.

JUNE, JULY AND
Month of AUGUST 1957 Docket No. DMEA 4230 Contract No. DMEA/012
Operator's Name Alfred G. Hoyl & Associates Minerals Thorium-Monazite-
Address 1727 Boulder Street - Denver 11, Colorado Columbium-Tantalum

OPERATION	UNIT	COSTS THIS MONTH*	UNITS THIS MONTH	COSTS TO DATE*	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT* Units	AUTHORIZED BY CONTRACT* Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn		5090.00	978	5090.00	978	5.2045	1000	5,250.00
Auger								
Supervision		900.00		900.00				900.00
Stripping								
Sample Labor		2550.25		2550.25				2,924.10
Trenching								
Category 4		205.04		205.04				155.40
Test Pits								
Category 7		2156.96		2156.96				2,890.92
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		687.72		687.72				735.12
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		1765.56		1765.56				2,373.39
TOTAL COSTS		13355.53		13355.53				15,428.93

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 8/31/57 Operator Alfred G. Hoyl & Associated

Per Frank R. Komatz Title Supervisor & Associate

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

* Represents first Stage Portion of Contract only with exception of $180.00 allowance in Second Stage for Sample Sacks transferred to first stage since no allowances were shown under first stage for sample sacks needed, and purchased for this contract.

(Instructions on reverse)

(For Government use only)

/s/ William M. Kemicker

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 20 1957
DATE | INITIALS | CODE

BIG MEADOWS PROJECT
ALFRED G. HOYL AND ASSOCIATES
CUSTER COUNTY, IDA.

NARRATIVE REPORT

Pursuant to DMEA Contract Docket 4280 Frank R. Komatz, Associate proceeded to Custer County, Idaho to negotiate drilling contract, procure the necessary road building equipment and labor force needed to complete road, sample, set up camp in the Big Meadow. Beginning date was June 28, 1957.

The only difficulty encountered was necessity to change the first bull dozer, Caterpillar tractor owned by Bill Uhrig. This equipment was too big and to have continued this equipment on the road would have resulted in much greater cost in this contract for the following reasons:

1. The springs were running freely and the large cat was tearing up more of the spring bottoms than it was repairing.
2. The D-8 blade was making too large a roadway. To minimize the necessity of moving dead timber with a smaller blade saved us money. Dead trees falling sometime make an endless job in removing them from the roadway.
3. Operator, Bill Uhrig was given reasonable time to replace this large equipment with a D-6 and was unable to do so. He did bring a D-2, which was too small, resulting in the necessity to hire another contractor.

Signed proper authority with Forest Service to build necessary roads in Pigtail Creek and route in Meadows. Written authority in our Denver Office.

Several drilling contractors were contacted before final decision to hire a contractor experienced in Bureau of Mines churn drilling--Russell Cowe, Boise. Due to inability to move in some several days elapsed after road was completed gave us an opportunity to remove large boulders from roadway and further improve and dry up the prevalent springs that made travel rather hazardous during our early entrance and travel on the roadway. Drilling began on July 22, 1957.

Visitors to our area were:

Dean Holt -	USBM	7-9-57
James McKee	USBM	7-9-57
Bill Romisher	USBM	7-10-57
Storch & Fiscus		7-27-57
Alvard	USGS	7-29-57

Labor problem seemed to work itself out slowly when labor force was advised food would be furnished, but an allowance would be made against their pay to handle food costs. This allowance was determined to be at $3.00 per day to insure adequate and suitable food would be available at all times.

Arrangements were made with Baumhoff-Marshall for concentration and weights of our dried samples. Instructions were sent from Denver. Rare Metals of Murrary Utah were engaged to do the analysis of concentrations as sent from Baumhoff-Marshall.

Extreme care was necessary to move drill rig from one location to another and across Pigtail Creek and Warm Srpring. We were fortunate in not having any unusual problems after making all crossings safe with cribbing and logging all crossings. Good weather minimized our requirements to do any additional road work with the exception we did drag the 4 miles of road with an crudely constructed drag to fill in some of the rougher bad holes.

Our weekly reports and transmittal of logs complete this narrative report.

Frank R. Komatz

Form MF-104

OPERATORS MONTHLY REPORT

Alfred G. Hoyl & Associates
1727 Boulder Street
Denver, Colorado

Docket No. DMEA 4280

Contract No Idm 012
Minerals -Thorium-Monazite
Columbium-Tantalum

Contract Amount $26,986.00 Government Participation 75% $ 20,240.00

STAGE I

Category (1) Independent Contracts

Russel Cowe Drilling Company
Boise, Idaho

978 Feet Churn Drilling @ $5.2045/Ft $ 5,090.00

RECEIVED 20 D.M.E.A.

Category (2) Personal Services

Supervision

1 General Supervisor - Frank Komatz
1½ Months @ $600.00 per Month $ 900.00

2 Consulting Engineers
6 Days @ $100.00 per day 600.00
Meadows-Consultation
Baumhoff-Marshall Consultation
Rare Metals Lab Consultation
Alfred G. Hoyl & Richard Moody

Labor

3 Samplers during drilling & Testing
Direct Labor Paid $1,626.25
108 Man Days @ $3.00
per day subsistance 324.00 1,950.25 3,450.25

Category (3) Operating Materials and Supplies

Western Steele Manufacturing Co
Invoice # 42271 dtd 7/26/57

6 Steel boxes 15 Guage formed & Welded 153.30

Boise Blue Print Co
Invoice # D25566 dtd 8/9/57
x Section Paper 7.89

United Electronics Wholesale
Invoice # E 14858
Batteries for Scintillator 7.62

Springer Hardware
dtd 7/16/57
Hoe-Shovel-Scraper-Brush-Twine 10.05

OPERATORS MONTHLY REPORT

Docket No DMEA 4280
(Continued)
Page #2

Category (3) Operating Materials & Supplies

Norco Welding Equipment - Boise Invoice No 10873 dtd 7/19/57 2 Pair Welding Gloves		3.40
Smith Lumber Company - dtd 7/19/57 Lumber for camp		19.96
Allied Builders Supply dtd 7/17/57 Nails & Lumber		4.30
Jenson Oil Co dtd 8/7/57 Starter for chain saw		1.75
Allied Builders Supply dtd 8/7/57 Axe Handle		1.60
The Outlet Stores dtd 7/8/57 Mosquito Nets-Lantern-Mantles		18.17
Cronkhite Bosanko dtd 7/10/57 Scale		16.86
Colorado Tent & Awning Co Dtd 6/27/57 Tent-Sample Sacks-Mattress-Pump Tarp-Sleep Bag	$210.05	
50% Charged to Meadows Project		108.18
Colorado Tent & Awning Co dtd 6/29/57 Tent-Tap-Mattress-Pump-Sleep bag 100 Sample Bags	$250.84	
50% charged to Meadows Proj		125.42
Colorado Tent & Awning Co dtd 6/29/57 Bag for tent-50Sample Sacks	$ 31.34	
50% charged to Meadows Project		15.67
Sachs-Lawlor dtd 6/29/57 Rubber Stamp		2.68

Category (3) Operating Materials & Supplies

Skyline Engineering Supply Co dtd 7/8/57				
Steel Tape			37.97	
Cronkhite-Bosanko Supply Co dtd 7/15/57				
Bathroom Scale			9.21	
Colorado Tent & Awning dtd 7/29/57				
Sample Bags		$145.46	~~145.46~~	
50% Charged to Meadows Project			72.73	
Hendrie & Bolthoff Co dtd 8/1/57				
Screen			17.16	
Busson's Hardware dtd 7/19/57				
Tubs-bucket-Ax-Twine-			25.92	
Stanley Mercantile				
film-Color		1.85		
Gregory Store				
film-black-white		.85		
grease pencils		.75		
Labels-leads		.94		
First Aid		.35		
Golden Rule Store				
Paper		.48	5.22	
Francis Jones, Inc. Hailey, Ida. 7/6/57				
Stove-Nails-Lock			14.95	
Francis Jones, Inc 8/5/57				
Nails-Molding for screen			1.07	
D. Damer				
Payroll records			1.35	
Standard Printing Co 7/19/57				
Legal forms-paper			.50	
Utoco				
Chain Saw Oil		.80		
Gas Can		1.50		
General Petroleum				
Chain Saw Gas		2.50	4.80	687.72

Category (4) Operating Material Equipment

(a) Rental			
William Corbett			
Surveying Equipment, 2 Months @ $50.00		100.00	
Shando Lambert			
Jeep Pick-Up Truck-Fuel & Mileage Months of July-August		90.04	

Category (4) Operating Equipment

(a) Rental

1 26" Chainsaw 2 Months @ $7.50 per Mo	15.00	205.04

Category (6) New Buildings, Fixtures & Installations

General Supervisor ½ Month @ $600.00 Mo		300.00
Mine Labor Payroll See Certified Copy Attached	778.56	
Uhrig Bros Construction Co D-7 Caterpillar Tractor with D-8 angle Blade. Tractor was too big with dead timber, making expense apparent to exceed amount a D-6 tractor. After making 1/2 mile road from Aztec Mine, Tractor was released for smaller tractor.	75.00	
Robert G. Stefanich Building road from point of D-8 tractor ending to Meadow. Building trails, culverts, widing roadway and extending trails. Building crossings over Pigtail Creek and Warm Springs Creeks	612.00	1465.56

Category (7) Miscellaneous

Engineering and Accounting office 2 Months @ 100.00	200.00	
Payroll Taxes and Insurance $2,526.25 @ 8% See Certified Copy of Payroll	202.10	
Glenn Brewer Hauling Samples from Stanley-Boise	242.00	
Andrew William Asp Hauling Samples from Stanley-Boise	35.00	
Cecil Broomfield Hauling Samples from Stanley-Boise	20.00	
Baumhoff-Marshall Concentration of Samples & Determination of Weights	773.23	
Frank R. Komatz-Supervisor Expenses Mountain States Tel & Tel 63.80 Hotel & Meals 235.95	299.75	
Mileage-Denver-Stanley-Denver	384.88	2156.96
Total Cost Stage I to August 31, 1957		$13355.53
Government Participation (75%)		$10016.65

EXTRA COPY
D M E A
RECEIVED SEP 20 1957
DATE ENTRIES CODE

DMEA Field Team, Region I

DMEA Certifying Officer, Region I

Monthly operating report for June, July and August 1957
Contract No. Idm-81012

The subject operating report has been processed and forwarded to the Disbursing Officer for payment.

Deletions made and reasons for same are listed below:

Category (2) Personal Services

Supervision

2 Consulting Engineers - 6 days @ $100.00/day (no Consultants are authorized in the contract)	$ 600.00

Labor

Subsistence, 108 man days @ $3.00/day (There is no provision for subsistence under the contract)	324.00

Category (3) Operating Material & Supplies

Tents, sample bags, mattresses, sleeping bags, etc. (a written statement giving reason and basis for pro-rating amounts).	322.00
Steel Tape (included in Category (4) Operating Equipment - Surveying Equipment)	37.97
Film (not considered necessary to operation)	2.70
2 Scales (1 scale approved for payment - justification necessary if additional scales are needed)	13.66
Paper, leads, legal forms (included in Category 7, Miscellaneous - Accounting Expenses)	3.27

Category (4) Operating Equipment
Subcategory (c) Depreciation

Jeep Pickup (this exceeded the maximum of 2 mos. @ $25.00/mo. $50.00 maximum has been approved)	$ 40.04
Chainsaw (this exceeded the maximum of 2 mos. @ $2.70/mo. $5.40 maximum has been approved).	9.60

Category (6) New Buildings, Fixtures & Installations

Rental of D-7 Tractor (the work performed is not considered acceptable by the Government)	75.00
Road Building with D-6 Cat (will be reinstated when Amendment is written)	612.00
Labor (included $300.00 previously claimed as General Supervisor; $150.00 subsistence not authorized under contract)	450.00

Category (7) Miscellaneous

Supervisor's Expenses (not allowable under the contract)	684.63
Hauling Samples (this item must be supported by document showing number of tons and number of miles hauled. Upon receipt of such information this item may be reinstated).	297.00
	$3,471.87

We are withholding an amount of $500.00 pending resumption of work under Stage II.

Dorothy F. Long

cc: DMEA (2)
USGS (2)
Contract Admin. & Audit Div.

So. 157 Howard Street
Spokane 4, Washington

August 30, 1957

OFFICIAL FILE COPY
DATE
RECEIVED
DATE | INITIALS
9/3 | G | 220
9/3 | WW | 800
~~9/4 | FMM | 700~~

Mr. Frank R. Komatz
229 Midland Savings Building
Denver 2, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Komatz:

This will acknowledge receipt of your letter of August 26, 1957, addressed to Mr. Stephen W. Zoldok, with which you enclosed logs of drill holes 14, 15, 16, 17, 19, and 20.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

cc: DMEA(2) w/2 copies incoming and encl. ✓
DMM(2) do.
DMEM(A) w/copy incoming and encl.
Alvord w/copy incoming wo/encl.

Frank R. Komatz

OIL PROPERTIES

DENVER, COLORADO
Telephone Cherry 6476

PARSONS, KANSAS
Telephone 807

August 26, 1957
220 Midland Savings Bldg
Denver 2, Colorado

Mr. Stephen W. Zelalox
U. S Department of the Interior
Defense Minerals Exploration Adm.
No. 187 Howard Street
Spokane 4, Washington

Dear Sir:

SUBJECT: DMEA 4280

The following logs are herewith submitted covering the end of first stage drilling of the Big Meadow, Custer County, Idaho.

You will please note from the map submitted to you and the absence of drill hole number 18. This hole was not drilled as a part of first stage drilling.

Drill Hole	Line	Coordinate	Depth
14	6	250S 650E 4030N 500E 500N 800W	55 Ft
15	4	250S 650E 2000S	55
16	4	250S 650E 1000N	42½
17	4	250S 650E	45
19	4	250S 650E 2000S	45
20	5	250S 650E 3000S 500E	85

Yours very truly,

Frank R. Komatz
Supervisor
Big Meadows Project.

FRK:bo

CC: Alfred E. Hoyl
Contract Engineering Co.
1727 Boulder St.
Denver, Colorado..

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #20 Line 8 Page 1 of 2 Date Begun 8/19/57 Total Depth 85 FT

Drill Cowie Drilling Co. Date Finished 8/20/57

Field Big Pocosin-Carver Co-Ida. Drilling Time _____ Hrs. _____ Min.

Coordinates 2505-6608 3093-5008. Lost Time _____

Location Remarks Terminal Drill Hole Extreme South End

Depth of Drilling 85' Depth to Water 1 FT Depth to Bedrock —

Theoretical Weight of Cuttings _____ Diameter of Casing 6

Percent Recovery of Cuttings _____ Diameter of Shoe 7

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler Ase Driller Bromfield Panner Ase

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	[illegible]	[illegible]
1	0	5	12	50		62		GRN-TR.MON. FR.B.S. GRN-TR MON. FR.B.S. TR ZIR	26 26	18 13
2	5	10	12	46		58		" " " "	26 26	18 10
3	10	15	12	47		59		" " " "	26 26	12 19
4	15	20	24	36		60		GRA-TR MON-SOBS- "	26 26	23 34
5	20	25	20	73		93		" " " "	26 26	20 20
6	25	30	18	80		98		" " " "	26 26	25 30
7	30	35	38	84		122		" " " "	26 26	24 84
8	35	40	9	49		58		GR.C.-TR MON-FR.B.S.	26 26	1-5 -5
9	40	45	19	50		69		S.C-TR MON-FR.BS	26 26	-4 7.8
Totals:			16#	515		679				

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #20 Line 5 Cont'd Date Begun _____ Total Depth _____

Drill _____ Date Finished _____

Field _____ Drilling Time _____ Hrs. _____ Min.

Coordinates _____ Lost Time _____

Location Remarks _____

Depth of Drilling _____ Depth to Water _____ Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler _____ Driller _____ Panner _____

Sample No.	Depth From	Depth To	Wt. in screen size +1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	!	?
								S.C.-Tr. Mon-Tr B.S.-Tr Zr.	26	3.2
10	45	50	9	99	+	108		Sage- " " " "	26	4.5
									26	4.0
11	50	55	37	138		175		" " " "	26	6.0
								" " " "	26	3.0
12	55	60	39	90		129		ar.M- " " "	26	5.0
								" " " "	26	4.0
13	60	65	34	107		141		" " " "	26	4.0
									26	4.5
14	65	70	36	91		127		" " " "	26	5.0
									26	6.0
15	70	75	46	97		143		" " " "	26	5.0
									26	3.5
16	75	80	32	94		126		" " " "	26	3.9
									26	5.0
17	80	85	61	118		179		" " " "	26	6.0
			[illegible]	[illegible]		[illegible]				
Totals:			458	1349		1807				

Screenings
+1/8 - 1/4 NT
- 1/4 341
455

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations

Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

DRILL [illegible]

[illegible] Total Depth 45

[illegible] Hrs. _____ Min.

[illegible] Ill.

