DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E NO._____ DMEA NO. 4772

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [ ] Project summary (final)
- [ ] Work Comoleted analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17963

DMEA 13

DISSOLUTION OF PARTNERSHIP

This is to signify that the partnership between Paul H. Floyd and Frank E Birch is dissolved; I, Paul H. Floyd, hereby relinquishing all rights to the Addy mining claims and the current agreements concerning these claims.

October 31 , 1955 Signed: Paul H. Floyd

Paul H. Floyd

In accordance with the above agreement, I hereby release Paul H. Floyd, his assignees, or his heirs of any obligations incurred by my operation and/or the operation of the Addy Development Co.

November , 1955 Signed: Frank E Birch

Frank E. Birch

GEORGIA PACIFIC CORP
DMEA
RECEIVED 1955

DISSOLUTION OF PARTNERSHIP

This is to signify that the partnership between Paul H. Floyd and Frank E Birch is dissolved; I, Paul H. Floyd, hereby relinquishing all rights to the Addy mining claims and the current agreements concerning these claims.

October 31 , 1955 Signed: Paul H. Floyd

Paul H. Floyd

In accordance with the above agreement, I hereby release Paul H. Floyd, his assignees, or his heirs of any obligations incurred by my operation and/or the operation of the Addy Development Co.

November , 1955 Signed: Frank E Birch

Frank E. Birch

DISSOLUTION OF PARTNERSHIP

This is to signify that the partnership between Paul H. Floyd and Frank E Birch is dissolved; I, Paul H. Floyd, hereby relinquishing all rights to the Addy mining claims and the current agreements concerning these claims.

October 31 , 1955 Signed: Paul H. Floyd

Paul H. Floyd

In accordance with the above agreement, I hereby release Paul H. Floyd, his assignees, or his heirs of any obligations incurred by my operation and/or the operation of the Addy Development Co.

November , 1955 Signed: Frank E Birch

Frank E. Birch

DISSOLUTION OF PARTNERSHIP

This is to signify that the partnership between Paul H. Floyd and Frank E Birch is dissolved; I, Paul H. Floyd, hereby relinquishing all rights to the Addy mining claims and the current agreements concerning these claims.

October 31 , 1955 Signed: Paul H. Floyd

Paul H. Floyd

In accordance with the above agreement, I hereby release Paul H. Floyd, his assignees, or his heirs of any obligations incurred by my operation and/or the operation of the Addy Development Co.

November , 1955 Signed: Frank E Birch

Frank E. Birch

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

CENTRAL FILE COPY
DMEA
RECEIVED JUN 28 1957

DATE	INITIALS	CODE

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

Re: New Application (Tungsten)
Addy Development Company
Washington Metals Mine or Addy Mine
Stevens County, Washington

Dear Mr. Selfridge:

Enclosed are three copies of an application received in this office June 24, 1957 from Frank E. Birch of the Addy Development Company, Addy, Washington. We have retained one copy for our files.

Also enclosed is one copy of a Mining Lease between Addy Mining Company, and Frank E. Birch and Paul H. Floyd.

Sincerely yours,

Donald R. MacLaren

Donald R. MacLaren
Alternate Acting Executive Officer
DMEA Field Team, Region I, NW Dist.

Enclosures

cc: USBM (2)
Geologist

MF-103
(Revised April 1956)

RECEIVED JUN 28 1957 D.M.E.A.

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED by hand JUN 24 1957 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. 4772
Metal or Mineral Tungsten
Date Received 6-28-57
Estimated Cost Not given
Participation (Government %)

INSTRUCTIONS --SEE ATTACHED SHEETS

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: Addy Development Co
East 949 - 43rd Street
Spokane 36, Washington

(*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

(*b*) State any mine name by which the property is known.

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

(*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

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

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.

(*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.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore .....

.....

(*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.

(*c*) The work will start within ..... days and be completed within ..... 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.

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 [X] Use of equipment owned by you [X] 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 June 24th, 195 7

Addy Development Co.
(Applicant)

By Frank E. Birch

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—86551-1

MINING OPERATIONS

CONSULTING ENGINEERS

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 28 1957

DATE	INITIALS	CODE

ADDY DEVELOPMENT COMPANY

ADDY, WASHINGTON

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

1. (a) Addy Development Co., Addy, Washington.
   (b) Partnership, organized in Washington State.
   (d) Partners: Frank E Birch and George A. Monroe.

3. (a) The two following described patented mining claims. View #1 & View #2, Survey No.1224, being a portion of Section Nineteen (19), Township Thirty-two (32) North, Range Thirty-eight (38) East W.M., in the Summit Mining District, Stevens County, Washington, said Patent recorded in Book P of Patents at page 309, records of Stevens County, Washington State.
   (b) Mine name: Washington Metals Mine, or Addy Mine.
   (c) Interest: Lessee-purchaser under contract, royalties apply to purchase price.
   (d) Lease Copy enclosed.
   (e) No liens, no encumbrances.
   (f) Patented claims.

4. (a&b) Mr. James Reed, of Twin Bridges, Montana, recently told me in a conversation, that he took out approximately 400 units of WO_3 trenching the outcrop on this property in the winter of 1932-'33. The operation subsequently went underground; available maps show some 600 feet of drifting at the upper horizon for a maximum back of 200'. Stoping was done over a total strike length of 220', and for a vertical height of 50' above the sill. At this point the vein pinched too narrow for practical extraction, although it is of good grade in a 2" width.