[illegible] to Bedrock _____

Thickness of Cuttings _____

Percentage of Cuttings _____

Total [illegible] per cu. yd. _____ per cu. yd. _____

Ga[illegible] _____ Drilling [illegible] _____

Sample No.	[illegible]	[illegible]	Wt. in screen + [illegible]	[illegible]	[illegible]	[illegible] Wt.	[illegible]	Remarks	[illegible]	[illegible]
								[illegible] Fractions	2'6	1'8
1	[illegible]	[illegible]	7			[illegible]		[illegible] - To Mon. Fr. B.S	2'6	2'0
								" "	2'6	2'3
2		[illegible]	1	6[illegible]		7[illegible]		" "	2'6	2'1
								" "	2'6	2'0
3	[illegible]	[illegible]	23	30		53		" "	2'6	2'2
								" "	2'6	1'9
4	[illegible]	[illegible]	25	69		94		" "	2'6	3'5
								" "	2'6	3'8
5	[illegible]	[illegible]	35	69		104		" "	2'6	3'5
								" "	2'6	3'0
6	[illegible]	[illegible]	30	78		108		" "	2'6	2'5
								" "	2'6	2'8
7	[illegible]	[illegible]	28	95		123		" "	2'6	3'—
								" Gd. B.S	2'6	3'5
8	3[illegible]	4[illegible]	48	84		132		" "	2'6	3'8
								" "	2'6	3'9
9	4[illegible]	45	36	89		125		" " Fr. B.S	2'6	3'8
Totals:			240	606		846				

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #17 Line 4 Date Begun 8/13/50 Total Depth 45

Drill Rowe Drilling Co Date Finished 8/14/50

Field Big Meadow - Custer Co Mt Drilling Time _____ Hrs. _____ Min.

Coordinate 250 S - 650 E. Lost Time _____

Location Remarks _____

Depth of Drilling 2 1/2 FT Depth to Water 2 FT Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler ASP Driller [illegible] Panner ASP

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	Dry Wt.	Wet Wt.
1	0	5	0	33		33		[illegible] S - Tr. Mon. - Tr. B - Tr. Zr.	[illegible]	0.0
2	5	10	13	40		53		[illegible] - Tr. Mon - Tr. B - Tr. Zr.	[illegible]	1.8
3	10	15	14	61		75		[illegible] - Tr. Mon - Tr. B - Tr. Zr.	[illegible]	2.6
4	15	20	11	42		53		" " " "	[illegible]	2.8
5	20	25	13	79		92		" " " "	[illegible]	2.7
6	25	30	29	76		105		" " " "	[illegible]	2.9
7	30	35	66	70		136		" " Tr. B.S. —	[illegible]	2.5
8	35	40	37	178		215		" " " "	[illegible]	6.5
9	40	45	6	171		177		" " Fr. B.S. Tr. Zr.	[illegible]	5.3
								[illegible] - F - " Tr. B.S. —	[illegible]	2.6
								[illegible] - F - " " " —	[illegible]	2.6
								[illegible] - F - " Fr. B.S. Tr. Zr.	[illegible]	3.0
								[illegible] - F - " Tr. B.S. —	[illegible]	3.0
								[illegible] - F - " Tr. B.S. —	[illegible]	3.7
								[illegible] - F - " Fr. B.S. —	[illegible]	2.0
	Totals:		189	750		939				

[illegible] 495
[illegible] 40
[illegible] 149
189

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. ____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. 16-Line #4 Date Begun 8/14/57 Total Depth 42 1/2 FT.

Drill Cowe Date Finished 8/15/57

Field Bigfork-Cusick & Wa. Drilling Time ____ Hrs. ____ Min.

Coordinates 250 S-650 E-1000 N Lost Time ____

Location Remarks ____

Depth of Drilling ____ Depth to Water 5 FT. Depth to Bedrock ____

Theoretical Weight of Cuttings ____ Diameter of Casing ____

Percent Recovery of Cuttings ____ Diameter of Shoe ____

Pounds of Black Sand per cu. yd. ____ Pounds of Monazite per cu. yd. ____

Sampler ASP Driller Crawford Panner ASP

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	[illegible]	[illegible]
								SOIL - ER-TR MON-TR B.S.	[illegible]	[illegible]
1	0	5	21	30		51		GR.M - FR.MON - PR BS-TR	[illegible]	[illegible]
2	5	10	17	24		41		" " " "	[illegible]	[illegible]
3	10	15	23	46		69		" " " "	[illegible]	[illegible]
4	15	20	33	55		88		" " " "	[illegible]	[illegible]
5	20	25	46	71		117		" " " "	[illegible]	[illegible]
6	25	30	67	86		153		" " " "	[illegible]	[illegible]
7	30	35	13	88		101		" " " "	[illegible]	[illegible]
8	35	40	36	127		163		GR.F - TR MON - TR BS	[illegible]	[illegible]
9	40	42½	10	45		55		G.R.F. - " "	[illegible]	[illegible]
								G.R.F. - " "	[illegible]	[illegible]
	Totals:		266	572		838				

4-4 56
4-4 710
766

Moving Time from Bl ____ To Bl ____ Days ____ Hours ____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No [illegible]

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #15 Line 4 Date Begun 8/15/59 Total Depth 55 Feet

Drill Core Drilling Date Finished 8/16/59

Field Big Prairie-Custer Co-Ker Drilling Time _____ Hrs. _____ Min.

Coordinates 250 S-650 E 2000 N Lost Time _____

Location Remarks _____

Depth of ~~Drilling~~ Soil 2 1/2 Ft Depth to Water 1 FT Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler ASP Driller [illegible] Panner ASP

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8"+ 16	-16	Total wt.	Wt. of Table Conc.	Remarks	[illegible]	[illegible]
								Soil	2'6	1'8
1	0	5	4	36		40		S m - Fr Mon - Fr B. Tot. R.	2'6	2'-
								" " Fr B "	2'6	2'2
2	5	10	7	58		65		S. C - " " "	2'6	2'6
								Gr m - " Gd. B "	2'6	2'2
3	10	15	55	51		106		" " " "	2'6	3'4
								" " " "	2'6	4'-
4	15	20	66	80		146		S m - " " "	2'6	3'5
								" " " "	2'6	4'-
5	20	25	11	127		138		" " " "	2'6	4'5
								" " " "	2'6	7'-
6	25	30	7	73		80		" " " "	2'6	3'7
								" " " "	2'6	5'5
7	30	35	7	116		123		S.C. " " "	2'6	4'5
								" " " "	2'6	3'4
8	35	40	39	115		154		" " " "	2'6	3'8
								Gr C - Gd. Mon - " "	2'6	3'-
9	40	45	42	76		118		Gr m - Fr Mon - " "	2'6	4'5
Totals:										

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #15 line #4 Pay-[illegible] Date Begun _____ Total Depth _____

Drill _____ Date Finished _____

Field _____ Drilling Time _____ Hrs. _____ Min.

Coordinates _____ Lost Time _____

Location Remarks _____

Depth of Drilling _____ Depth to Water _____ Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler _____ Driller _____ Panner _____

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	
10	45	50	45	74		119		Gr. M - Fr. Mon - Fr. B - Tr. Zirc 2/6	3L
								Gr. M - Fr. Mon - Fr. B - Tr. Zirc 2/6	3L5
11	50	55	25	80		105		S. C - Fr. Mon - Gr. B - Tr. Zirc 2/6	4½
								Gr. C - Fr. Mon - Gr. B - Tr. Zirc 2/6	8'
Totals:			308	886		1194			

Moving Time from BM _____ To BM _____ Days _____ Hours _____

1/8-1/4 96
1/4 212
308

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

Hole No. #1 Lone #6 Pit 1 2 Pits Date Begun 8/6/57 Total Depth 55 FT

Drill Cowie Drilling Date Finished 8/10/57

Field Big Meadow-Cuyuna Co Mn Drilling Time _____ Hrs. _____ Min.

Coordinates 7505 6506E-4030N-506E 500N-800W- Lost Time _____

Location Remarks _____

Depth of Drilling _____ Depth to Water _____ Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler ASP Driller Broomfield Panner ASP

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	Size	Color
1	0	5	2	22		24		S. Soil - Gd. Mon. Gd. B Tr. Fe	2'6	1'7
								S - Gd. Mon - Gd. B. Tr. Z/RC	2'6	1'7
2	5	10	16	30		46		S - Gd. Mon - Gd. B. Fa. Z/RC	2'6	3'5
								GQF - " - " - "	2'6	2'4
3	10	15	25	49		74		" " " "	2'6	3'6
								G. F. " " "	2'6	2'4
4	15	20	0	45		45		Fine - Fa. Mon - Tr. B.S	2'6	4' -
								" " "	2'6	4' -
5	20	25	0	10		10		" " "	2'6	4'5
								" " "	2'6	5'
6	25	30	0	5		5		" " "	2'6	3'-
								" " "	2'6	4'-
7	30	35	0	12		12		" " "	2'6	4'-
								" " "	2'6	4'5
8	35	40	0	103		103		S. F - Fa. Mon - Fa. B.	2'6	4'5
								" " "	2'6	5'
9	40	45	0	130		130		" " "	2'6	4'-
								" " "	2'6	4'5
Totals:										

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Abbreviations
Cl - Clay
Gr - Gravel
Bld - Boulders
S - Sand
M - Medium
C - Coarse
F - Fine

DRILL SAMPLE RECORD

U. S. BUREAU OF MINES,
REGION I

Project No. _____

Abbreviations
Y - Yellow
W - White
B - Black
Bl - Blue
Br - Brown
R - Red
G - Green

(Continued)

Hole No. 14 Line 6 Page 2-Page Date Begun _____ Total Depth _____

Drill _____ Date Finished _____

Field _____ Drilling Time _____ Hrs. _____ Min.

Coordinates _____ Lost Time _____

Location Remarks _____

Depth of Drilling _____ Depth to Water _____ Depth to Bedrock _____

Theoretical Weight of Cuttings _____ Diameter of Casing _____

Percent Recovery of Cuttings _____ Diameter of Shoe _____

Pounds of Black Sand per cu. yd. _____ Pounds of Monazite per cu. yd. _____

Sampler _____ Driller _____ Panner _____

Sample No.	Depth From	Depth To	Wt. in screen size + 1/8"	-1/8" + 16	-16	Total wt.	Wt. of Table Conc.	Remarks	[illegible]	[illegible]
10	45	55	1	121		122		S.R - FR. MON - FR. B.	[illegible]	[illegible]
								S.F - FR MON - FR B	[illegible]	[illegible]
11	50	55	17	127		144		S.M - FR MON - Rd. B	[illegible]	[illegible]
								C.R - FR MON - FR B	[illegible]	[illegible]
Screenings:	Totals:		61	654		715				

+1/8-1/4 - 22
+1/4 - 39
61

Moving Time from BM _____ To BM _____ Days _____ Hours _____

Draft
FMMurphy/izm
9-10-57

EXPLORATION PROJECT CONTRACT
ALFRED G. HOYL AND ASSOCIATES
DOCKET NO. DMEA-4280
AMENDMENT NO. 2

It is agreed this _____ day of _____, 1957 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Alfred G. Hoyle and Associates, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E1012 (Docket No. DMEA-4280), dated September 20, 1956, hereinafter called the "Contract," is further amended as follows:

1. (a) Work under the contract shall be suspended during the period beginning September 1, 1957 and ending not later than July 1, 1958.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, except those relating to concentrating, testing, and analyzing the samples recovered during the Stage I drilling; and the Government shall not contribute to any cost of rehabilitation or repair, which in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. The time fixed for the completion of the work in Amendment No. 1 is extended from October 20, 1957 to October 20, 1958.

3. The time fixed for "Royalty on production" in Article 8.,(b),(2) is extended from ten years to eleven years.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as maximum.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Administrator, Defense Minerals Exploration Administration

ALFRED G. HOYL AND ASSOCIATES

By_____
Alfred G. Hoyl

By_____
Richard D. Moody

By_____
T. F. Adams

By_____
A. B. Manning

By_____
Douglas V. Watrous

By_____
Arthur G. Wood

By_____
Frank R. Komatz

By_____
Stanfurd L. Jackson

By_____
Charles J. Carr

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

9-17 FMM 220

August 23, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: Donald C. Alvord, Geologist, U. S. Geological Survey

Subject: Interim Inspection Report, Docket No. DMEA-4280 (Monazite-Thorium), Alfred G. Hoyl and Associates, The Meadows, Custer County, Idaho, Contract No. Idm-E1012

The Meadows property was examined on July 20, 1957 in company with Mr. Sui Ju Kung, Mining Engineer, Taiwan, Nationalist China. Mr. Frank R. Komatz, 400 Steele Street, Denver, Colorado, was present as the Operator's general superintendent. A good dirt road from the Aztec mine down Pig Tail Creek about 3 miles to the Meadows had already been completed under the contract. Transit control, tied to the southeast corner of the Alvorado Placer claim had already been established, and the Stage I drill hole sites had been marked with flagged stakes. Mr. Komatz expected a churn drill rig to arrive at Stanley that evening and to be set up and ready for drilling by quitting time Sunday, July 21.

The property was examined again on July 29, 1957 in company with Mr. Kung. Mr. Komatz, two samplers, a laborer, and the driller and helper were on the property during the examination. Drilling was started on July 22 in the vicinity of the favorable Pig Tail Creek alluvium. Three holes had been completed and the fourth was being drilled. CDH-1, coordinates 7.0 N., 0.5 W., very near the western edge of the valley fill on Pig Tail Creek, had bottomed on bedrock or a boulder at a depth of 27.5 feet. CDH-2, coordinates 8.0 N., 0.5 E., was bottomed at 82.5 feet without encountering bedrock and CDH-3, coordinates 7.0 N., 0.5 E., was bottomed in valley fill at 50.0 feet. CDH-4, coordinates 7.0 N., 1.5 E, then being drilled, was at 32.0 feet.

The sampling procedure appears to be sound and the work to be done conscientiously. Casing is driven ahead of the bit in 2.5-foot increments by means of drive clamps attached to the tool string. The valley fill material is then loosened with a chopper bit to within 0.5 foot of the bottom of the casing and the loosened material is then collected with a suction bailer. The cuttings are

dumped into a collecting trough and the bailer is washed carefully at the end of a sampling run to get the last bit of cuttings. The cuttings are drained in the collecting trough, scraped and washed into drying pans, dried over an open fire, and combined into 5-foot runs. The dried cuttings are screened on a 1/8-inch screen, the plus 1/8 is weighed and run through a 1/4-inch screen; the plus 1/4-inch material is discarded. The minus 1/4 to plus 1/8 and the minus 1/8 fractions are retained for study and analysis.

A handful of material was coned and parted from the minus 1/8 inch portion of the 17.5- to 20.0-foot run of CDH-4 and was sorted under a 14X hand lens into its rock and mineral constituents with the following results:

Percent	Lithology
49.5	Limestone, dense blue gray.
23.4	Quartzite; gray, white, and brown; both meta- and ortho-quartzite.
2.2	Schist, dark green.
2.7	Basic dike rock.
1.6	Rhyolite.
20.6	Quartz monzonite fraction: granitic rock fragments, quartz grains, fragments of femic minerals; a trace of magnetic blacks (magnetite-ilmenite); and several (8) grains of light- and dark-colored unknowns.

Although such a sample by itself is almost meaningless, it is at least suggestive that the sands and gravels from the potentially favorable granitic sources are greatly diluted by detritus from unfavorable sedimentary and metasedimentary environments at the sample locality. Panning a double shovel full of material from this hole yielded about a tablespoonful of heavies, mostly magnetic blacks. According to the samplers, this was typical.

Although far from discouraged by the appearance of the first four holes, Mr. Komatz was quite concerned about the possibility of the Government insisting upon completing the drilling program even if the first phases of the work were negative. I assured him that DMEA was no more interested in exploring unpromising ground than he was and that I felt sure a mutual termination agreement could be worked out if and when the drilling results indicate such action to be desirable.

Donald C. Alvord

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Alvord

1201 N. Division St.
Spokane 2, Washington

August 23, 1957

8/30 Q 220
8/30 800
Fwd 100

Mr. Alfred G. Hoyl
Contract Engineering Co.
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl & Asso.
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Hoyl:

This letter will confirm your telephone conversation of August 21, 1957 with Mr. S. W. Zoldok, DMEA representative.

You stated that a preliminary appraisal of Stage I work, which you had just completed, did not appear too encouraging and that you wished a recess until the spring of next year by which time the samples obtained in Stage I will have been analyzed and we will know whether Stage II work is warranted. The Field Team concurs with you in this matter, and we will request Washington to authorize a recess.

In submitting your voucher for the work completed, we suggest that you include on the one voucher all work done under Stage I. The narrative report to accompany your voucher should be as complete as possible so that if Stage II work is not warranted, then this narrative report can also serve as your final report. Such a final report is required under Article 7(c) of the contract.

Will you please furnish us with the serial number identification of the D-6 bulldozer used on the project, as an amendment to the contract will be necessary to allow use of this dozer in lieu of a D-8.

By Field Team, Region I

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

August 21, 1957

Mr. W. S. Martin, Acting Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Martin:

In reply to your letter of August 12, 1957, the Field Team was aware that the Operator was using a D-6 dozer in lieu of a D-8 (or equivalent) as specified in the contract and also that a pickup was being rented. We have been awaiting the Operator's July billing (which has not yet arrived) before making our recommendations for an appropriate amendment to Washington.

It is not the Field Team's intention to authorize payment for the 6 hours of dozing with the D-7.

By Field Team, Region I

A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew
Wing G. Agnew, Member
U. S. Bureau of Mines

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 26 1957

DATE	INITIALS	CODE
8/26	Q	220
8/26	MH	700
	cc: USGS (2)	
	USBM (AD)	

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

August 19, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 26 1957

DATE	MINES	CODE
8/26	Comm	100
8/27	F-MM	

MEMORANDUM

To: DMEA Field Team, Region I

From: William M. Romischer, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-4280 (monazite-thorium), Alfred G. Hoyl & Associates, The Meadows, Custer County, Idaho, Contract No. Idm-E1012

The property was visited on August 8. Mr. Frank R. Komatz, project supervisor, was present.

The contractor commenced churn drilling on July 22. Eleven of the 20 holes for Stage I drilling were completed at the time of the inspection on August 8. The total footage drilled for the eleven holes is 543.0.

Mr. Komatz stated that Baumhoff & Marshall of Boise, Idaho, are going to concentrate the samples and the samples will be sent to Rare Metals at Murray, Utah, for analysis.

William M. Romischer

William M. Romischer

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Romischer

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8-7	Murphy	700
8-7	Ellis	700
8/7	Martin	130
8/9	Johnson	110
		100
8-7	Chamber	800
9	Mutchenbaugh	100
8/13	G.	220
		700

AUG 12 1957

Mr. A. B. Weissenborn
Executive Officer
DMEA Field Team, Region I
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280 (Monazite-thorium)
Contract No. Idm-11012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Mr. Dean C. Holt's memorandum, dated July 12, addressed to you, and received here on August 1, 1957, has been reviewed.

We note that some of the changes in equipment, although evidently necessary to complete the project in a satisfactory manner, do not conform to the contract provisions, as follows:

1. The Operator has hired a D-6 bulldozer with angle blade at $12.00/hr., whereas the contract calls for a D-8 unit at $384.30/week and an angle dozer at $88.88/week; and

2. The Operator is renting a pickup truck whereas this item is listed under depreciation.

Without an amendment to the contract authorizing the above changes, the Government cannot participate in the costs for use of the D-6 with angle dozer, or the pickup truck.

With regard to the D-7 charged to the project for 6 hours, the costs for this work will be disallowed as it does not conform with the contract as to size of the unit and the work performed could not be considered acceptable by the Government.

It is suggested that the Field Team submit its findings and recommendations so that an amendment may be prepared to allow the use of the new equipment mentioned above. Complete data on the time the equipment will be used and its cost should be included.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (HB)

APPROVED:

P. F. Yopes (HB)
Member, Bureau of Mines

N. E. Nelson (HB)
Member, Geological Survey

FMMurphy/izm 8-7-57
cc to: Mr. Murphy
Admr.'s Reading File
Operating Committee
THKiilsgaard, 5224

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

July 23, 1957

ORIGINAL FILE COPY
RECEIVED AUG 19 1957
DATE | INITIALS | CODE
19 | Com. | 100
8/30 ~~Form~~ ~~Ppc~~

MEMORANDUM

To: DMEA Field Team, Region I

From: Dean C. Holt, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-4280 (monazite-thorium), Alfred G. Hoyl & Associates, The Meadows, Custer County, Idaho, Contract No. Idm-E1012

The property was visited July 17, 1957. Mr. Frank R. Komatz, project supervisor, and Mr. W. M. Romischer, Mining Engineer, Bureau of Mines, accompanied the writer.

Proposed churn drill hole locations for the first stage of the contract were visited and Mr. Komatz requested permission to move the location of the churn drill hole shown at coordinate 3N, 3.5E to 7N 0.5W. The marshy nature of some of the terrain in the Meadows area makes it necessary to give the Operator some leeway in laying out the proposed churn drill holes. All drill hole locations visited met the approval of the examiners.

The bulldozer operator completed his building of access roads and trails to drill sites on July 13, 1957.

The Operator stated that the churn drill contractor would definitely be on the job July 22, 1957.

William Asp, a former Bureau of Mines sampler, has been hired to handle the churn drill samples. Mr. Asp is a very capable churn drill sampler.

Dean C. Holt

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Holt

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 1 1957

DATE	INITIALS	CODE
8/5	C	220
8/5	COM	100
8/6	~~FMM~~	~~200~~

July 12, 1957

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Dean C. Holt, Mining Engineer, Bureau of Mines

Subject: Initial inspection, Docket No. DMEA-4280 (monazite, uranium, thorium, rare earths, etc.) Alfred G. Hoyl and Associates, Big Meadows Placer Area, Custer County, Idaho, Contract No. Idm-E1012

The property was visited July 9, 1957. Mr. Frank R. Komatz, project supervisor, accompanied the writer.

Mr. Komatz reported that the D-7 Caterpillar contracted from the Uhrig Construction Co. of Hailey, Idaho, was unable to build the access road. An inexperienced operator and the condition of the machine prompted Mr. Komatz to terminate Mr. Uhrig's contract. Six hours time was charged to the project; five hours of this time consisted of walking the machine from the main road. Contract D-8- ?

On July 9, Mr. Komatz contracted a new D-6 bulldozer with an angle blade from Robert Stefanich of Hailey, Idaho, for $12.00/hr. Mr. Stefanich had moved his machine to the project in two hours by low boy and was working on the road by 10:00 A.M., July 9. The work consisted of widening the narrow trail constructed by J. Buse, a stockman, in 1954.

Mr. Komatz informed the writer that Russell Cowe, the churn drill contractor from Boise, Idaho, was having difficulty hiring a driller and that the churn drilling would be delayed a few days.

Several hours were spent discussing sampling procedure with Mr. Komatz.

The writer visited the property again on July 12, accompanied by Mr. W. M. Romischer, Mining Engineer, Bureau of Mines. The 3 miles of access road had been completed at 12:00 noon and 32 hours of time had been charged to the project. The bulldozer operator was building access trails to drill site locations in the afternoon and Mr. Komatz stated that he planned on terminating the bulldozer contract on Saturday, July 13.

In addition to the bulldozer operator Mr. Komatz has three laborers on the payroll who will work as samplers when the churn drilling starts. One of these men, Shando Lambert of Clayton, Idaho, was hired on July 6 and the other two were hired July 10. Mr. Lambert is renting his jeep pickup to Mr. Komatz for general haulage on the project. Depreciation allowance of $50 per month is allowed under the contract for this purpose.

The churn drilling should commence next week but at this time no new information has been received from Mr. Russell Cowe, the drill contractor.

Dean C. Holt

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Holt

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE
7/29	C	220
7/29	[illegible]	800
		700

1201 N. Division St.
Spokane 2, Washington

July 26, 1957

Mr. Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-K1012

Dear Mr. Hoyl:

Under the terms of the contract Stage II work must be approved in advance, in writing, by the Government.

In order that the Government will have adequate information on which to base a decision in this matter we must have the following data as soon as possible after each hole in Stage I is completed.

(1) The total dry weight of the screened reject or oversize from each hole (obtained by combining the weights of the rejects from each sample).

(2) The total dry weight of the table (or other) concentrate from each hole.

(3) Log of each hole.

Please have the laboratory that concentrates your samples send one-half of the concentrate from each hole directly to U. S. Bureau of Mines, 1201 North Division Street, Spokane, Washington, with a statement of the procedure used.

By Field Team, Region I

cc: DMEA (2)
USGS (2)
USBM (AD)

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: Mr. Frank R. Komata
Stanley, Idaho

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957
DATE | CODE
7/29 C 220
100

1201 N. Division St.
Spokane 2, Washington

July 26, 1957

Mr. Alfred G. Heyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: WORK AUTHORIZATION
Docket No. DMEA-4000 (monazite-thorium)
Alfred G. Heyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Ida-21012

Dear Mr. Heyl:

The Government approves moving the location of one churn drill hole from coordinate 3N., 3.5 E. to 7N, 0.5W (see contract map) subject to paragraph 8 under Exhibit "A" of the contract which states:

> "No hole shall be drilled closer than 200 feet to any area known by the Operator to be in conflict with the claims included in this contract, nor closer than 200 feet to any area not owned by the Operator."

By Field Team, Region I

I. E. Weinsenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: Mr. Frank R. Kennets
Stanley, Idaho

DMEA (3)
USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 25 1957

DATE	INITIALS	CODE
6/25	C	220
~~6/25~~	~~EMM~~	~~700~~

June 21, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are two copies of a letter dated June 18, 1957 from Alfred G. Hoyl, which is self-explanatory.

We do not anticipate that this situation described by Mr. Hoyl will be a deterrent in commencing work on schedule, July 1, 1957.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1737 BOULDER STREET

DENVER 11, COLORADO

OFFICIAL FILE COPY
D M E A
RECEIVED JUN 25 1957

DATE	INITIALS	CODE

June 18, 1957

Mr. A. E. Weissenborn, Exec. Officer
United States Department of the Interior
Defense Minerals Exploration Administration
So. 157 Howard St.
Spokane 4, Washington.

Re: Docket No. DMEA 4250 (Menasite-Thorium)

Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

DMEA

Dear Mr. Weissenborn,

Confirming my telephone conversation with you of last week, I am outlining herewith the title problem which has arisen regarding the Meadows placer. In February of 1957 we were served with a notice of a quiet title suit on the property. This suit was instigated by a company called the Western Placer Mining Co. from Missoula, Montana. We of course filed a answer and have been investigating the problem since. We are now in the process of filing a cross complaint.

We have discovered that the Western Placer Mining Co. supposedly discovered and located claims over our claims during March and the early part of April, 1956. As you know, our claims were discovered and located in August of 1954.

The Western Placer Mining Co. is basing their claim on the contention that Alfred G. Hoyl and Associates is not a legitimate association of nine individuals. We have an affidavit on file in the Custer County courthouse stating the full names of all the associates, and we have acted as an association with equal ownership in all our dealings. There is no question but what Alfred G. Hoyl and Associates is a valid association having nine individuals with equal interests.

When we were doing our assessment work in June and July of 1956, we found no evidence of any claim stakes or validation pits which the Western Placer Mining Co. claims to have placed during March and the first few days of April, 1956. In fact, the Forest Service says there was three feet of snow in the area at that time.

Mr. A. E. Weissenborn

We feel that the Western Placer Mining Co., who deliberately jumped our claim, will withdraw as soon as we have filed our cross complaint as they are obviously bluffing in the hopes of obtaining an interest in the property. We will probably carry through the quiet title suit ourselves and quiet the title in our mine associates.

Either Frank Komats or myself will be in Idaho next week and we plan to begin clearing the road into the property at that time. We will advise you as soon as we have made a definite date for the actual drilling to commence.

Please feel free to call us collect if there are any questions you might have.

Very truly yours,

CONTRACT ENGINEERING CO.

Alfred O. Hoyl

AOH/bp

RECEIVED
air mail
JUN 20 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 11 1957

DATE	INITIALS	CODE

March 7, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are the Government, Docket, and Division copies of Amendment No. 1 to the contract.

By copy of this letter, other copies of the amendment are being distributed.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosures

cc: Finance Office w/encl.
USBM (2)
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Washington

February 26, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 4 1957

DATE	INITIALS	CODE
3/4	C	220
		225

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are three copies of a letter from the Operator, dated February 22, 1957, in further reply to our inquiry of February 5 regarding the possibility of a lawsuit involving claims under the subject contract.

Sincerely yours,

Wing G. Agnew

Wing G. Agnew, Member
DMEA Field Team, Region I
Northwest District

Enclosure

cc: USGS (2)
USBM (AD)

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

RECEIVED
BUREAU OF MINES
FEB 25 1957
SPOKANE, WASH.

February 22, 1957

Field Team, Region I
Northwest Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Docket No. D. M. E. A. 4280
(Monozite-Thorium)
Alfred G. Hoyl & Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm - E1012

Gentlemen:

Following up our letter of February thirteenth, we have found that a corporation, who claim to have staked claims on top of ours in March of 1956, are planning a quiet Title suit on the property.

We do not yet understand what is back of this suit as our claims were properly discovered, located, and filed in August of 1954. Assessment work was completed and filed for the year 1955-1956.

Obviously these people have no rights to the mineral lands we have claimed. We have turned the matter over to our legal counsel and will advise you as quickly as we find out more about the matter.

Yours very truly,

ALFRED G. HOYL & ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

AGH:dsh

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 4 1957
DATE | INITIALS | CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Washington

February 18, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 21 1957

DATE	INITIALS	CODE
2.21	C	220
		225

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. ~~DMEA-1,280 (Monazite-Thorium)~~
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are three copies of the Operator's reply to our inquiry of February 5 regarding the possibility of a lawsuit involving claims under Contract No. Idm-E1012.

By Field Team, Region I, NW District

Wing G. Agnew

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Donald R. MacLaren

Donald R. MacLaren, Acting Member
U. S. Geological Survey

Enclosures

cc: USGS (2)
USBM (AD)

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET
DENVER 11, COLORADO

RECEIVED
BUREAU OF MINES
FEB 15 1957
SPOKANE, WASH.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 21 1957

DATE	INITIALS	CODE

February 13, 1957

Field Team, Region I, NW Dist.
Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Gentlemen:

In reply to your letter of February 5th, we have no information about any possible lawsuit involving our claims in the Meadows.

Enclosed is a copy of a letter we wrote to Mr. Ellis in Washington, D. C. regarding any possible conflict. We assumed that you had received a copy of this letter. Actually no conflict exists and I am sure no lawsuit could possibly arise.

We will forward the signed copies of the proposed Amendment No. 1 at an early date.

Yours very truly,

CONTRACT ENGINEERING COMPANY

Alfred G. Hoyl

Alfred G. Hoyl

AGH:ef

(Note: Copies of the Operator's letter to Mr. Ellis are not attached as the Washington files contain this letter.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

February 6, 1957

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are copies of a self-explanatory memorandum dated February 4, 1957 from S. W. Zoldok of the Bureau of Mines, and a letter we have written to the Operator dated February 5, 1957.

By Field Team, Region I, NW Dist.

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosures

cc: USBM (2)
USBM (AD)
Alvord

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE
2/12	C	220
		225

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE

[redacted]
1201 N. Division St.
Spokane 2, Washington
February 5, 1957

Mr. Alfred G. Hayl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hayl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-41012

Dear Mr. Hayl:

We have learned of the possibility of a lawsuit involving the title of the claims on which the exploration authorized in DMEA Contract Idm-41012 will be done.

We would appreciate your comments on this matter.

By Field Team, Region I, NW Dist.

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USGS (2)
USBM (AD)

FORM NO. 64

Office Memorandum · UNITED STATES GOVERNMENT

TO : DMEA Files

DATE: Feb. 4, 1957

FROM : S. W. Zaldak

SUBJECT: Contract Idm-K1012, Alfred C. Heyl and Associates

Henry S. Childs, president, Western Fluorite Mining Co., Inc., Missoula, Montana, and another engineer were in today to see Dick Storch and stated that they are relocating the Alfred C. Heyl & Asso. claims and are going to contest same. Case coming to trial in April.

Mac
al

cc: Docket
AD
USGS

Street address penciled on back of visiting card:

630 North Avenue East
Missoula, Mont.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY DMEA RECEIVED FEB 7 1957		
DATE	INITIALS	CODE
2-8	C	220
2/8	[illegible]	800
		225

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

February 4, 1957

Mr. Alfred G. Noyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Noyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Ida-K1012

Dear Mr. Noyl:

Enclosed are the original and five copies of a proposed Amendment No. 1 to the above-referenced contract which postpones the date of completion of the contract from August 1, 1957 to October 20, 1957 and provides for a possible change in the location of two holes if this should be advisable as the project progresses. The reason that these two holes have been accepted from a closely defined location is that the hole at coordinates 8 N. and 0.5 E. may be too near the slope wash while the hole at coordinates 3 N. and 3.5 E. may be too close to the confluence of Slate Creek and Warm Springs Creek. In this event, these holes would not be expected to be successful. Under the terms of the proposed Amendment No. 1, these two holes could be used for possible closer spaced drilling between holes that might contain material of higher than normal grade.

If the proposed amendment is acceptable, please sign the original and all copies, and return all but the one marked "Operator's copy" to this office.

If the amendment is not satisfactory, please return the original and all copies to this office with a statement of your objections, so that we can consider any changes you propose.

By Field Team, Region I, NW Dist.

Enclosures

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

cc: DMEA (2)
USGM (2)
USGM (AD)
Nickelson

Wing G. Agnew, Member
U. S. Bureau of Mines

EA Form 7
(12-56)

700

OFFICIAL FILE COPY

Date	Surname	Code
1/23/57	Murphy	700
1-24	[illegible]	700
1-24	Chamber	800
1/25	Selfridge	130
	Mathewby	100
1/25	Johnson	110

JAN 28 1957

Mr. A. B. Weissenborn
Executive Officer
DMEA Field Team, Region I
Northwest District
South 157 Howard Street
Spokane 1, Washington

Re: Docket No. DMEA-4280 (Monazite-thorium)
Contract No. Idn-31012
Alfred C. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

1-28-C

Dear Mr. Weissenborn:

Enclosed are the original and five copies of Amendment No. 1 to the subject contract, signed by the Administrator for the Government. Also enclosed are two extra copies for Field Team use.

You will note that the amendment allows the change in the location of the two holes recommended in your letter of September 11, 1956; however, the holes will remain a part of Stage I work. If they were transferred to Stage II, as suggested, it would necessitate a complete change in most of the categories of the original contract without serving any special purpose.

If you and the Operator find the proposed amendment in order, please have the persons listed sign the original and five copies. If any part of the proposed amendment does not meet with your approval and the Operator's, then the original and copies, including the extra copies, are to be returned to this office with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

FMMurphy/gla 1-23-57
cc to: Admr.'s Reading File
Operating Committee
Messrs. Chas. T. Baroch, 3649
THKiilsgaard, 5224
Code 700
Mr. Murphy

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/24	Selfridge	130
"	[illegible]	100
		100
		225

January 24, 1957

Memorandum

To: Administrator

From: George C. Selfridge
Special Assistant

Subject: Docket No. DMEA-4280 (Monazite-thorium)
Contract No. Idr-21012
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Mr. Weisenborn telephoned January 24, 1957, to ask about the status of a proposed amendment relating to a time extension of the subject contract. The writer informed him that he had seen nothing recently but that he would immediately check with the Commodity Division to see what happened the amendment.