A new drift was driven with the help of a DMEA loan in 1950 or 1951. This drift, driven by the present lessor of the property (Mr. R.J. Weller, of Spokane), was collared 104' vertically below the portal of the upper drift, and driven 557' laterally and on structure. The vein in this drift is a narrow quartz affair, 2" to6" in width, showing a good deal of wolframite in the more narrow sections. This vein shows frequent faulting with minimum displacement. However, there is evidence to indicate that the crew driving the drift had considerable difficulty staying on the lead. In the 557' of drift driven there was no commercial width of ore discovered, and when the structure in the face finally pinched to a streak of gouge the project was abandoned and written off as no discovery.

Docket 1466 Idm E200

When I looked over the property in thespring of 1955, it appeared to me that the vein might possibly have rolled and been faulted slightly into the hangingwall, fifteen or twenty feet back from the face of the drift, (see attached sketch #1). The structure that had been followed was apparently a minor veinlet, running out into the footwall, but was picked up across the fault and taken to be the actual vein.

Upon acquiring a lease on the property I spent two months in the summer and fall of 1955 opening this vein in the hangingwall, drifting 40', and stripping ten tons of clean ore for a mill run sample of the material. This sample ran 2.4% WO_3, which was sufficient value to encourage me to find my partner, Mr. Monroe, and return to the mine the following spring.

With an additional 60' of drifting we had explored an ore zone almost 100' in strike length, 12" to 18" wide, a 2' mining width of which milled out slightly less than 1% WO_3.

This newly discovered dike carries the best mineral showing on the hill, at the present drift face showing a 12" width of 3.2% WO_3. This latter value was derived from two face samples, one taken from a 2'x12" section of the face that was highgrade, assaying 9% WO_3, the other taken from the remaining 5'x12" showing of vein in the face, assaying 0.9% WO_3 (assay sheets attached). This apportions out (2' @ 9% plus 5' @ 0.9% equivalent to 7' @ 3.2%) to a face sample of 3.2% WO_3.

Three raises have been driven in the newly discovered zone, one holed through to the upper level. This furnishes some ventilation, and blocks out an estimated 1,500 units of WO_3 which is sub-marginal under present market conditions, but would warrant installing milling facilities under stable market conditions of $50 per STU. From ore produced prior to removal of government subsidies, blind grab samples taken from each 1 ton car as it was dumped in the bunker at the portal yielded the enclosed assays. These assays appear high when compared with mill returns, and this was discovered to be the fault of the assayer. Subsequent assays from a custom assayer in Wallace, Idaho, have checked out quite satisfactorily.

Thirty tons of ore mined and trucked to J. G. Drent's custom mill near Hall, Montana yielded 1.37% WO_3. Ninety tons of ore milled at the Kelly Camp Tungsten Mill near Republic, Washington yielded 45 units in a 65% concentrate. There were no facilities for satisfactory sizing of feed or treating middlings here, and recovery was near 60%. R. J. Weller, of Spokane, put up a small plant near the mine. Two hundred tons of ore run through this plant yielded approximately 130 units WO_3 in a 65% concentrate. Due to tragically poor design this mill was inoperable, and dismantled.

At this time the present mine workings have pipe and rail to a point near the drift face. Surface installations include a cabin, tool shed, powder magazine, and seventy-ton capacity ore bunker. The workings are open and readily accessible for examination.

(c) All present mineral showings at the Addy Mine are on a quartz vein and a pegmatite dike. The present working level was driven approximately 500' on a narrow quartz vein. This vein graduates to a pegmatite dike at the point of recent discovery, mentioned above. The portal of the old upper workings shows the narrow quartz vein that is exposed in the lower drift, and accessible stopes in the old workings show that the body was mined in one area to the surface, and in the next block to a point 50' above the upper drift, or 154' above the lower drift. In the latter instance the vein pinched in the back of the stope to a width of 2", and was faulted off in the west, or inside end of the stope. Stoping stopped at the fault, the fault was not crossed in the stope. The pegmatite outcrop can be

traced over the hill to a point near the western end line of the property. At the summit the outcrop appears to be some two or three feet wide, carrying little mineralization... On westward it appears to narrow, and is then lost in the slump of hillside boulders. The country rock is a diorite, or quartz diorite. On down the hill to the west, the other side of the mountain from the Addy Mine workings, are several prospect cuts, x-cuts and drifts showing small amounts of scheelite, and a slightly mineralized granite-lime or diorite-limestone contact.

The mineral-bearing pegmatite and the Addy Mine consist chiefly of plagioclase, quartz and muscovite. Wolframite and scheelite, in the form of coarse crystals, with an occasional showing of pyrite and molybdenite, are the only metallic minerals discernible. The latter two are in insufficient quantity to penalize the grade of the concentrate. This is an extremely simple and easy milling ore.

From all appearances of the property and showings in sight the mineralization at this property is better as the work progresses westward and downward, with a strong showing of ore in the face and bottom of the lower drift. In the 1,300' of strike length between the present drift face and the end line of the property there is an extremely good likelihood of discovering at least one ore zone that would be commercial under any condition of the tungsten market, plus the certaintyof exposing reserves that could be profitably extracted should any critical need bring the domestic market up to wartime highs. I believe that by drifting to the endline of the property, commercial ore would be found.

The 3.2% value and 12" width in the present face of the lower drift would be commercial under present market conditions ($19.75 per STU plus duty) if it were discovered to exist over a reasonable strike length. However, in the light of the grade of material already blocked out, and the unsteady market conditions, it would seem unwise to set up at the property for a small amount of drifting, since enough work should be done, and sufficient discovery made to warrant the expense of a milling unit. Since there is no economic quantity of ore now in sight the present proposed drifting program appears to be the most efficient and likely way of discovering commercial ore here, and would simultaneously make known the location of sub-marginal reserves that might become orein time of national need.