The writer transmitted the information orally to the Division suggesting that immediate action be taken regarding the amendment.

George C. Selfridge

George C. Selfridge

GCSelfridge/esf
cc to: Admr. R. Fill
Docket
Mr. Selfridge

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington
November 8, 1956

RECEIVED NOV 13 1956 D.M.E.A.

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

This is in further reference to our letter to you of November 6, 1956 with enclosed Government, Docket and Division copies of Contract No. Idm-E1012.

Your letter of September 20, 1956, which transmitted the proposed contract to us, stated that an amendment would be forwarded shortly which will incorporate the contract changes recommended in our letter of September 11. If this amendment has not already been prepared, we suggest that you include in it an extension of the contract time. Our November 6 letter to you stated that we would prepare an amendment extending the completion date to December 1, 1957, but it would be better to extend the date to only November 1, 1957, so that the repay period will remain the same. Inasmuch as the Operator requested an extension of time to October 1, 1957 we believe there will be ample time to complete the work by November 1.

By Field Team, Region I, NW District

A. E. Weissenborn

A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: USGS (2)
USBM (AD)

11-13-56

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington
November 8, 1956

RECEIVED NOV 13 1956 D.M.E.A.

Mr. Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Ida-K1012

Dear Mr. Hoyl:

This will acknowledge receipt of your letter of October 24, 1956, and the signed copies of the contract.

We agree with you that it will probably be better to not start contract work until next spring or summer as weather conditions would preclude any work in this area after November 15.

The commencement date of July 1, 1957, will not prevent your starting work before that time if you are able and desirous of doing so, but we would appreciate your advising us two or three weeks in advance of the date you intend to start work.

We will prepare an amendment to the contract to extend the completion date. The amendment will be sent to you shortly.

By Field Team, Region I, NW District

A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (3)
USGS (2)
USBM (AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED NOV 9 1956 DMEA

November 6, 1956

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Contract No. Idm-E1012

Dear Mr. Selfridge:

Enclosed are the Government, Docket, and Division copies of this contract. Other copies of the contract have already been distributed.

The Operator states in his letter of October 24, 1956, copies of which are enclosed, that he will not be able to begin work until spring and will not be able to complete the job by August 1, 1957, the termination date fixed in the contract. We will therefore prepare an amendment extending the completion date to December 1, 1957.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

Enclosures
cc: USBM(2)w/incoming
Finance Office w/incoming
Nickelson

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

RECEIVED NOV 9 1956 D.M.E.A.

October 24, 1956

Mr. A. E. Weissenborn
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4280 (Monazite Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

I am enclosing herewith five copies of the long form contract No. 1012, Docket No. DMEA-4280. We have retained the Operator's Copy. All of the copies have been signed.

We have inserted the date of July first as the commencement date as it would be November first before we would be able to get equipment into the field, and we feel that this might be too late to start due to weather conditions. We would appreciate your opinion as to what weather we could expect during November in the portion of Idaho we are concerned with.

The first work to be done is to improve the trail with a dozer so the drilling equipment can be moved in. We do not feel it wise to do the road work unless we can complete a substantial portion of the testing as well.

If the road work is done in the fall and weather prevents us from doing the test work, the spring run-off might destroy much of our efforts on the road. Probably it would be better to do the road work as soon as practicable in the spring, and complete the testing thereafter in one continuous operation; in which case it probably would be necessary to advance the completion date to October 1, 1957.

Please advise us what your opinion is regarding these considerations.

Yours very truly,

ALFRED G. HOYL AND ASSOCIATES

Alfred G. Hoyl

AGH:dsh
Enclosures

10/1/56 gla

RECEIVED
OCT - 1 1956

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

September 26, 1956

Mr. Alfred G. Hoyl
Contract Engineering Company
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4289 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Hoyl:

Enclosed are the original and five copies of a proposed long-form contract signed by the Administrator for the Government. Attached to each contract form MF-200 are Annex I (1 page), Exhibit "A" (6 pages), and one map of the project area.

The proposed contract does not include a supervisor's assistant, as it is believed that the samplers could give whatever assistance the supervisor might require. It is also believed that one mineralogical determination on a representative sample will supply the information required in regard to the important minerals that might be present. Apparently the items listed under Category (6), page 3 of Exhibit "A" are for the road construction.

If the proposed contract meets with your approval, please insert in Article 3 of the contract form the date work will commence, then have all nine associates sign the original and all copies, and return to this office.

If you can not complete the work this fall, you should request an amendment authorizing a recess from the date work ceases until work can be resumed in the spring.

If any part of the contract does not meet with your approval, the original and all copies should be returned unsigned to this office with any proposed changes for consideration.

IK

By Field Team, Region I, NW District

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: DMEA (2)
USBM (2)
USBM (AD)
Nickelson

700

DOCKET COPY
Surname: Murphy, Ellis, Selfridge, Johnson, Mattendorf

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. R. Weissenborn
Executive Officer
DMEA Field Team, Region I
Northwest District
South 157 Howard Street
Spokane, 4, Washington

Re: Docket No. DMEA-4280 (Monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

Enclosed are the original and five copies of a proposed long-form contract signed by the Administrator for the Government. Attached to each contract form DF-800 are Annex I (1 page), Exhibit "A" (6 pages), and one map of the project area. Also enclosed are two extra copies of Annex I, Exhibit "A", and map; two copies of a memorandum, dated August 20, 1956, by Frank B. Lamb, Committee Member; and two copies of a self-explanatory letter, dated August 16, 1956, by the Applicants to Mr. Ellis.

The proposed contract does not include a supervisor's assistant, an engineer, and the number of mineralogical determinations recommended by the Field Team. In our opinion the samplers could assist the supervisor when necessary, and one mineralogical determination on a representative sample would give DMEA all the information it requires in regard to the important minerals that might be present.

If you and the Applicants find the proposed contract in order, please insert in Article 3 of the contract form the date work shall commence, then have the nine associates sign the original and all copies. Thereafter, kindly distribute the copies in the usual manner.

If any part of the proposed contract does not meet with your approval and the Applicants', then the original and all copies, including the extra copies, are to be returned to this office with the proposed changes for consideration.

Approved:

P. F. Yopes
Member, Bureau of Mines (S/G)

Thor H. Kiilsgaard
Member, Geological Survey (S/G)

Enclosures: 6

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (S/G)

PS: An amendment incorporating changes in contract recommended in your letter of September 11, will be forwarded shortly.

Messrs: JEBrandford, 3641
THKiilsgaard, 5224
JOHosted, 3210 GSA
Code 700
Mr. Murphy

) w/cc FT-I, NWD, let. Sept. 11 and
AEC let. August 27, 1956

FMurphy:ms 9/17/56
Copy to: Docket
Operating Committee
Admr. R. File

9/20/56 gla

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

September 18, 1956

RECEIVED
SEP 20 1956

Mr. Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division
Defense Minerals Exploration Administration
Washington 25, D.C.

Re: Docket No. DMEA-4280
(Monazite-thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Ellis:

Regarding our letter of August 16, 1956 regarding above docket, we would appreciate very much hearing from you as to whether more information is required and as to what action we might expect from the Defense Minerals Exploration Administration on this project.

Yours very truly,

CONTRACT ENGINEERING COMPANY

Alfred G. Hoyl

Alfred G. Hoyl

AGH:ef

Note: No reply needed. Property contract mailed to Field Team. A.M. September 20.

J M Murphy

9/17/56 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
SEP 17 1956

September 11, 1956

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Selfridge:

Enclosed are three copies of a letter from Arthur E. Granger of the Salt Lake area office of the Atomic Energy Commission, in which he makes two suggestions regarding the program recommended by the examiners in their report on the subject property. Both the suggestions merit consideration.

While we pointed out in our letter of May 1, 1956, that the radioactivity is due to euxenite, samarskite, and other radioactive blacks, and that the values are low in thoria but high in niobium and tantalum, we did not sufficiently emphasize the importance of the latter two minerals in our report of examination.

The Field Team therefore recommends that niobium and tantalum be included as minerals to be explored for under the contract. We also recommend that holes proposed at coordinates 8 north, 0.5 east, and at 3 north, 3.5 east be deleted from the holes to be drilled under Stage I, and be provided for in Stage II, at locations to be mutually acceptable to the Operator and the Government.

Note: Talked to AW about this during his October '56 trip to Washington. He has some new data on area and will send in a recommendation to amend contract. (Oct. 22, 1956) Murphy

By Field Team, Region I, NW District

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

Stephen W. Zoldoski
for Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Nickelson

Note (by Mr. Murphy) - Hole 8N.-0.5 E. too near slope wash
Hole 3 N-3.5 E. too near confluence of Slate Creek and W. S. Creek

Dmea (2)

UNITED STATES
ATOMIC ENERGY COMMISSION

SALT LAKE AREA OFFICE
P.O. Box 2196
SALT LAKE CITY, UTAH

RECEIVED
SEP 1 1956

IN REPLY REFER TO:

SLAO:DLD:sf

August 27, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District
South 157 Howard Street
Spokane, Washington

Dear Mr. Weissenborn:

Reference is made to your letter, dated 8/15/56 but received at this office 8/20/56, regarding Docket No. DMEA-4280 (Monazite-Thorium).

This property has not been visited by Atomic Energy Commission personnel so our comments are based upon perusal of the examining engineer's report and study of the map submitted therewith.

The AEC is interested in evaluating sources of radioactive raw materials regardless of the type of occurrence so we would be interested in the results of the proposed exploration. However, the Commission would probably not buy the concentrate produced by possible future dredging operations since the radioactive minerals are refractory to present mill processes.

Regarding the proposal itself, we suggest that it be worded to include niobium and tantalum as well as thorium and monazite. In Stage I (widespread drilling) it seems likely that commercial quantities of thorium may be missed but if niobium-tantalum is found, Stage II would be justified without amending the Docket.

We also suggest that holes proposed in Stage I at coordinates 8 north, 8.5 east and at 3 north, 3.5 east will be unsuccessful since the first

RECEIVED
AUG 30 1956
U.S.G.S.
SPOKANE, WASH.

one is too near the slope wash and the second is too near the confluence of Slate Creek and Warm Springs Creek. In each case the contamination of ore gravel by waste material seems likely. Perhaps these holes should be drilled nearer the center of the area at locations proposed for Stage II.

Very truly yours,

Arthur E. Granger
Manager
Salt Lake Area Office

8/21/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 20, 1956

Memorandum

To: E. W. Ellis, Chief, Division of Rare and Misc. Metals, DMEA

From: Assistant Chief, Branch of Rare and Precious Metals

Subject: Review of Field Team report, DMEA Docket No. 4280 (Monazite-Thorium), Alfred G. Hoyl and Associates, The Meadows, Warm Springs Creek, Custer County, Idaho

I have reviewed the attached field examination report with letter of transmittal dated August 1, 1956 and received in this office August 17, 1956.

The applicant proposes to drill 3,000 feet of churn drill holes spaced on 500-foot centers at a total cost of $13,970. The field examiner, with concurrence of the Field Team, recommends an alternate program of 1,000 feet of drilling on 1000-foot centers in a first stage to be followed, if warranted, by an additional 900 feet of drilling on closer spacing. The Field Team estimates the cost of the first stage to be $16,318, and that of the second stage $12,541, for a total estimated cost of $28,859.

The Field Team expressed uncertainty as to the applicant's ability to observe proper sampling procedures and indicated that a Bureau of Mines engineer would spend at least one day per week on the project. They also indicate that concentration of samples can be done in the Bureau of Mines laboratory at Spokane, Washington as they know of no one in southern Idaho who does this type of work.

The assays of black sands from 3 grab samples shown in the Field Team's letter of transmittal justifies further investigation of the deposit and I concur with the recommendation of the examiner and Field Team. However, consideration should be given in preparing a contract with the applicant to assure competent engineering supervision of the project in addition to that which

the Bureau of Mines may provide. Furthermore, it is believed that satisfactory concentration and analysis of samples can be obtained from commercial laboratories in Salt Lake City, Denver and other locations in nearby states.

Frank D. Lamb

Frank D. Lamb

Attachment

8/20/56

PHONE GRAND 7-5294

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

1727 BOULDER STREET

DENVER 11, COLORADO

RECEIVED

AUG 20 1956

August 16, 1956

Mr. Ernest Wm. Ellis
Chief, Rare and Miscellaneous Metals Division
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-4280 (Monazite-thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Ellis:

In reply to your letter of August 13, 1956, we wish to provide the following information. Our group of claims as recorded in the Custer County courthouse, Challis, Idaho, were discovered on the fifteenth day of August, 1954, and located on the eighteenth day of August, 1954. The claims were duly staked, the validation pits excavated, and the claims recorded according to law. The assessment work was accomplished for the year '55 - '56, and affidavits to that effect properly recorded.

You will note that our group of claims covers 1,480 acres of most of the placer ground in the Meadows area. None of our claims conflict with those of Mr. J. Buse of Challis, Idaho, as his claims all lie to the west up Pigtail Creek and do not extend into the area covered by our group of claims.

Mr. Johnson has six 20 acre claims in the area, which we are assuming are valid. There is no conflict with these claims, although they do lie within the area of one of our claims.

Mr. Jaggers has staked one 20 acre claim in the area which is in conflict. We feel, however, that it is not valid since it was located on the thirtieth of September and recorded the twenty-fifth of October, 1954.

A few additional claims were staked in the area in September of 1954, but were never recorded.

Since we do not conflict with Mr. Buse or Mr. Johnson, and since Mr. Roy Jaggers has only one claim which might conflict, we feel that the question of conflict of title is of minor importance.

Of the total 1,480 acres, Mr. Johnson's and Mr. Jaggers' claims would not exclude more than 140 acres.

Re: Docket No. DMEA-4280 (Monazite-thorium)

The remaining 1,340 acres would not be in conflict with anyone.

In view of the fact that only a minor portion of the total acreage could be in conflict, we feel that our DMEA project could proceed as planned.

Please advise if further information is required.

Yours very truly,

ALFRED G. HOYL AND ASSOCIATES

Alfred G. Hoyl

Alfred G. Hoyl

AGH:dsh

8/15/56

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
AUG 1 5 1956

August 14, 1956

Re: DMEA 4280 (Monazite)
Alfred G. Hoyl & Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
Appl. Est. - $13,970.00
Rec'd. Est. - $28,859.55

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicants requested assistance in testing a large gravel deposit, preliminary testing of which indicates a content of 1.82 pounds of monazite equivalent per cubic yard.

The engineer examiner recommends " . . . that the application be approved with the modifications proposed by the Bureau of Mines and that a unit cost contract be awarded on the basis of the Bureau of Mines' cost estimates, providing the proposed modifications are acceptable to the applicants. Because of possible conflicts of the claims with those of other locators in the area the applicant's property rights should be determined before any exploratory work in the area is begun."

The recommendation is based on 11 grab samples and rough yardage estimates, which range from 30 to 60 million cubic yards.

The applicants proposed to do 3,000 feet of drilling at an over-all cost of $13,970.00. The examiner recommends a 2-stage work program consisting of 1900 feet of drilling at an estimated cost of:--

Stage I

1000 feet churn drilling at $5.25/ft.	$ 5,250.00
Labor, supervision and consultants	5,711.45
Operating supplies, etc.	820.66
Operating equipment	1,278.44
Miscellaneous	3,257.92
	$16,318.47

Stage II

900 feet of drilling at $5.25/ft.	$ 4,725.00
Labor, supervision and consultants	4,574.10
Operating materials and supplies	280.00
Operating equipment	41.55
Miscellaneous	2,920.43
	$12,541.08
Total Stages I and II	$28,859.55

The costs estimated by the examiner are based on Bureau of Mines experience in similar work.

I concur with the recommendation of the examiner and the Field Team.

N. E. Nelson

N. E. Nelson

Su me copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

700

Murphy
Ellis
Mottendorf

AUG 13 1956

Mr. Alfred G. Hoyl
Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Hoyl:

Information available to this office indicates that most of the placer ground, relating to the above-docketed application, namely, the ground along Pig Tail Creek, near the junction of Martin Creek with Warm Springs Creek, and the main valley or Meadows, along Warm Spring Creek, has been staked by J. Buse, of Challis, Idaho, Roy T. Jaggers, of Stanley, Idaho, and Robert Johnson, of Missoula, Montana, as well as by yourself and associates.

As a conflict in the claim locations appears to exist, we will require written evidence which indicates that you have the uncontested right of possession of the claim groups mentioned in the application.

We will hold the subject application in abeyance pending clarification of your title to the claim groups.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

FMMurphy/ai
8-13-56
cc to: Docket
Admr.'s Reading File
Code 700
Mr. Murphy
DMEA Field Team, Region I, NW Dist. (2)
Messrs. ~~JECrawford, Rm. 3649~~ Chas T. Barnes 3649
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.

8/14/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

RECEIVED
AUG 13 1956

1201 N. Division St.
Spokane 2, Washington
August 10, 1956

AIR MAIL

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4280 (monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Selfridge:

Enclosed are three copies of a letter from the applicant and three copies each of bids for churn drilling by Leroy A. Ray and Henry L. Johnson, churn drill contractors.

These exhibits are to accompany the Field Team recommendations on this application which were mailed to Washington on August 1, 1956.

Sincerely yours,

Thomas E Howard
for: Wing G. Agnew, Member
DMEA Field Team, Region I
Northwest District

Enclosures

cc: USGS (2)

CONTRACT ENGINEERING COMPANY

Engineering, Development, Research, in the Mineral and Construction Industries

DENVER, COLORADO

1727 BOULDER STREET

RECEIVED

AUG 13 1956

Mac
at
USBM
DMEA

August 8, 1956

Mr. A. E. Weissenborn
Executive Officer, DMEA Field Team
Northwest District, Region I
South 157 Howard Street
Spokane 4, Washington

Docket No DMEA-#280
Alfred G. Hoyl & Associates
The Meadows
Custer Co., Idaho

Dear Mr. Weissenborn:

In accordance with a phone call from Mr. Don MacLaren of your office, we have obtained two bids on churn drilling for the Meadows property on Warm Springs Creek, Custer County, Idaho.

The two bids are enclosed. One is based on a price per foot - the second on an hourly basis. The Porter Brothers have also offered to rent us one of their drills but we would have to provide the driller ourselves.

The footage cost bid by Mr. Ray is higher than we had anticipated and if we are unable to secure a better bid, it would necessitate an adjustment in our program. At this stage from Denver it is difficult to obtain a good bid and we are sure that we can better the figures when the project has been definitely scheduled and we are able to contact the available drillers in person. It might also be wise, in view of your good results with a back-hoe, to include some work with this type of equipment in the project.

We will be guided by your recommendations in this respect. If additional information is required, please advise.

Yours very truly,

CONTRACT ENGINEERING COMPANY

Alfred G. Hoyl

AGH:ef

Enclosures 2

DOMESTIC SERVICE

Check the class of service desired; otherwise this message will be sent as a full rate telegram

FULL RATE TELEGRAM		SERIAL	
DAY LETTER		NIGHT LETTER	

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1211

INTERNATIONAL SERVICE

Check the class of service desired; otherwise this message will be sent at the full rate

FULL RATE		LETTER TELEGRAM	
VICTORY LETTER		SHIP RADIOGRAM	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to

C O P Y

C O P Y

RECEIVED
AUG 13 1956

PR SKA926 NL PD AR SPOKANE WASH 7

August 7, 1956
11:25 p.m.

CONTRACTING ENGINEERING CO.
ATTN: A. HOYL
1727 BOULDER STREET
DENVER, COLORADO

TO CONFIRM OUR PHONE CONVERSATION AUGUST 6 AFTERNOON WE AGREE TO DRILL AND FURNISH NECESSARY EQUIPMENT FOR PROPOSED PROJECT. FIRST 2,000' WILL BE AT RATE OF $5.25 PER FOOT; OVER AND ABOVE 2,000' WILL BE DRILLED AT $5.00 PER FOOT; IF LESS THAN 2,000' IS DRILLED THERE WILL BE A MOVING DOWN AND BACK CHARGE OF $400. YOU MAY EXTEND YOUR TOTAL FOOTAGE OVER 2 YEARS OF DRILLING.

LEROY A. RAY
SPOKANE DRILLING CO.

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

To guard against mistakes or delays, the sender of a message should order it repeated, that is, telegraphed back to the originating office for comparison. For this, one-half the unrepeated message rate is charged in addition. Unless otherwise indicated on its face, this is an unrepeated message and paid for as such, in consideration whereof it is agreed between the sender of the message and this Company as follows:

1. The Company shall not be liable for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the unrepeated-message rate beyond the sum of five hundred dollars; nor for mistakes or delays in the transmission or delivery, or for non-delivery, of any message received for transmission at the repeated-message rate beyond the sum of five thousand dollars, unless specially valued; nor in any case for delays arising from unavoidable interruption in the working of its lines.

2. In any event the Company shall not be liable for damages for mistakes or delays in the transmission or delivery, or for the non-delivery, of any message, whether caused by the negligence of its servants or otherwise, beyond the actual loss, not exceeding in any event the sum of five thousand dollars, at which amount the sender of each message represents that the message is valued, unless a greater value is stated in writing by the sender thereof at the time the message is tendered for transmission, and unless the repeated-message rate is paid or agreed to be paid, and an additional charge equal to one-tenth of one per cent of the amount by which such valuation shall exceed five thousand dollars.

3. The Company is hereby made the agent of the sender, without liability, to forward this message over the lines of any other company when necessary to reach its destination.

4. Except as otherwise indicated in connection with the listing of individual places in the filed tariffs of the Company, the amount paid for the transmission of a domestic telegram or an incoming cable or radio message covers its delivery within the following limits: In cities or towns of 5,000 or more inhabitants where the Company has an office which, as shown by the filed tariffs of the Company, is not operated through the agency of a railroad company, within two miles of any open main or branch office of the Company; in cities or towns of 5,000 or more inhabitants where, as shown by the filed tariffs of the Company, the telegraph service is performed through the agency of a railroad company, within one mile of the telegraph office; in cities or towns of less than 5,000 inhabitants in which an office of the Company is located, within one-half mile of the telegraph office. Beyond the limits above specified the Company does not undertake to make delivery, but will endeavor to arrange for delivery as the agent of the sender, with the understanding that the sender authorizes the collection of any additional charge from the addressee and agrees to pay such additional charge if it is not collected from the addressee. There will be no additional charge for deliveries made by telephone within the corporate limits of any city or town in which an office of the Company is located.

5. No responsibility attaches to this Company concerning messages until the same are accepted at one of its transmitting offices; and if a message is sent to such office by one of the Company's messengers, he acts for that purpose as the agent of the sender.

6. The Company will not be liable for damages or statutory penalties in the case of any message except an intrastate message in Texas where the claim is not presented in writing to the Company within sixty days after the message is filed with the Company for transmission, and in the case of an intrastate message in Texas the Company will not be liable for damages or statutory penalties where the claim is not presented in writing to the Company within ninety-five days after the cause of action, if any, shall have accrued; provided, however, that neither of these conditions shall apply to claims for damages or overcharges within the purview of Section 415 of the Communications Act of 1934.

7. It is agreed that in any action by the Company to recover the tolls for any message or messages the prompt and correct transmission and delivery thereof shall be presumed, subject to rebuttal by competent evidence.

8. Special terms governing the transmission of messages according to their classes, as enumerated below, shall apply to messages in each of such respective classes in addition to all the foregoing terms.

9. No employee of the Company is authorized to vary the foregoing.

10-42

CLASSES OF SERVICE

DOMESTIC SERVICES

FULL RATE TELEGRAMS

A full rate expedited service.

DAY LETTERS

A deferred service at lower than the full rate

SERIALS

Messages sent in sections during the same day.

NIGHT LETTERS

Accepted up to 2 A.M. for delivery not earlier than the following morning at rates substantially lower than the full rate telegram or day letter rates.

INTERNATIONAL SERVICES

FULL RATE (FR)

The standard fast service at full rates. May be written in any language that can be expressed in Roman letters, or in secret language. A minimum charge for 5 words applies.

LETTER TELEGRAM (LT)

Overnight plain language messages. Minimum charge for 22 words applies.

VICTORY LETTER TELEGRAM (VLT)

Overnight plain language messages to armed forces overseas. Minimum charge for 10 words applies.

SHIP RADIOGRAM

A service to and from ships at sea. Plain or secret language may be used. Minimum charge for 5 words applies.

8/14/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
1201 N. Division St.
Spokane 2, Washington

RECEIVED
AUG - 9 1956

August 1, 1956

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D.C.

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows
Warm Springs Creek, Custer Co., Idaho

Dear Mr. Selfridge:

Enclosed are four copies of a memorandum by Almon F. Robertson, Bureau of Mines, recommending a contract to explore the Meadows Placer deposit on Warm Springs Creek, Custer County, Idaho. The applicant proposes to drill 3,000 feet of churn drill holes spaced on 500-foot centers. Robertson recommends an alternate program with 1,000 feet of drilling on 1,000-foot centers in a first stage to be followed, if warranted, by an additional 900 feet of drilling on closer spacing. The Field Team concurs in Robertson's recommendation.

Assays of black sands on three grab samples from the Meadows Placer contained the following:

Sample Number	Th O_2 Percent	U_3O_8 Percent	(Cb Ta) $_2O_5$ Percent
19-H	0.10	0.09	0.50
25-H	0.05	0.04	0.52
26-H	0.10	0.06	0.62

Reviewed by
DMEA OPERATING COMMITTEE
8-13-56
(date)

The indicated grade, based on this obviously limited sampling, is about 0.21 pounds of combined columbium-tantalum pentoxides per cubic yard, or approximately 7-1/2 million pounds for the deposit.

Since we are uncertain as to the applicant's ability to observe proper sampling procedures, we will have an experienced Bureau of Mines engineer spend at least one day per week at the project.

The concentration of samples can be done in the Bureau of Mines laboratory at Spokane, Wash., as we know of no one in southern Idaho who does this type of work.

The applicant was requested to furnish the required bids for churn drilling.

By Field Team, Region I, NW District

Wing G. Agnew, Member
U. S. Bureau of Mines

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

ON-SITE EXAM. REPORT

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1201 North Division
Spokane 2, Washington
July 19, 1956

RECEIVED
AUG - 9 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Almon F. Robertson, Mining Engineer, Bureau of Mines

Subject: Field examination, Docket No. DMEA-4280 (monazite-thorium), Alfred G. Hoyl and Associates, The Meadows, Warm Springs Creek, Custer County, Idaho

INTRODUCTION

The Meadows placer deposit was first examined by John R. Reynolds, mining engineer, Bureau of Mines, and Robert Carnes, a WAE employee of the Bureau, in the fall of 1953 during a reconnaissance survey of the placer deposits in the vicinity of the Sawtooth Valley in central Idaho. The examination was a part of a general reconnaissance in Idaho and western Montana of all placer deposits containing radioactive opaque minerals. The examination was made for the Atomic Energy Commission by the Bureau of Mines.

Laboratory tests on concentrates from three grab samples taken by Reynolds and Carnes indicated that, although the concentrates contained only a small amount of monazite, they had an excess radioactivity which, presumably, was due to the presence of euxenite, samarskite, or other radioactive opaque minerals. Dean C. Holt, mining engineer, Bureau of Mines, and Ray Mullen and Robert Carnes, WAE employees of the Bureau, visited the Meadows in August and September 1954 and took a total of eight large-sized grab samples. These were transported by pack horses to the end of the trail leading down Pig Tail Creek and then by truck to the Bureau of Mines laboratory at Spokane, Wash. The results of laboratory tests on these samples confirmed the results of the tests on the samples taken by Reynolds and Carnes.

Reviewed by
DMEA OPERATING COMMITTEE
8-13-56
(date)

Summary

The entire meadows area along Warm Springs Creek was located as placer claims by Alfred G. Hoyl and Associates in August 1954. The properties consist of nine 160-acre claims and one 40-acre claim or a total of 1,480 acres situated on unsurveyed lands in the Challis National Forest.

The applicant has proposed that the road extending down Pig Tail Creek from the Aztec mine be extended to the junction of Pig Tail Creek with Warm Springs Creek to permit drilling equipment

to be taken to the placer areas and that 3,000 feet of churn drill sampling be done on the claims. It was proposed that the drill holes be drilled at intervals of 500 feet. The cost of the project was estimated to be $13,970.

The claims are in an isolated location at a comparatively high altitude. Drilling can be done in the area only during the late summer and early fall months. To obtain as much information as would be needed to evaluate the deposit an alternative program is recommended. Instead of 3,000 feet of churn drilling only 1,000 feet, with holes spaced at 1,000-foot centers, would be drilled as Stage I of the project. Stage II of the project would consist of 900 feet of churn drilling. The spacing and location of the holes drilled under Stage II to be dependent on the results obtained under Stage I.

Recommendations

It is recommended that the application be approved with the modifications proposed by the Bureau of Mines and that a unit cost contract be awarded on the basis of the Bureau of Mines' cost estimates, providing the proposed modifications are acceptable to the applicants. Because of possible conflicts of the claims with those of other locators in the area the applicant's property rights should be determined before any exploratory work in the area is begun.

LOCATION AND ACCESSIBILITY

The Meadows placer area is situated mainly in unsurveyed T. 9 N., R. 15 E. of the Boise Meridian. It is in the Challis National Forest and can be reached from Stanley, Idaho, the nearest town, by a graveled road south, 12 miles to Fisher Creek, then by an unimproved road northeast, 7 miles to the Aztec mine, thence by trail down Pig Tail Creek 3 miles to the Meadows.

The area is about 63 miles by road north from Ketchum, the nearest point where railroad facilities are available.

The altitude of the valley is about 7,300 feet above sea level and it is surrounded by high mountains, some of them reaching altitudes of over 10,000 feet.

The placer gravels in the valley were deposited by streams flowing into a lake formed when the lower end of the valley was blocked by glacial debris.

Because of its high altitude the area is almost inaccessible during the late fall, winter and early spring months. For many years the area has been used, under lease from the Forest Service, as summer grazing land for sheep and cattle. At one time some placer mining for gold was done along Pig Tail Creek but no mining was done in the main Meadows along Warm Springs Creek.

APPLICANT

Mr. Alfred G. Hoyl, head of the group which located the claims, is a mining and geological engineer, a graduate of the Colorado School of Mines and one of the proprietors of the Contract Engineering Company of Denver, Colorado. At the time the claims were filed on by Mr. Hoyl he stated he was representing the Humphreys Investment Company, 915 First National Bank Bldg., Denver, Colorado, manufacturing and sales agents for the Humphreys Spiral Concentrators, and that the company was able to match any Government funds in the event that an exploration program is approved.

It is stated in the application that Mr. Hoyl will supervise the operations.

PROPERTY

The following unpatented claims are listed in the application and are shown on the accompanying map of the area. All claims are owned by right of location.

Name of claim	Recorded in Book No.	Recorded in Pages No.	Location
Azul Group	5	624 & 643	SE¼, sec. 32, T. 10 N., R. 15 E.
Pinto "	5 6	630 6	NE¼, sec. 5, T. 9 N., R. 15 E.
Rojo "	5 6	629 5	SW¼, sec. 5, T. 9 N., R. 15 E.
Verde "	5	623 & 642	SE¼, sec. 5, T. 9 N., R. 15 E.
Esperdo "	5	622 & 641	NW¼, sec. 8, T. 9 N., R. 15 E.
La Veta "	5 6	627 3	NE¼, sec. 8, T. 9 N., R. 15 E.
Alvarado "	5	621 & 640	SE¼, sec. 8, T. 9 N., R. 15 E.
Cortez "	5 6	626 2	NE¼, sec. 17, T. 9 N., R. 15 E.
Luz "	5 6	625 1	SW¼NW¼, sec. 16, T. 9 N., R. 15 E.
Coronado "	5 6	628 4	SW¼, sec. 16, T. 9 N., R. 15 E.

Prior to the time the second sampling was done by Bureau of Mines employees, most of the placer ground along Pig Tail Creek, near the junction of Martin Creek with Warm Springs Creek, and the main valley or Meadows, along Warm Spring Creek, had been staked by J. Buse, Challis, Idaho, Roy T. Jaggers, Stanley, Idaho, Robert Johnson, Missoula, Montana, and Alfred G. Hoyl and Associates, Denver, Colorado. From the position of claim corners seen in the main Meadows it was apparent that the claim locations were in conflict. The records of Custer County at Challis were not examined to determine if all of the locators had filed location notices. It is not known whether all of the locators have done the assessment work necessary for the maintenance of their legal rights to the claims since they were located.

If Alfred G. Hoyl and Associates are considered to be the legal owners of the claims listed in the application, some provision should be made to protect the interests of the Government in the lands involved.

Description of the Deposit

The Meadows placer area consists, for the most part, of an ancient lake bed in which sedimentary material derived by erosion from the surrounding mountains has been deposited. The area, about $3\frac{1}{2}$ miles long by $\frac{1}{2}$ to 1 mile wide, is covered with a heavy growth of rich grass and for many years has been used as a summer range for sheep and cattle. Warm Springs Creek follows a meandering course from south to north through the meadows. Slate Creek, the principal headwaters tributary of Warm Springs Creek, drains an area where the predominant rocks are limestone, sandstone and quartzite. Pig Tail and Martin Creeks, flowing easterly, join Warm Springs Creek near the lower end of the Meadows. Both creeks drain areas where granitic rocks are predominant.

The preliminary sampling done in the area indicates that the gravels containing the largest amounts of the heavy minerals are situated near the junction of Pig Tail Creek with Warm Springs Creek and extend downstream past Martin Creek to the lower end of the valley. The gravels derived from the eroded areas to the south and east contain smaller amounts of the black minerals; these probably were contained only in pegmatite dikes which penetrated the sedimentary rocks. It is probable that the gravels in the southern part of the Meadows will contain only small amounts of monazite or radioactive black minerals; the amount of drilling which will be needed in the southern end of the valley may be limited to two or three holes.

PROPOSED EXPLORATION

Before any drilling can be done it will be necessary to extend the road down Pig Tail Creek from the Aztec mine to the Meadows. Some rock excavation, which will require the use of a compressor and drilling equipment, will be done as soon as the work is begun. Most of the road construction can be accomplished with a dozer.