(d) The Addy Mine property lies ¼ mile from a county road that the county maintains when the mine is in operation.. The connecting road between the mine and the county road is in good condition. The mine is five miles from a paved highway, and 17 miles from the Great Northern Railway, at Addy.

There are ample cheap housing facilities scattered over the countryside within a ten-mile radius of the mine, as well as a cabin on the mine property that will house four men.

(e) Stevens County is well supplied with manpower, at a relatively low cost. There has been no difficulty finding men to work at this property.

There is ample timber on the property for several years of mining.

With Addy only 17 miles, and Spokane little over 70 miles from the mine, supplies and equipment are readily available, repair service is excellent.

The mine makes enough water for drilling purposes. Several good millsites lie within five miles of the mine, with ample water, and

power available. There is no electric power at the mine, and insufficient water for mill operation.

5. (a) Exploration Project:
The minerals to be explored for here are the Tungsten minerals Wolframite and Scheelite.

(b) Proposed exploration would consist of 1,300' of drifting from the present face to the western end line of the property. This would appear to be a relatively simple project of following a pegmatite dike in a diorite country rock showing no large displacements either on the surface or underground, and appearing to become a stronger structure in its westward progression.

(c) The work would be started within 60 days and completed within 18 months from the date of exploration project contract.

(d) The applicant, the Addy Development Company, is a partnership between myself (F. E Birch) and George Monroe. I am a graduate Mining Engineer (Missouri School of Mines at Rolla) with ten years varied mining experience ranging from contract miner in Darwin, California; Miami, Arizona; Butte, Montana; Couer d'Alene district of Idaho, to staff work in the Willow Creek District of Alaska, leasing placer on the Kenai Peninsula, the Addy tungsten lease, to Mine Superintendent at Bonanza Lead's operation of the Chewelah Copper Mine near Chewelah, Washington.

My partner, Mr. Monroe, has had fifteen years experience contract mining in Butte, Montana; Avon, Drummond, Philipsburgh and other Montana camps; leased in the Willow Creek District, Alaska, the Addy tungsten lease, and was Foreman of Bonanza Lead's operation of the Chewelah Copper Mine near Chewelah, Washington.

We are presently operating under a development contract with the Daybreak Uranium Company, of Spokane, on the Spokane Indian Reservation.

Mr. Monroe and myself would be in complete supervision of this proposed exploration project at the Addy Mine.

6. (a) The Addy Development Company would contract this exploration at a total cost of forty dollars ($40) per lineal foot of drifting for 1,300' of 5' x 7' drift. This contract price would include labor, supervision, consultants, operating materials and supplies, operating equipment, cost of moving in equipment, pipe, rail, rehabilitation and repairs of present buildings and portal sets of present drift, cleanup of present drift, costs of new buildings and installations necessary for the job, and miscellaneous costs of repairs and accounting, with no need for any extra allowances and contingencies. This price is the current sane minimum for driving small drift; it is the price we are getting for the drift we are now driving for the Daybreak Uranium Company. We are familiar with ground conditions and operational costs at the Addy Mine. The previously driven drift is a drawback to efficient operation. Future drifting with proper supervision would result in a constant grade and easy curves. The contract price would cover any ground conditions encountered.

7. (a) We are prepared to furnish our share of the costs of the proposed contract in accordance with the regulations on Government Participation.

(b) We would furnish our share in the form of money, equipment, and any other form needed to meet the contract obligations at the contracted price of $40 per foot of drifting, expecting monthly remuneration of 75% of this price from the Government. We personally, and as a company, have money and equipment available at this time to meet our share of the costs.

OFFICIAL FILE COPY
G M & A
RECEIVED JUN 28 1957

DATE	INITIALS	CODE

Pipe sample of m[illegible] heavy [illegible] fine are bin from ore stoped (2' stoping width to 3') above west end of drift.

Mill Tails

OFFICIAL FILE COPY
D M E A
RECEIVED JUN 28 19
DATE | INITIALS | CODE

Pipe sampled heads in Bunker

Pipe sample of mill heads in fine ore bin, from ore stopped above west end of drift. 2" width. to 3'.

Peter Mark

RECEIVED 1957
DATE | INITIALS | CODE

March 23, 1957

12" width over 24" height in west face of drift, Addy Mine.

Peter Mach

CERTIFICATE OF ASSAY

PETERS & BLACK

CHEMISTS

Addy Development Co. April 6, 1957

		WO_3
4/2 Face Sample	12" width, over 60" height in west face of drift, exclusive of 24" height in previous sample, Addy Mine.	0.92

Charges $5

GOLD and SILVER BOUGHT.

Wm. H. Stowell & Co.

CHEMISTS and ASSAYERS
621 SPRAGUE AVENUE
TELEPHONE MAIN 3004

Memorandum of Assay of Rock made for

Ally Rev. Co.

Spokane, Wash., June 1, 1955

SAMPLE MARK	ASSAY VALUE PER TON OF 2,000 POUNDS AVOIRDUPOIS															
	WO3 per lb.			per lb.			Silver at cents per ounce				Gold at per ounce				Total	
	Per Cent	DOLLARS	Cents	Per Cent	DOLLARS	Cents	OUNCES	10ths	DOLLARS	Cents	OUNCES	100ths	DOLLARS	Cents	DOLLARS	Cents
No. 1	1 9/10	-27.5 Tons of ore shipped to Helt, Montana - car grab														
No. 2																
No. 3	Composit of 2"-3" grade from each of 26 ore car ten cars ore was dumped in bunker.															
No. 4																
No. 5																
No. 6																
No. 7																
No. 8																

No. 151014

Charges $ 3.00

Wm. H. Stowell & Co. Assayers

Wm. H. Stowell & Co.