Estimates of the costs for dozer and compressor rental and for gas, oil, dynamite and sample bags as mention in the application are believed to be too low.

over

The applicant's estimate of costs for the churn drilling at $2.00 per foot is considered to be too low also. Contract prices paid by the Government for similar drilling during the past 4 years on two different contracts, based on guaranteed minimums of 2,500 and 1,000 feet of drilling, were $5.50 and $4.60 per foot, respectively. These contracts specified that the samples from the drill holes were to be delivered into a trough or container; subsequent handling of the samples was done by Government employees who dried, screened, sacked, weighed and transported them to the field laboratory for concentration and estimation of their mineral content. No provision was made in the applicant's estimate of costs for samplers and a laborer who will be needed for supplying firewood, drying samples and assisting in moving sampling equipment to the different drilling sites.

The applicant proposes that 3,000 feet of churn drill sampling be done in the area with holes spaced at 500-foot centers. This spacing is believed to be closer than necessary for determining the average mineral content of the gravels in the deposit and its approximate size. If the first drilling is done at 1,000-foot intervals in the main part of the Meadows, in 2 or 3 rows of holes, the economic limits of the deposit can be determined. Later, if the results of the analyses of the samples taken from the first holes indicate the deposit contains enough of the valuable minerals to warrant the installation of mining, concentration and sand-separation equipment, intermediate holes can be drilled to determine more accurately the extent and grade of the deposit, to the maximum minable depth.

The size of a dredge required for mining the gravels is determined by the depth to which the economically minable gravels extend. Unless bedrock is reached it may be necessary to drill some of the holes to depths of 100 feet or more to determine the kind and grade of the minerals present. A cross-section of the valley, constructed from the contours shown on the topographic map accompanying the application, indicates the depth to bedrock in the widest part of the valley may be as much as 300 feet.

Samples should be taken from each 5 feet of hole. If standard 6-inch inside diameter drive pipe, with a 7½-inch drive shoe is used, individual samples, dried and screened to minus 1/8-inch size, will average about 100 pounds in weight. If the holes are drilled to an average depth of 50 feet, 10 samples weighing approximately 1,000 pounds will be recovered per hole. 20 holes

Because of the remoteness of the area and its high altitude the amount of drilling which can be done by one drill before early snowstorms force a suspension of operations will be limited by the time available after the proposed road construction is completed.

RECOMMENDED EXPLORATION

The following exploration is recommended by the Bureau of Mines for consideration.

Stage I

Complete the road down Pig Tail Creek from the end of the present road to the Meadows.

Drill 20 churn drill holes, as shown on the accompanying map. These holes to be drilled at 1,000-foot intervals to depths averaging 50 feet. Total aggregate depth of holes to be limited to a maximum of 1,000 feet.

Recover samples for each 5-foot section of drill hole. Samples to be taken after each $2\frac{1}{2}$ feet of drive of the casing pipe. All samples to be dried, screened to minus 1/8-inch mesh. The weights of the undersize and oversize material will be determined in the field. The plus 1/8-inch mesh material will be discarded unless radiometric tests show it contains radioactive minerals. The minus 1/8-inch material will be transported to a field laboratory where it will be screened on a 16-mesh screen. The oversize, after being checked with a Geiger counter, will be reserved for further analysis if the Geiger tests warrant. The undersized material will be concentrated to a rough concentrate on a Wilfley table; this material will then be cleaned to a final concentrate by retreatment on the Wilfley table or on a smaller laboratory type table.

The weight of the final concentrate per cubic yard of gravel from each 5-foot sample will be determined after it is dried. Each final concentrate will then be compared radiometrically with the radioactivity of a standard monazite sample which contains known percentages of uranium and thorium. The amount of monazite present in each concentrate will be estimated visually by use of a binocular microscope.

Estimated Costs of Project

Stage I - 1,000 feet of churn drilling - 2 months

(1) Unit Cost Contract

1,000 feet of churn drilling @ $5.25/ft.	$5,250.00

(2) Labor, supervision and consultants

Labor			
1 miner	10 days @ $25/day x 1.083	$ 270.75	road.
1 helper	10 " @ $20/day x 1.083	216.60	
3 samplers	45 " @ $60/day x 1.083	2,924.10	$3,411.45
Supervision			
1 Engineer	2 mo. @ $600/mo.	1,200.00	
1 Assistant	2 mo. @ $400/mo.	800.00	2,000.00 why?
Consultants			
Engineering and accounting - part time 2 months @ $150/mo.		Miscellaneous	300.00 5,711.45

(3) Operating Materials and Supplies

To be purchased:		
For road construction		
Explosives, caps, fuse, etc.	300.00	road.
For churn drill sampling		
6 sample pans (sheet iron) 18"x36"x8" @ $20/ea.	120.00	
1 Screening pan (sheet iron) 32"x42"x10" @ $25.00	25.00	
1 ¼"-screen (30"x30" on wood frame)	25.00	
2 rd. pt. No. 2 shovels @ $4.19	8.38	15.96
2 sq. pt. No. 2 " @ 3.79	7.58	
2 galv. iron tubs (11 gal.) @ 2.50	5.00	
2 galv. iron pails (11 qt.) @ 1.30	2.60	
2 garden hoes @ 2.49	4.98	
1 spring scale (Hanson - 200# cap.) @ $8.00	8.00	
1 hooked floor scraper @ 0.85	.85	
2 wire brushes (14" handle) @ 0.37	.74	

(3) Operating Materials and Supplies (continued)

To be purchased:

For churn drill sampling (continued)

2 large gold pans	@ $2.50	5.00		
1 pole ax	@ 4.65	4.65		
1 D.B. ax	@ 4.95	4.95		
1 RR pick (with handle)	@ 3.35	3.35		
2 No. 6 steel wedges (9")	@ 1.45	2.90		
1 8-lb. mall	@ 4.75	4.75		
4 - 24"x40" No. 22 gage pan covers	@ 1.00	4.00		
1 stable broom	@ 1.00	1.00		
2 pr. asbestos mittens	@ 5.00	10.00		
1 Fairbanks platform scale (250# cap.) @ $37.50 (less 50% salvage)		18.75		
1 - 12'x14'x4' wall tent @ $52.95 (less 50% salvage)		26.48		
2 - 8'x10' tarpaulins @ $12.35		24.70		
100 feet 3/8" manila rope @ $0.02/ft.		2.00		
200 large sample bags, tags, twine @ $1.00		200.00	520.66	820.66
			18.75	
			26.48	
			565.89	

(4) Operating Equipment

To be rented:

	No. wks.	Rate	Total		
1 - 105 cu.ft. compressor, portable	2	$58.95	117.90		
1 jackhammer (medium)	2	14.85	29.70		
2 sets of drill steel 7/8" (hex.)					
2 pc. 2' long	2	0.99	3.96		
2 pc. 4' "	2	1.30	5.20		
2 pc. 6' "	2	1.53	6.12		
2 pc. 8' "	2	1.85	7.40		
1 D-8 caterpillar tractor (130 h.p.)	2	384.30	768.60		
1 Angle dozer	2	88.88	177.76	1,116.64	(road)

Combine 52.38

To be purchased:

4 carbide insert bits (1¼" cs) @ $13.00	52.00		
4 " " " (1-3/8" cs) @ 13.60	54.40	106.40	(road)

To be furnished:

	Value	Mo.depre.	Use period	Total		
1 1-ton pickup truck	$1500.00	25.00	2 mo.	50.00		
1 16" chain saw (gas)	162.50	2.70	2 mo.	5.40	55.40 (road)	1,278.44

(5)	Rehabilitation and Repairs		None
(6)	Buildings, Improvements & Installations		None
(7)	Miscellaneous		
	Unemployment compensation, Indust. Accid., OAB, vacations - 8% of payroll	272.92	
	Hauling samples (10 tons), 485 miles @ $0.10/mi./ton	485.00	
	Concentration and estimation of samples (200 @ $5.00)	1,000.00	
	Chemical ~~and mineralogical~~ analyses (20 @ $50.00)	1,000.00	
	Mineralogical analyses (20 composites @ $25.00) No!	~~500.00~~	3,257.92
(8)	Contingencies		None
	Total cost of Stage I		$16,318.47

200 (100 pound samples)

Stage II - 900 feet of drilling (contingent on Stage I) - 1½ months

(1) Unit Cost Contracts

900 feet of churn drilling @ $5.25/ft.			4,725.00

(2) Labor, Supervision and Consultants

Labor			
3 samplers 45 days @ $60/day x 1.083		2,924.10	
Supervision			
1 Engineer 1½ mo. @ $600/mo.	900.00		
1 Asst. Engr. 1½ mo. @ 400/mo.	600.00	1,500.00	
Consultants			
Engineering and Accounting - part time (M15) 1 month @ $150/mo.		150.00	4,574.10

(3) Operating Materials and Supplies

To be purchased:			
For road construction:		None	
For churn drill sampling:			
180 large sample bags @ $1/ea.	180.00		
Hand tool replacement	100.00	280.00	280.00

(4) Operating Equipment

To be rented:					None	
To be purchased:					None	
To be furnished:						
	Value	Mo.depre.	Use period	Total		
1 - 1-ton pickup	$1500.00	$25.00	1½ mo.	37.50		
1 - 16" chain saw	162.50	2.70	1½ mo.	4.05	41.55	41.55

(5) Rehabilitation and Repairs — None

(6) Buildings, Improvements & Installations — None

(7) Miscellaneous:

Unemployment comp., Indust. Accid., OAB, vacation - 8% of payroll	233.93	
Hauling samples, 9 tons, 485 miles @ $0.10/mi./T	436.50	
Concentration and estimation of samples 180 @ $5.00/ea.	900.00	
Chemical analyses, 18 composites @ $50/ea.	900.00	
Mineralogical analyses, 18 composites @ $25/ea. No.!	450.00	2,920.43

(8) Contingencies: None

Total cost - Stage II $12,541.08

Attachment 1
Distribution:
DMEA (4)
USBM (5)
USGS(SRO)
Docket
Nickelson
AEC, Salt Lake City

700

FILE COPY

Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

MAY 22 1956

Mr. Alfred G. Hoyl
Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Re: Docket No. DMEA-4280 (Monazite-thorium)
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Hoyl:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

Mr. A. E. Weissenborn
Executive Officer, DMEA Field Team
Northwest District, Region I
South 157 Howard Street
Spokane 4, Washington

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

G. O. Mittendorf

Administrator

FMMurphy/izm 5-18-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
DMEA Field Team, REg. I, NW District (2)

700

FILE COPY
Surname:
FMMurphy
WSMartin
TH Kiilsgaard

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

MAY 22 1956

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region I, NW District
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-4260 (Monazite-thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Weissenborn:

The captioned application is referred to Region I, Northwest District, Field Team for a field examination and recommendation on the proposed project.

Enclosed are copies of memoranda, dated May 11, 1956, by N. E. Nelson, USGS, and Frank D. Lamb, USBM, relating to the subject application.

In the event the Field Team concludes that a project to explore the above-referenced property is warranted, it should advise the Applicant to submit copies of bids from three independent contractors for the churn drilling.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (WB)

Enclosures

FMMurphy/izm 5-18-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
Operating Committee
Messrs. ~~XXXXXXXXXX~~
FDLamb, Rm. 3649
THKiilsgaard, Rm. 5224

APPROVED:

/s/ Robert W. Geehan (WB)
Member, Bureau of Mines

Thor H. Kiilsgaard (WB)
Member, Geological Survey

ACL.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

RECEIVED
MAY 14 1956

May 11, 1956

Memorandum

To: E. W. Ellis, Chief, Division of Rare and Misc. Metals, DMEA

From: Assistant Chief, Branch of Rare and Precious Metals, USBM

Subject: Application for assistance, DMEA Docket No. 4280 (Monazite, etc.), Alfred G. Hoyle and Associates, The Meadows, Warm Springs Creek, Custer County, Idaho

I have reviewed the attached undated application, which was received in this Branch on May 8, and have also reviewed the preliminary report of examination covering the same area, dated January 4, 1955, by Dean C. Holt of the Bureau of Mines.

The application proposes to explore by churn drilling a deposit estimated to contain up to 60 million cubic yards of minable gravel. A total of 3,000 feet of drilling in holes spaced on 500-foot maximum centers is proposed. Samples obtained from the drill holes would be processed to recover heavy mineral concentrates, and assayed in an appropriate laboratory. The total cost of the project is estimated to be $13,970.

Holt's report indicates that the area under consideration may contain about 35 million cubic yards of minable gravels. Seven grab samples taken from test pits and stream bars contained only traces of monazite, but had an average radioactivity equivalent to 1.82 pounds of monazite per cubic yard. While neither the application nor Holt's preliminary report indicates the identity of the radioactive mineral or minerals in the deposit, it is presumably from such minerals as euxenite and samarskite.

The Porter Bros. operation in Bear Valley, Idaho, is the first commercial attempt to exploit a placer deposit of this type, and some comparison can be made between the Bear Valley area and that of the subject application. The average monazite equivalent determinations on samples obtained by the Bureau in three areas in Bear Valley were 2.11, 1.60, and 0.22 pounds per cubic yard. Thus, the 1.82 pounds per cubic yard average monazite equivalent found by Holt indicates a possible commercial deposit, provided the radioactivity proves to be from euxenite and not monazite.

It is suggested that the application be referred to the Field Team for consideration and recommendation. Particular attention should be given the estimated cost of the project, which is believed to be too low in the application.

Frank D. Lamb

Frank D. Lamb

5/10/56

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
MAY 1 1 1956

May 11, 1956

Re: DMEA 4280
Alfred G. Hoyl & Associates
The Meadows, Warm Springs Creek
Custer County, Idaho
$13,970.00 - Monazite

Memorandum

Ernest Wm. Ellis

To: [redacted], Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application.

The applicants request assistance in testing a large gravel deposit for which preliminary testing indicates a grade comparable to the grade of the placer on Bear Creek developed by Porter Brothers.

The Meadows deposit was visited by Mr. Reynolds of the Bureau of Mines and by Mr. Dean Holt of the same agency in 1955. Twelve grab samples totalling 564 pounds probably of near surface material were taken by Mr. Dean and concentrated. The black sand content varied from 4.64 to 79.0 pounds per cubic yard. The volume is estimated to be 36,000,000 cubic yards. Further testing was recommended.

An appraisal of the application involves an appraisal of the industry and a comparison with similar deposits, especially those in Idaho.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

Alfred G. Hoyl and Associates
1727 Boulder Street
Denver 11, Colorado

Subject: DMEA 4280
Re: The Meadows, Warm Springs Creek

Gentlemen:

The receipt of your application dated April 24, 1956 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number 4280 and referred to the Rare and Miscellaneous Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

May 7, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region I.

DMEA
4280 Alfred G. Hoyl and Associates

Robert E. Adams
Chief, Operation's Control
and Statistics Division

8/20/56

xxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, 1956

April 15, 1956

Mr. Arthur E. Granger
U. S. Atomic Energy Commission
P. O. Box 2196
Salt Lake City, Utah

Re: Docket No. DMEA-4280 (Monazite-Thorium)
Alfred G. Hoyl and Associates
The Meadows, Warm Springs Creek
Custer County, Idaho

Dear Mr. Granger:

Enclosed is an application received from Alfred G. Hoyl of Denver, Colorado, to explore The Meadows property in the Warm Springs Creek area of Custer County, Idaho. Also enclosed is a report by Alnon F. Robertson, Bureau of Mines engineer, in which he recommends a contract.

It would be appreciated if we could have your comments on the merits of this application. As soon as we receive your answer we will forward it to Washington so that they may have the benefit of your evaluation in considering this program of exploration.