GOLD and SILVER BOUGHT

CHEMISTS and ASSAYERS
421 SPRAGUE AVENUE
TELEPHONE MAIN 5924

Memorandum of Assay of Rock made for

Addy [illegible] Spokane, Wash. [illegible]

ASSAY VALUE PER TON OF 2000 POUNDS AVOIRDUPOIS

SAMPLE MARK				Total Dollars	Cents
No. 1/3	3.70	1.10			
No. 2/7	1.60				
No. 3/5	1.50				
No. 4					
No. 5					
No. 6					
No. 7					
No. 8					

These samples were mixed composit of 2 & 3" grabs from each 1 ton car dumped in bunker at the Addy Mine.

No.

Charges $

Assayers

OFFICIAL FILE COPY
C.W.S.A.
RECEIVED JUN 28 1957
DATE | INITIALS | CODE

Wm. H. Stowell & Co.

CHEMISTS and ASSAYERS
421 SPRAGUE AVENUE
TELEPHONE MAIN 5034

GOLD and SILVER BOUGHT.

Memorandum of Assay of Rock made for Addy Mew. Co. Spokane, Wash. Aug 9, 1955

ASSAY VALUE PER TON OF 2,000 POUNDS AVOIRDUPOIS

SAMPLE MARK	WO3 per lb Per Cent	DOLLARS	Cents	per lb Per Cent	DOLLARS	Cents	Silver at ... cents per ounce OUNCES	10ths	DOLLARS	Cents	Gold at per ounce OUNCES	100ths	DOLLARS	Cents	Total DOLLARS	Cents
No. 1	7/10															
No. 2																
No. 3																
No. 4																
No. 5																
No. 6																
No. 7																
No. 8																

composit of 2"-3" samples of material mined in 2' to (Stone to three feet) width in last 20' of drifting. Samples taken from care as ore was dumped in bunker. This 2'-3' width was blasted & mucked out first to keep it separate from barren wall rock. Vein was actually 12" wide, but miner got 1' to 2' of overbreak in this section of drift. All ore was saved & sampled in drift by double-blasting, blasting ore and waste separately.

Frank Bird

No.

Charges $

Assayers

GOLD and SILVER BOUGHT.

Wm. H. Stowell & Co.

CHEMISTS and ASSAYERS
421 SPRAGUE AVENUE
TELEPHONE MAIN 5824

Memorandum of Assay of ..... made for

Spokane, Wash. Aug 19, 1955

ASSAY VALUE PER TON OF 2,000 POUNDS AVOIRDUPOIS

SAMPLE MARK	WO3 per lb			per lb			Silver at		per ounce		Gold at		per ounce		Total	
	Per Cent	DOLLARS	Cents	Per Cent	DOLLARS	Cents	OUNCES	10ths	DOLLARS	Cents	OUNCES	100ths	DOLLARS	Cents	DOLLARS	Cents
No. 1	1 5/10															
No. 2	1 3/10															
No. 3	4/10															
No. 4																
No. 5																
No. 6																
No. 7																
No. 8																

First two assays above are of composit of 2nd-3rd grade from each car of stope ore. Third sample checks previous sample of drift material - taken over 3' width in last 20' of drift.

No.

Charges $

Assayers

Wm. H. Stowell & Co.

CHEMISTS and ASSAYERS
421 SPRAGUE AVENUE
TELEPHONE MAIN [illegible]

GOLD and SILVER BOUGHT

Memorandum of Assay of

made for

Assayers

Z D.C.

MINING LEASE

ROBERT J. [illegible], and Mary E. [illegible], husband and wife, d/b/a Addy Mining Company, of Spokane, Washington, hereinafter called the lessor, and FRANK A. [illegible] and [illegible] H. FLAID, both of Kellogg, Idaho, hereinafter called the lessees,

WITNESSETH:

That in consideration of the mutual promises, covenants and agreements herein contained, and the moneys to be hereinafter paid, the parties hereto agree as follows:

1. The lessor hereby leases to the lessees and the lessees hire and take from the lessor the following described patented mining claims, to-wit:

View No. 1 and View No. 2, survey No. 1224, being a portion of Section Nineteen (19), Township Thirty-two (32) North, Range Thirty-eight (38) E. W.M., in the Summit Mining District, Stevens County, Washington, together with appurtenances for the purpose of mining thereon, said Patent recorded in Book P of Patents at page 309, records of said County and State,

for a term commencing on the date hereof and ending June 1, 1955.

2. A. The lessees shall pay to the lessor a royalty equal to 10% of 50% of the then current market value of all saleable metals or minerals contained in all ore produced from the above named patented mining claims delivered to any concentrator, smelter, or other purchase of mine products.

B. The weight and percentage of metals and minerals contained in any ore produced will be determined by assay of a representative sample taken from the ore after crushing to a three-quarter mesh before any further treatment by the concentrator, or smelter or other purchaser of mine products to which the ore is delivered. The samples to be taken by an automatic sampling device. The weight to be determined by scale weight prior to any crushing, said scale to be approved by both parties.

3. Lessees agree to work and develop the mine in a miner-like fashion in a manner necessary to good and economical mining, so as to take out the greatest amount of ore possible with due regard to the development and preservation of said mine or mining properties as a workable mining property and to the other obligations of the lessees herein contained.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 28 1957

DATE	INITIALS	CODE

4. Lessees agree to permit egress and ingress to the mining property to the Lessor and his agents and to all of the Lessees' records at all times and places. Lessees also agree to render to Lessor and his agents proper assistance in making any desired inspection, survey, samples or examination.