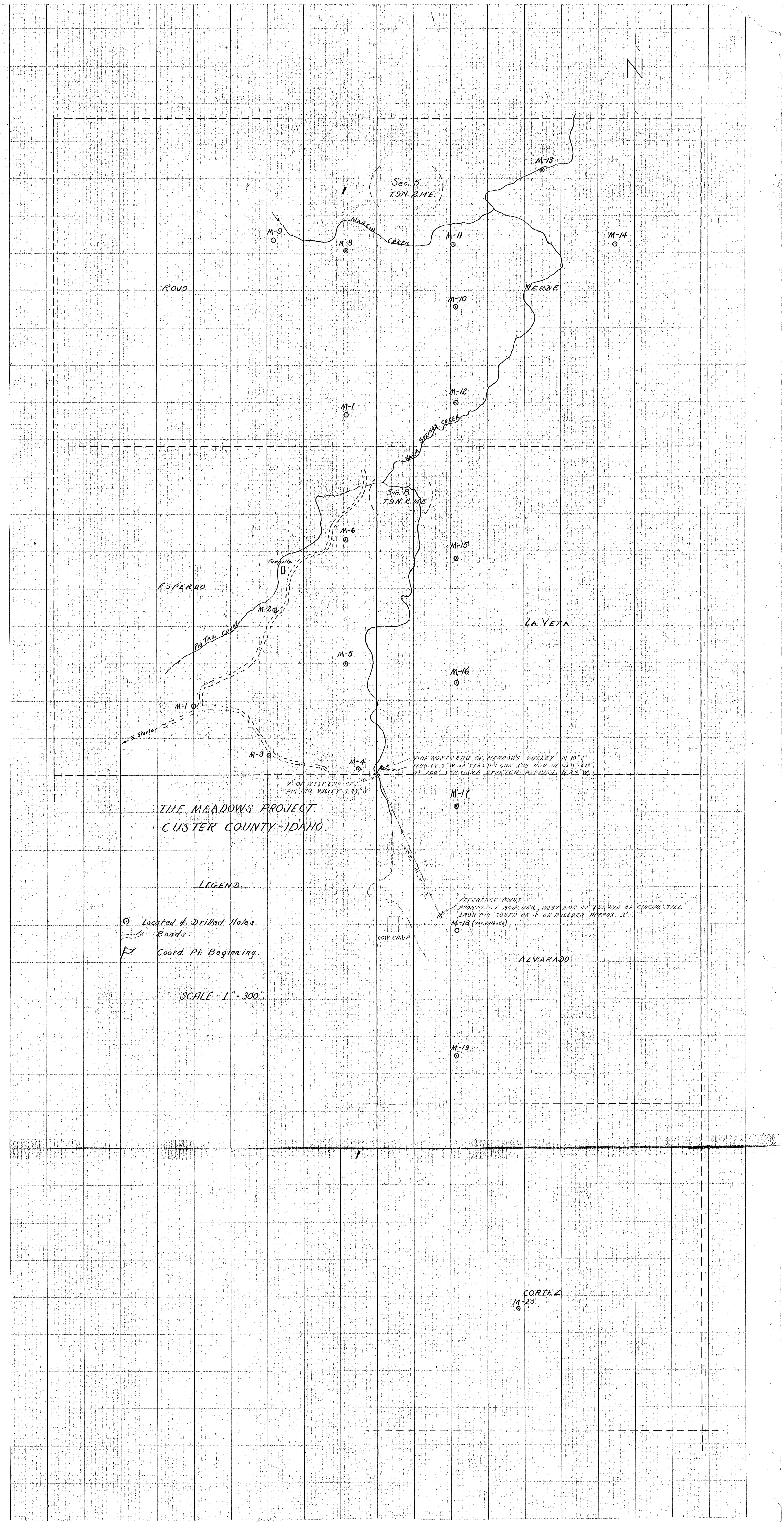
Sincerely yours,

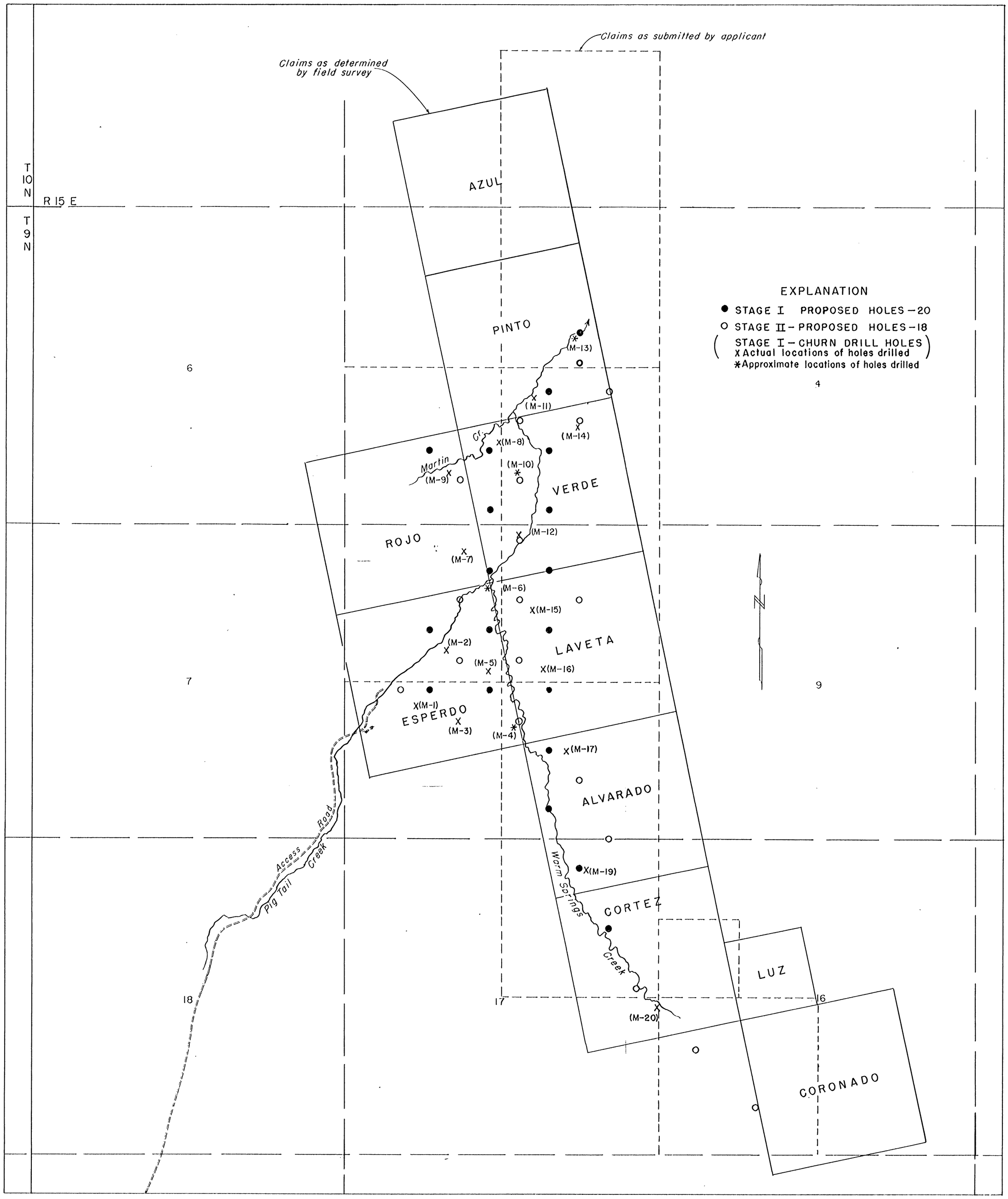
A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I, NW District

Enclosures

cc: DMEA (2)
USBM (2)
Nickelson

RECEIVED
AUG 20 1956


N
Sec. 5
T.9N. R.14E.
M-13
M-14
MARTIN CREEK
M-9
M-8
M-11
ROJO
VERDE
M-10
M-12
M-7
WARM SPRINGS CREEK
Sec. 8
T.9N. R.14E.
M-6
M-15
Campsite
ESPERDO
M-2
LA VETA
PIG TAIL CREEK
M-5
M-16
M-1
To Stanley
M-3
M-4
V. OF NORTH END OF MEADOWS VALLEY N 10° E
V. OF WESTERN EDGE OF PIG TAIL VALLEY S 35° W
M-17
THE MEADOWS PROJECT.
CUSTER COUNTY-IDAHO.
LEGEND.
Located & Drilled Holes.
Roads.
Coord. Pt. Beginning.
SCALE - 1" = 300'
REFERENCE POINT
PROMINENT BOULDER, WEST END OF ESCARPMENT OF GLACIAL TILL
IRON PIN SOUTH OF + ON BOULDER APPROX. 2'
M-18 (NOT DRILLED)
COW CAMP
ALVARADO
M-19
CORTEZ
M-20



CLAIM MAP OF
"THE MEADOWS" PLACER AREA
ALFRED C. HOYL AND ASSOCIATES
WARM SPRINGS CREEK
CUSTER COUNTY, IDAHO

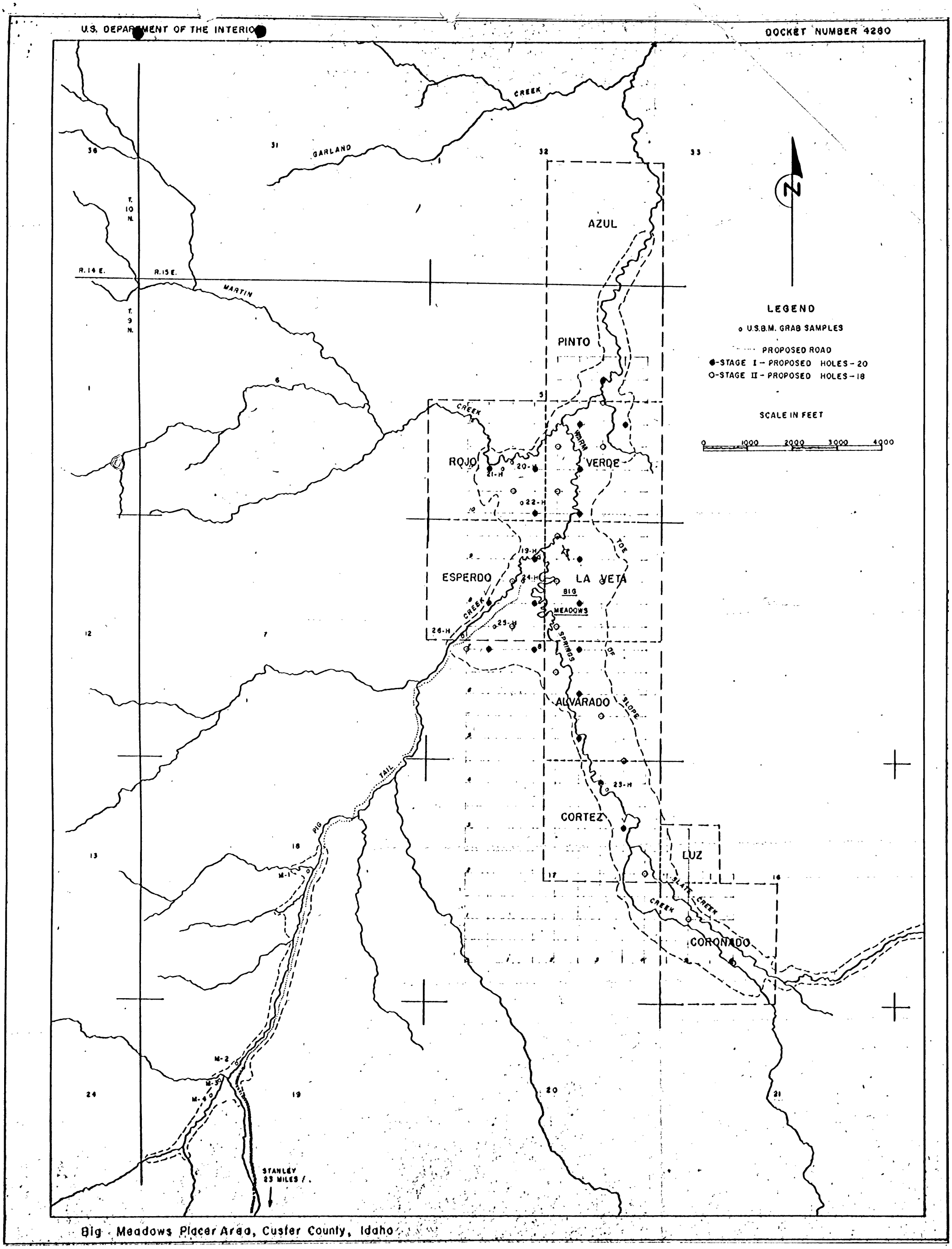
1000 0 1000 2000 Feet

R. D. SAMPLE

OCT. 1958

PLATE 3

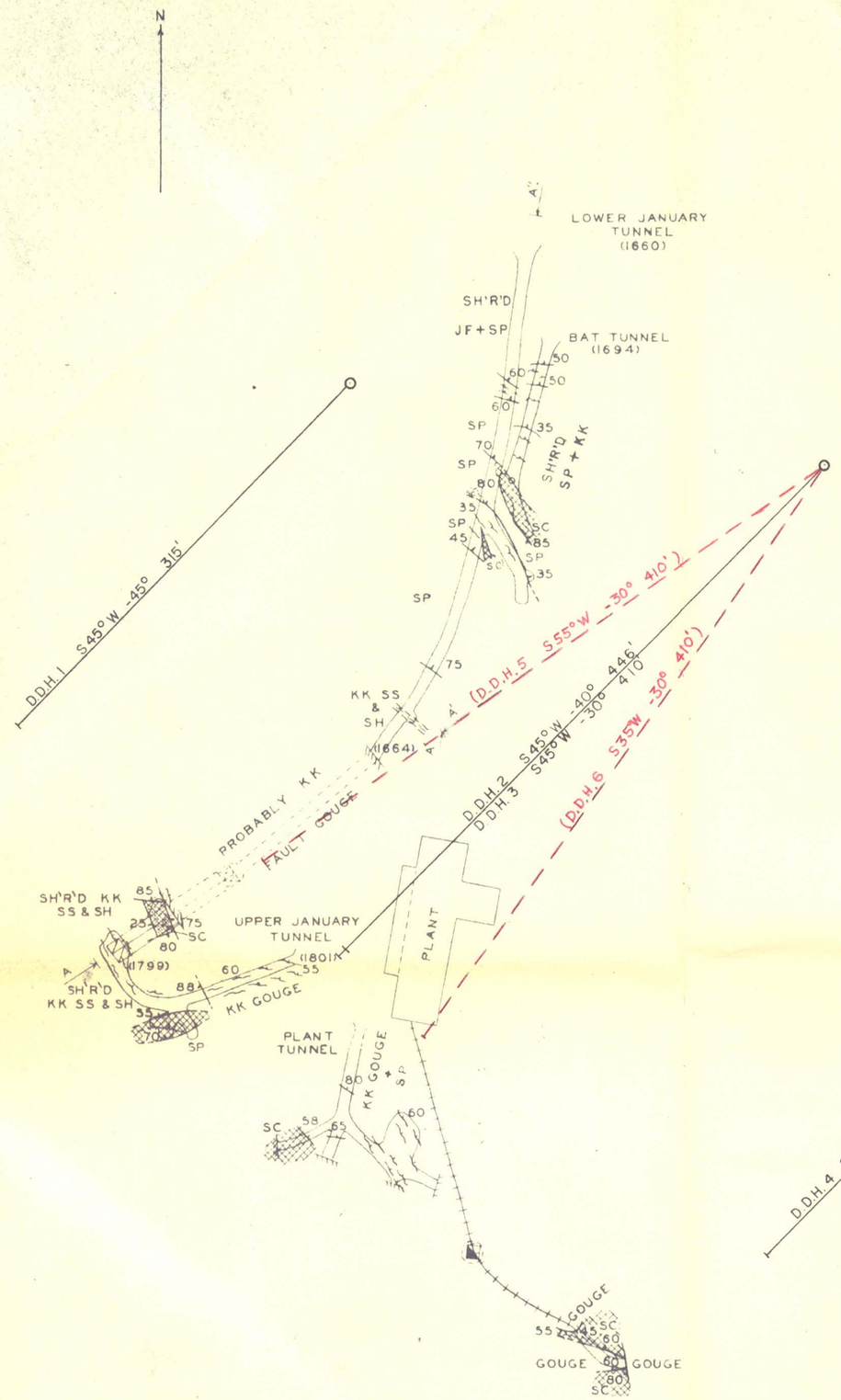
Field survey by R. D. Sample, U. S. G. S. and W. M. Romischer, U. S. B. M.

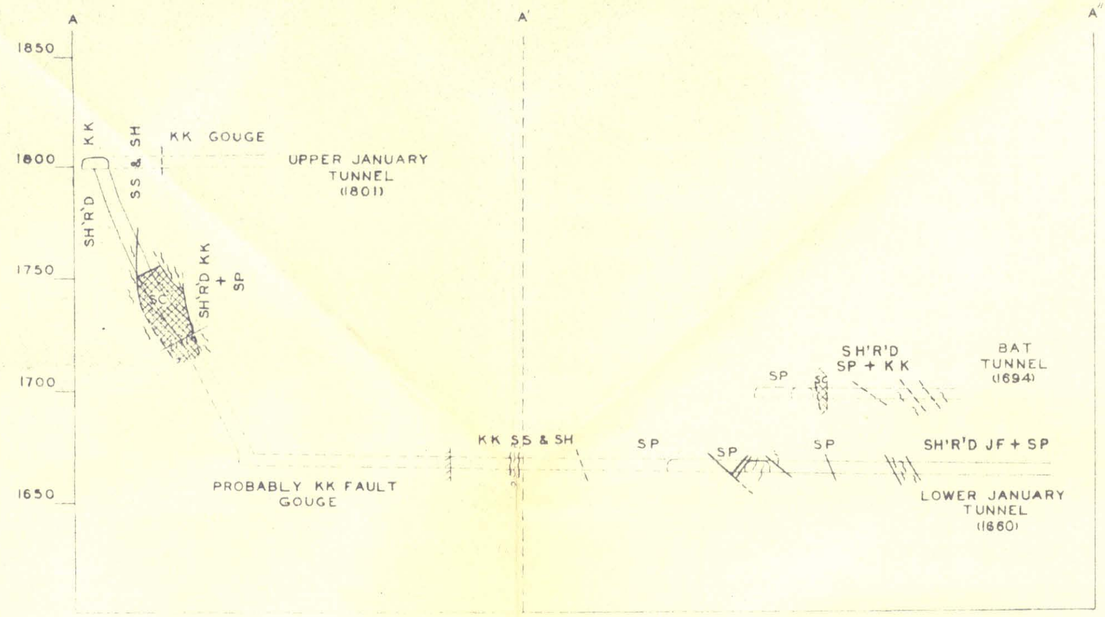


Big Meadows Placer Area, Custer County, Idaho

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 4186
(MERCURY)
Idm E-983





HARRISON MINE

YOLO COUNTY, CALIFORNIA

25 0 25 50 75 100

SCALE IN FEET

DATUM IS APPROXIMATELY MEAN SEA LEVEL

SEPT 1943

EXPLANATION

- SC — SILICA-CARBONATE ROCK
- SP — SERPENTINE
- KK — SH: KNOXVILLE FORMATION SH SHALE; SS: SS SANDSTONE
- JF — FRANCISCAN FORMATION
- CINNABAR MINERALIZATION
- FAULT (DASHED WHERE INFERRED)
- LINEATION OF SHEARS IN FAULT ZONE
- GRADATIONAL CONTACT
- HEAD OF INCLINED OPENING
- APPROXIMATE POSITION OF FOOT OF INCLINED OPENING
- APPROXIMATE POSITION OF CAVED SHAFT AT SURFACE
- TRACK
- INACCESSIBLE WORKINGS
- BUILDING
- LINE OF SECTION