5. The Lessees agree to apply a minimum of 300 eight-hour manshifts of work per full year in prospecting, development or mining production. Included in said 300 eight-hour manshifts the Lessees agree to perform any one of the following items of development work prior to December 31st of each year, including 1954, or an equal amount of said work pro-rated between any or all of the following classifications of development work listed, to-wit:

(a) seventy-five (75) feet of drift or raise.
(b) forty (40) feet of winze or shaft.
(c) five hundred (500) feet of core drilling in which cores or sludges are taken and properly logged.
(d) fifteen eight-hour days (15 days) of surface trenching by bull dozer.

6. Lessees agree to repair all old timber wherever it may become necessary and to well and sufficiently timber said mine and mining premises at all points where proper and necessary in accordance with good and safe mining.

7. Lessees agree to occupy and hold as the property of the Lessor all cross and parallel lodes, spurs and mineral deposits of every kind which may be uncovered, disclosed or discovered within said leased ground by the Lessees or any person or persons under or in privity with them with privilege to said Lessees to work and mine the same as part of the lease premises.

8. Lessees agree to keep at all times the drifts, shafts, tunnels and other workings, when currently in use, reasonably drained and clear of loose rock and rubbish unless prevented by extraordinary mining casualty.

9. Lessees agree that all ores mined which are too low grade for present shipment shall remain the property of and be subject to the control and disposition of the Lessor.

10. The Lessees do hereby assume all responsibility in case of accident to either Lessees or any of their employees in or about said property.

11. Lessees agree to pay all taxes assessed against said premises for ores mined and shipped under this lease and to pay all taxes assessed against

said premises both real and personal so long as they are in possession of said premises commencing January 1, 1955.

12. All bills and expenses incurred by the Lessees or those in privity with them shall be promptly paid by the Lessees so as to prevent the filing of any and all liens of miners, mechanics or materialmen against said premises, and if any just lien or liens shall be filed the Lessor may forthwith pay off and discharge the same and the Lessees hold themselves bound to pay the Lessor all sums so advanced or paid or in the alternative the Lessor may declare a forfeiture of this Lease.

13. Lessees agree that no third party or parties shall be allowed to hold possession of said premises or any part thereof as assignee, sub-tenant or under any other arrangement without the written permission of Lessor.

14. Lessees agree to deliver to Lessor quiet and peaceable possession of said demised premises in good order and condition with all drifts, tunnels, and other passages then currently in use cleared of loose rock and rubbish, at the end of this Lease or at any other time upon demand or forfeiture. Lessees in the event of any such termination, may remove from the premises within sixty (60) days of termination all their equipment, tools and personal effects provided that no such tools, machinery or personal effects shall be removed while the Lessees may be in any manner indebted to the Lessor under any obligation incurred under this Lease.

15. In the event of a default of any condition or covenant of this agreement either party may at their option declare a forfeiture or termination of this agreement, provided however that before such forfeiture or termination shall become effective the party so declaring the same shall notify the other party by registered mail of said termination, specifying the nature and extent of said default and said party so receiving said notice shall have 30 days to correct said default and in the event said default is so corrected this agreement shall be reinstated and considered in good standing as if said default had not occurred, but in the event said default is not corrected that this agreement shall thereupon be terminated.

16. Lessor agrees that lessees may abandon the leased property and cancel this agreement at any time provided they give lessor written notice of their intention so to do and have complied with all obligations under this lease to the time of said notice of abandonment.

17. Time is the essence of this agreement and it shall be binding on the successors in interest of all parties hereto.

18. That a failure to perform any condition or covenant of this agreement shall not be considered a violation of the terms hereof if said failure is caused or due to a riot, strike, war or any act of God or other unavoidable casualty not the fault of the party so failing to perform.

IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names, this 7th day of July, 1954.

ADDY MINING COMPANY

By R. Weller

Mary E. Weller

Lessors

Frank E. Birch

Paul W. Floyd

Lessees

STATE OF WASHINGTON,)
: ss.
COUNTY OF SPOKANE.)

On this day personally appeared before me ROBERT J. WELLER and Mary E. Weller, to me known to be the individuals described in and who executed the within and foregoing instrument, and acknowledged that they have signed the same as their true and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 7th day of July, 1954.

Robert B. Shaney

Notary Public in and for the State of Washington, residing at Spokane.

STATE OF IDAHO,)
: ss.
COUNTY OF SHOSHONE.)

On this day personally appeared before me FRANK S. BIRCH and SARAH H. BIRCH, to me known to be the individuals described in and who executed the within and foregoing instrument, and acknowledged that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 3 day of July, 1937.

C. H. Thorson
Notary Public in and for the State of Idaho, residing at Silverton.

AGREEMENT TO PURCHASE

ROBERT J. MILLER, and Mary E. MILLER, husband and wife, d/b/a Addy Mining Company, of Spokane, Washington, hereinafter called the Vendor, and FRANK M. BIRCH and PAUL H. FLOYD, both of Kellogg, Idaho, hereinafter called the Purchasers, agree as follows:

WHEREAS, Vendor, as Lessor, and Purchasers, as Lessees, entered into an agreement by which Lessor leased to Lessees the following described property:

> View No. 1 and View No. 2, Mineral Survey No. 1224, being a portion of Section Nineteen (19), Township thirty-two (32) North, Range thirty-eight (38) E. W.M., in the Summit Mining District, Stevens County, Washington, together with appurtenances for the purpose of mining thereon, said Patent recorded in Book ___ of Patents at page _____, records of said County and State,

and

WHEREAS, the parties desire to make a sale and purchase of said property as of June 1, 1955, conditioned upon due performance of all obligations under said lease by the Lessees to that date.

NOW, THEREFORE, in consideration of the covenants and agreements herein contained it is hereby agreed as follows:

1. Vendor does hereby sell to the Purchasers and the Purchasers agree to buy from the Vendors the above described premises as of June 1, 1955, on the following terms and conditions. Purchasers shall pay a sum equal to 1% of purchase price on June 1, 1956, in the event this agreement is not sooner terminated as hereinafter provided.

2. The purchase price shall be $75,000.00, provided that in the event of a discovery of any new geologically separate vein which is of equal or greater in value than the original vein in which the present adit is driven the purchase price shall be $150,000.00. All royalties paid on and after June 1, 1955, by the Purchasers in compliance with the terms of this agreement will be applied on the payment of the total purchase price of the above described property. Vendors agree to deliver to the Purchasers sufficient evidence of a clear and merchantable title to the above described property at the time of

payment to the Vendor of the total purchase price, which said Purchasers may pay at any time during the course of this agreement, minus the total royalties appli d to the purchase price to that date, said conveyance to be by a good and valid warranty deed.

3. All obligations, rights, duties and covenants of the Lessor and the Lessees which are specifically set forth in the lease agreement including payment of royalties but excluding the time of termination of said lease are incorporated herein by reference as if set forth herein verbatim, and said Lease shall be referred to for the purpose of determining all the legal rights and responsibiliti s of the Vendor and the Purchasers so long as this agreement is in force.

4. This Agreement may be terminated in the manner set forth in said Lease agreement and shall in any event terminate as of December 31, 1964, unless extended by written agreement of the parties.

5. In the event either party to this agreement is required to bring any legal proceedings to enforce his or their rights under the lease or this sale agreement, the prevailing party shall receive in addition to statutory costs, a reasonable attorney's fee to be fixed by the court from the party not prevailing.

6. As a further condition to the validity of this agreement and of said lease agreement, Purchasers agree to supply to the Vendor a guarantee that no indebtedness will be made against the property of the Lessor by posting a bond acceptable to the Vendor in the sum of $1,000 for the first sixty days of said lease and $5,000 thereafter, until this agreement is fully performed. This bond is in no way to be construed as a performance bond.

WITNESS our hands and seals as of this 1st day of June, 1955, the date on which we intend this agreement to be effective.

ADDI[illegible]ING COMPANY

By L. Weller

Mary E. Weller

Vendor

Frank E. Birch

Paul H. Flory

Purchasers

STATE OF WASHINGTON,)
: ss.
COUNTY OF SPOKANE.)

On this day personally appeared before me ROBERT J. [illegible] and Mary E. [illegible], to me known to be the individuals described in and who executed the within and foregoing instrument, and acknowledged that they have signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this [illegible] day [illegible] 1957.

Notary Public in and for the State of Washington, [illegible]

STATE OF IDAHO,)
: ss.
COUNTY OF SHOSHONE.)

On this day personally appeared before me FRANK E. [illegible] and PAUL H. FLOYD, to me known to be the individuals described in and who executed the within and foregoing instrument, and acknowledged that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal this 3 day of July, 1957.

Notary Public in and for the State of Idaho, residing at Kellogg

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/19	Hopkins	400
12/19	Martin	400
12/20	Schroeder	130
12/20	Rand	130
12/20	Nelson	130
	Ebert	110
"	Mittendorf	100
12/20	C	220
		225

DEC 20 1957

Addy Development Company
East 949 - 43rd Street
Spokane 36, Washington

Re: Docket No. DMEA 4772 - Tungsten
Addy Mine
Stevens County, Washington

Gentlemen:

Your application for exploration assistance and other data available to us in Washington concerning the referenced property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information, including the results of the exploration work performed under Contract No. Idm - E200 (Docket No. DMEA 1466) on the subject property, does not indicate the probability that the proposed work will disclose a sufficient tonnage of ore-grade material to warrant further Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your continued interest in the Defense Minerals Exploration Administration program.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

JHOPKINS/dlm 12-19-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

8623

Mr. Selfridge -

Narrow spotty mineralization in pegmatite. (?) Very little difference between mineralization over 2.5' width from original DMEA project. Difference could be in assaying.

Little support for stronger structure and increased values said to be expected.

Discuss with Division.

FEJ

Change from Qtz vein to pegmatite

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12-6	Chapman	400
12-6	Martin	400
12-9	Chambers	800
		130
		110
		100
		220

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

Re: Docket No. DMEA 4772 - Tungsten
Addy Development Company
Addy Mine
Stevens County, Washington

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed short form contract for an exploration program at the above-referenced property, signed by the Administrator for the Government, together with Annex I (1 page) Consent to Lien and Subordination Agreement, Exhibit A (2 pages) and 4 maps. Two extra copies of Exhibit A and the Annex and maps are enclosed for the use of the Field Team.

If the conditions and terms of the proposed contract are satisfactory to you and the Operator, all five copies should be signed by the Operator, and the usual distribution made.