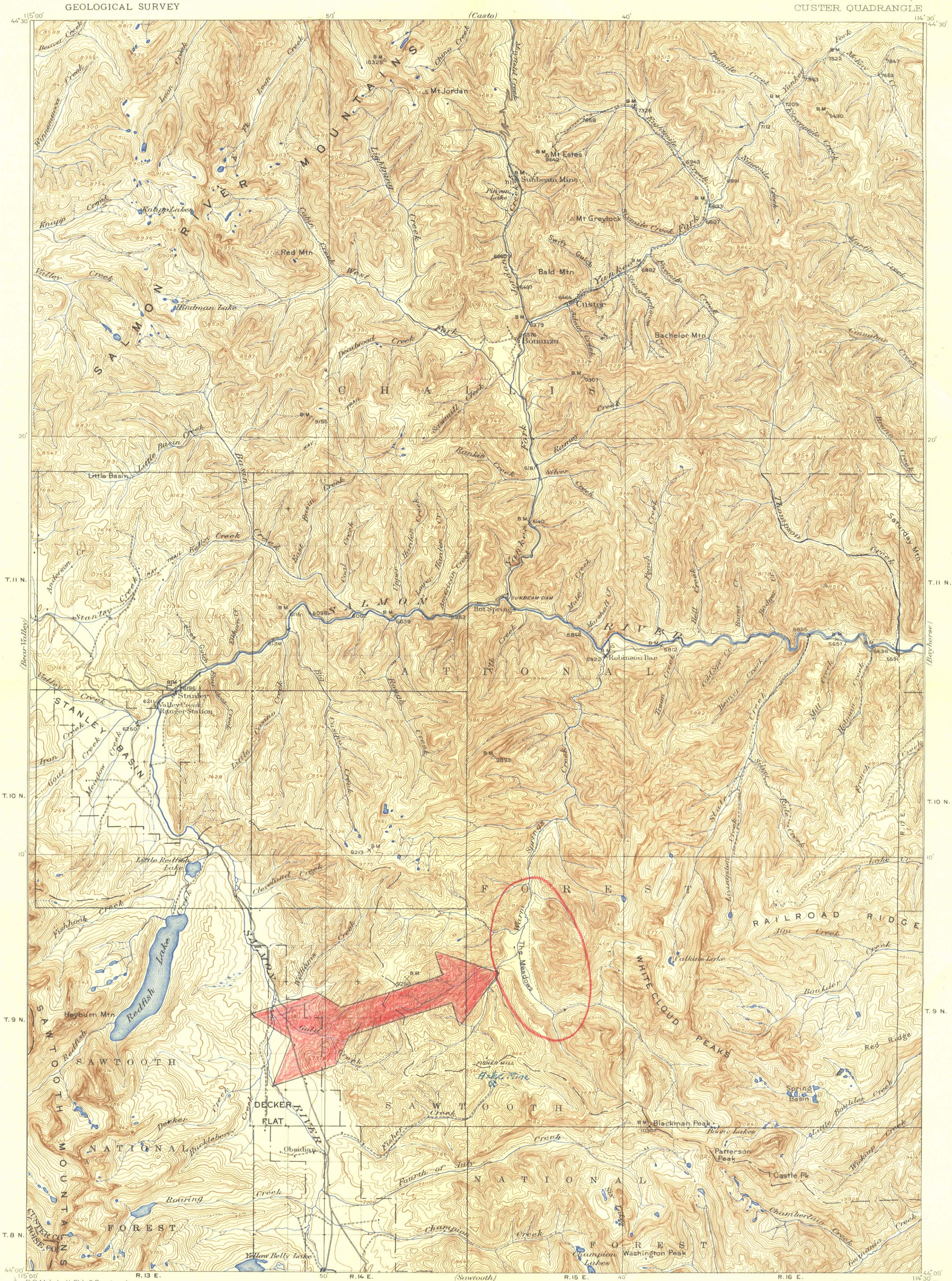
BASE MAP SUPPLIED BY H. G. SMITH

GEOLOGY & ADDITIONAL WORKINGS BY PAUL AVERITT & G. DONALD EBERLEIN
U.S. GEOLOGICAL SURVEY

Figure 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

IDAHO
(CUSTER COUNTY)
CUSTER QUADRANGLE



R.B.Marshall, Chief Geographer.
T.G.Gerdine, Geographer in charge.
Topography by Albert Pike and C.G.Anderson.
Control by T.M.Bannon and E.M.Bandli.
Surveyed in 1916 and 1919.

Polyconic projection, North American datum.

Scale 1/125000

1 ½ 0 1 2 3 4 5 6 7 8 9 Miles

3000 1500 0 3000 6000 9000 12000 Yards

5000 0 5000 10000 15000 20000 25000 Feet

1 0 1 2 3 4 5 6 Kilometers

Contour interval 100 feet

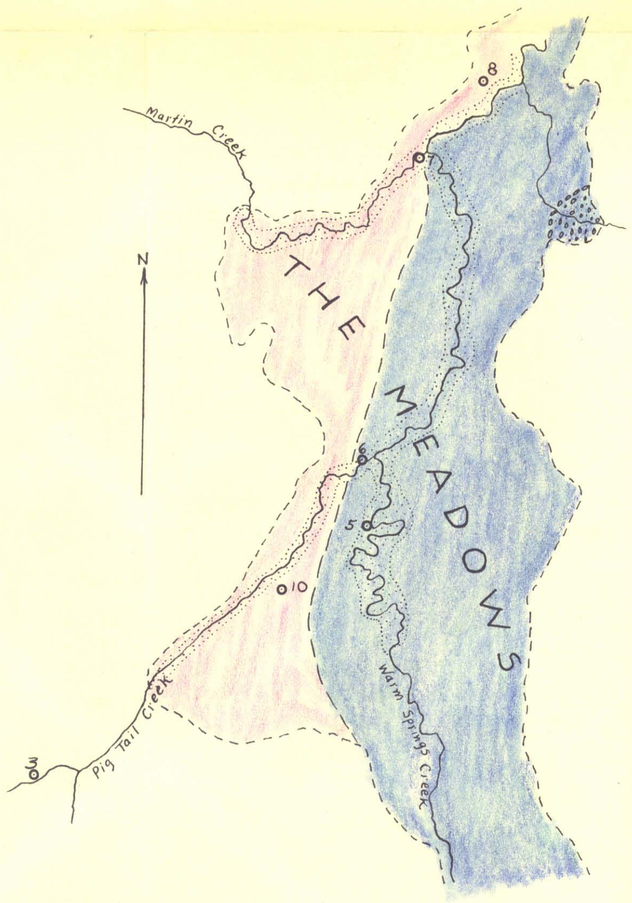
Datum is mean sea level

(Readjustment indicates that elevations on this map should be increased 1 foot)

TRUE NORTH
MAGNETIC NORTH
20½°
APPROXIMATE MEAN DECLINATION 1919

IDAHO
CUSTER
Edition of 1922.
reprinted 1946
N4400-W11430/30

MAP NO - 1



MINERAL ANALYSIS by P.L. Williams

Station No.	TYPE of SAMPLE	Total Conc. lbs/yds³	% Magnetite	Ilmenite	Garnet	Mafic Bks.	Allanite	Epidote	Sphene	Monazite	Radio Bks.	Zircon	Rutile	Anatase	Apatite	Diopside	Kyanite	Olivene	Lencatene	Scheelite	Pyrite (pseudo tourmaline)	Silimanite	Spinel	Urano-thorite	Xenotime
3	Slopewash on quartz monzonite	6.4	69	–	–	5.5	T	0.1	19	–	–	F	T		6				T		F T			F	
5	Warm Springs Creek gravel	1.5	26	9	T	9	T	F	11	T	–	0.5	–		1	5		9	F	F	F T		T	T	
6	Pig Tail Creek floodplain	16	74	0.7	T	1.2	.05	.05	19	F	T	0.1	T		3	F		0.4			F F			0.2	
7	Martin Creek floodplain	51	59	22	T	0.7	F	0.1	14	0.2	T	F	F		2						T			.05	
8	Unreworked Warm Springs Creek gravels	5.6	62	8	T	2	F	F	20	F		0.3	T		5	F		2	F		F T			F	
10	Unreworked Pig Tail Creek gravels	4.1	43	0.2	–	5	F	1.3	41	T		0.4	T		7	.4		.4	T		F			F	

EXPLANATION

Pig Tail and Martin Creek gravels

Warm Springs Creek gravels

Modern floodplain Zone of reconcentration

Glacial debris

o⁶ Pan Samples

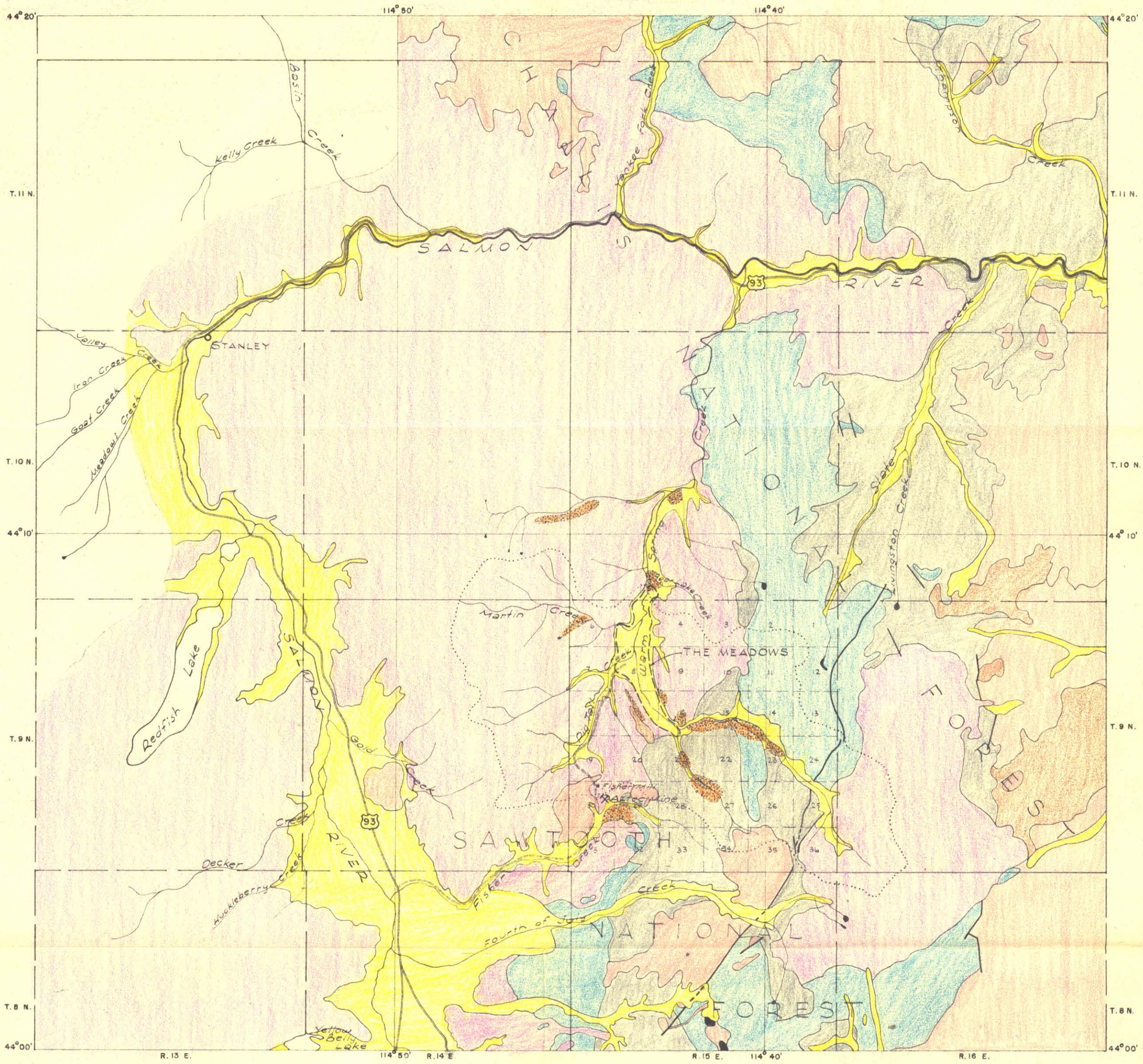
MAP of the PIG TAIL — MARTIN CREEK AREA
SHOWING SAMPLE LOCATIONS and ANALYSIS
WARM SPRINGS CREEK in BAYHORSE MINING DISTRICT
CUSTER COUNTY, IDAHO

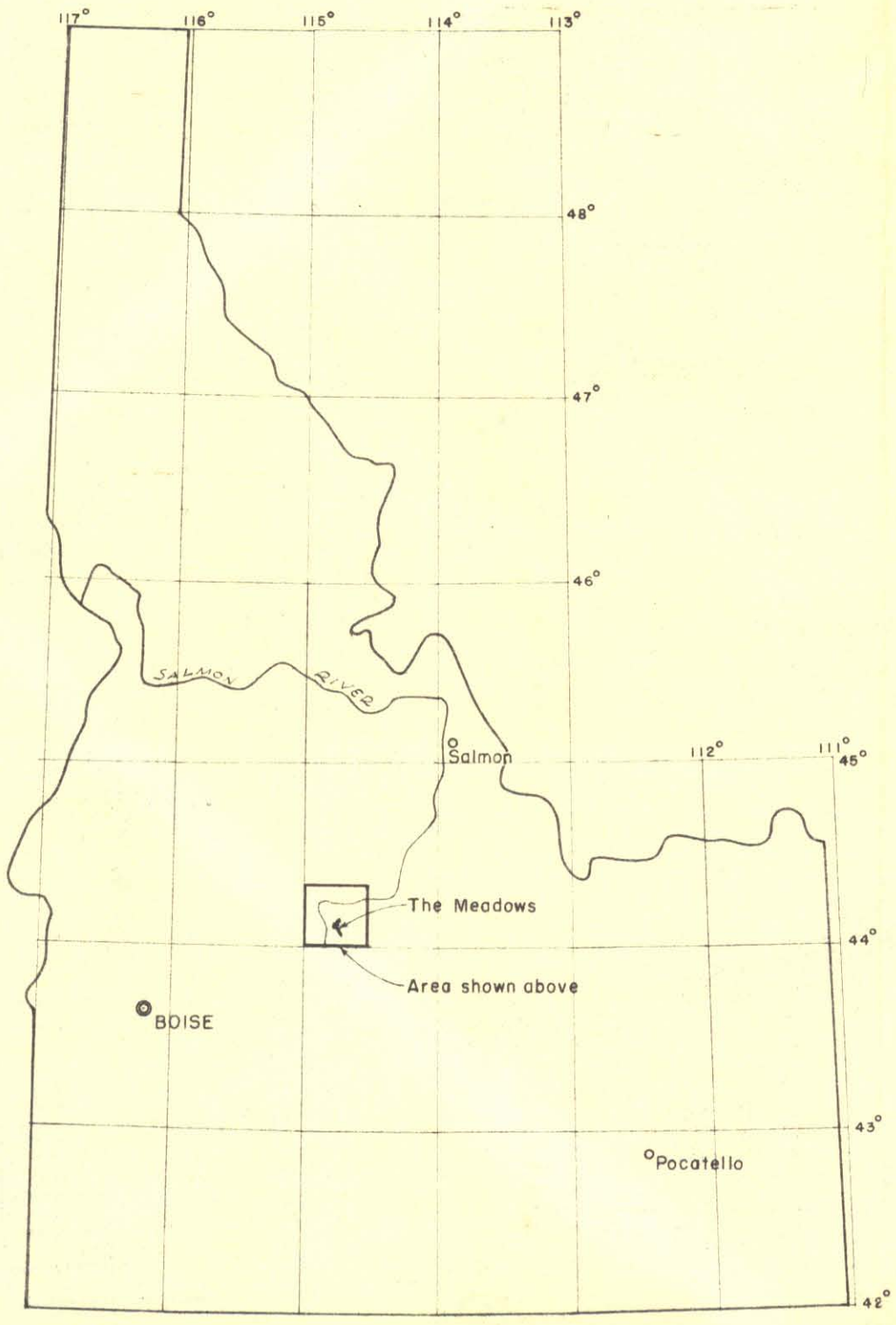
0 1000 2000 ft.
R.D. Sample

Slightly modified from map by P.L. Williams 1956

Oct. 1958

PLATE 4





INDEX MAP OF IDAHO
NO SCALE

EXPLANATION

- Valley fill
- Late Wisconsin
- Glacial deposits
- Tertiary volcanics
- Milligan formation
- Wood River formation
- Quartz monzonite
- Boundary of area draining into the Meadows
- Fault

GEOLOGIC MAP OF
"THE MEADOWS" PLACER AREA
ALFRED C. HOYL AND ASSOCIATES
WARM SPRINGS CREEK
CUSTER COUNTY, IDAHO

Scale $\frac{1}{125000}$

1 0 1 2 3 4 5 MILES

R. D. SAMPLE

Data slightly altered from Custer Quadrangle Topographic Map, 1922 Edition, U S G S. Geology from maps by C. P. Ross and P. L. Williams, U S G S.

OCT. 1958

PLATE 2