If any part of this proposed contract does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Not needed

Sincerely yours,

APPROVED:

Chairman, Operating Committee

Member, Bureau of Mines

TLCHAPMAN/dlm 12-6-57
cc to: Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Member, Geological Survey

Enclosures

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

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

Re: Docket No. DMEA 4772 - Tungsten
Addy Development Company
Addy Mine
Stevens County, Washington

Dear Mr. Weissenborn:

Enclosed are the original and four copies of a proposed short form contract for an exploration program at the above-referenced property, signed by the Administrator for the Government, together with Annex I (1 page) Consent to Lien and Subordination Agreement, Exhibit A (2 pages) and 4 maps. Two extra copies of Exhibit A and the Annex and maps are enclosed for the use of the Field Team.

If the conditions and terms of the proposed contract are satisfactory to you and the Operator, all five copies should be signed by the Operator, and the usual distribution made.

If any part of this proposed contract does not have your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

APPROVED: Not used

Chairman, Operating Committee

Member, Bureau of Mines

Member, Geological Survey

Enclosures

Government's copy

MF-200A
(Rev. April 1956)

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	*Commodity*	*Contract No. Idm–E*	*County*	*State*
4772	Tungsten		Stevens	Washington

It is agreed ....., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Addy Development Company, a partnership composed of Frank E. Birch and George A. Monroe

whose mailing address is East 949 - 43rd Street, Spokane 36, Washington

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before ....., and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within ..... months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $14,260.00. The Government will contribute 75 percent of the fixed unit cost of the work performed, not exceeding $10,695.00, in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: A royalty equal to 10% of 80% of the current market value of all salable metals payable to lessors.

(b) 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 of the land (lessor, seller, optionor, etc.) are attached, as follows: Consent to Lien and Subordination Agreement of lessors.

(c) 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. 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. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

(b) *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 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 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of 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. 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 all pertinent books, documents, papers, and records of the Operator.

(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 a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit 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 the unit costs thereof.

(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 6. *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 the Operator has rendered a sufficient final report (see Article 5), 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 (for example, if the Operator either transfers or fails to retain his interest in the land), 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, for 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, 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, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(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 thereof in the form in which and at the time 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 7. *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 the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further 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 the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and 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 Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *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 the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *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 10. *Changes and added provisions.*—

.....

.....

.....

.....

.....

.....

Long

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

ADDY DEVELOPMENT COMPANY
(Operator)

By
Administrator, Defense Minerals Exploration Administration

By (partner)
Frank E. Birch

By (partner)
George A. Monroe

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: 1956—O-383069

Sawyer
Chapman
Martin
Chambers

EXPLORATION PROJECT CONTRACT
ADDY DEVELOPMENT COMPANY
DOCKET NO. DMEA 4772

ANNEX I

The land referred to in Article 2 of the Contract is outlined on attached Figure 2 and is situated in Section 19, T. 32 N., R. 38 E., W.M., Summit Mining District, Stevens County, Washington. It consists of two patented lode mining claims, View No. 1 and View No. 2, USMS No. 1224, patents of which are recorded in the official records of Stevens County, Washington, in Book "P" of patents at page 309.

The Operator is in possession of said land pursuant to terms of a Mining Lease, dated July 7, 1954, from the owners, Robert J. Weller and Mary E. Weller, husband and wife, doing business as the Addy Mining Company of Spokane, Washington, to Frank E. Birch, and Paul H. Floyd, both of Kellogg, Idaho, who were doing business as a partnership under the name of Addy Development Company. By Dissolution of Partnership, dated October 31, 1955, Paul H. Floyd relinquished all rights to the Addy Mining claims, and Frank E. Birch released him of any obligations incurred by operation of the Addy Development Company.

A Consent to Lien and Subordination Agreement executed by the owners, Robert J. and Mary E. Weller, is attached and made a part hereof.

MF-205
(Combines and supercedes MF-201 and MF-203)
June 1956

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

RECEIVED NOV 4 '57 D.M.E.A.

To the United States of America:

Referring to that certain land in the County of Stevens State of Washington, described as follows: 2/

Patented mining claims View No. 1 and View No. 2, Survey No. 1224, being a portion of sec. 19, T. 32 N., R. 38 E., W. M., in the Summit Mining District, Stevens County, Wn., said patent recorded in Book P of patents at page 309, records of Stevens County, Wn.

_____,
which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom, to secure the payment to the Government of a percentage royalty on production as may be provided for by the Contract;

3. Subordinates the undersigned's right, title, claim, or interest in or against the land and in any production therefrom to the rights of the Government under the contract with respect to royalty on production and liens to secure same;

4. Represents and undertakes that there is no claim, lien, or encumbrance upon the undersigned's right, title, claim, or interest in or against the land other than the following: (If "none" insert the word "none." Do not leave lines blank.)

None

1/ Mining or production from the land is not required, and in the absence of production there is no obligation to pay royalty to the Government.

2/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in Book _____, Page _____, official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

5. Undertakes and agrees (a) neither to commit any act nor assert any claim in conflict with the provisions of this Agreement; and (b) to give advance notice of the Government's rights under this Agreement to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, claim, or interest in or against the land, or any production therefrom furnishing the Government with two copies of such notice; and

6. Consents to all amendments (including an agreement of termination) and assignments of the contract without notice thereof, and undertakes and agrees that this Agreement shall extend and apply thereto.

7. Added provision: _____ (State "None" or "See Annex No.____")

Dated this 8 day of October, 1957

R J Weller	[Seal]	W502-21st Spokane	[Address]
Mary E. Weller	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]
_____	[Seal]	_____	[Address]

I, _____ certify that I am the _____ _____ (Secretary, etc.) of the corporation named herein; that _____ _____ who signed this agreement was then _____ (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

_____ [Corporate Seal]

EXPLORATION PROJECT CONTRACT
ADDY DEVELOPMENT COMPANY
DOCKET NO. DMEA 4772

EXHIBIT A

Attached maps are as follows:

Figure 1 - Location Map, Addy Development Company, Stevens County, Washington

Figure 2 - Property map of Addy Development Company, showing location of proposed work, Stevens County, Washington

Figure 3 - Geologic Map of part of Addy Mine, Stevens County, Washington

Plate 1 - Composite Plan Map, Addy Mine, Stevens County, Washington

From the present face of the adit as indicated on Figure 2 and Plate 1, drift westerly 400 feet, following the mineralized zone. The drift shall be 5 feet by 7 feet in the clear and timbered as necessary.

With the approval of the Government, drill approximately 8 long holes, aggregating 400 feet, from the sides of the drift on a northerly and southerly course to prospect for veins en echelon. Four stations shall be cut in the sides of the drift for the long hole drilling. The total footage authorized for this station work shall be equivalent to about 10 feet of drifting.

Mineralized zones encountered in the drift and long holes shall be sampled and assayed for tungsten. Samples from long holes shall not exceed 5 feet in length.

Estimated Cost of the Project

Fixed Unit Costs

Drifting 410 feet at $31.00/ft. (includes drift and stations for long drill holes)	$12,710.00	
Timber 100 feet of drift at $6.00/ft.	600.00	
Drill 400 feet of long holes at $1.25/ft.	500.00	
Assaying 90 samples for tungsten at $5.00 each	450.00	
Total estimated cost of project		$14,260.00
Government participation at 75 percent		$10,695.00

United States
Department of the Interior

Prepared for
Defense Minerals Exploration Administration
Examination Report

Docket No. [illegible]

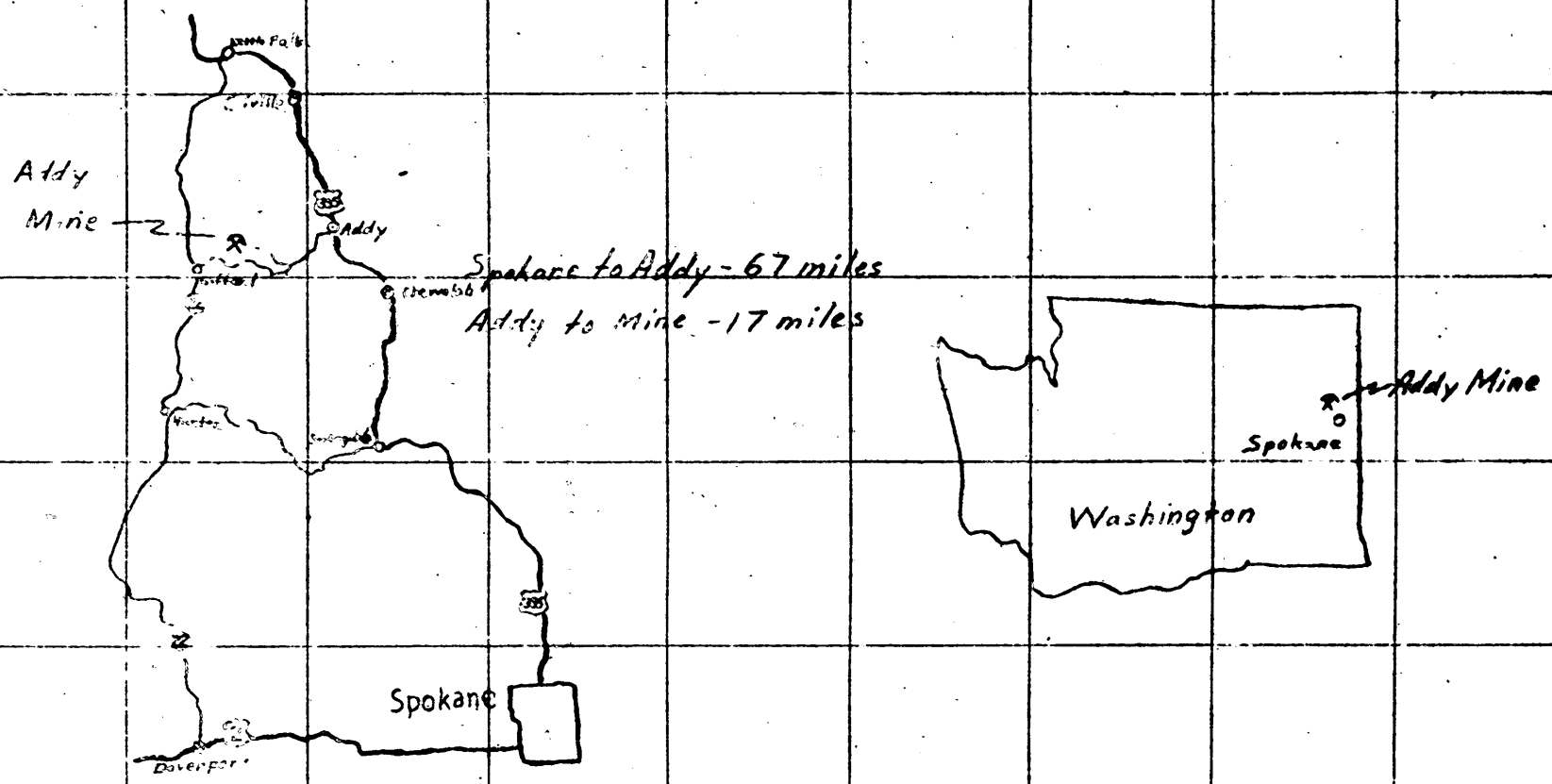
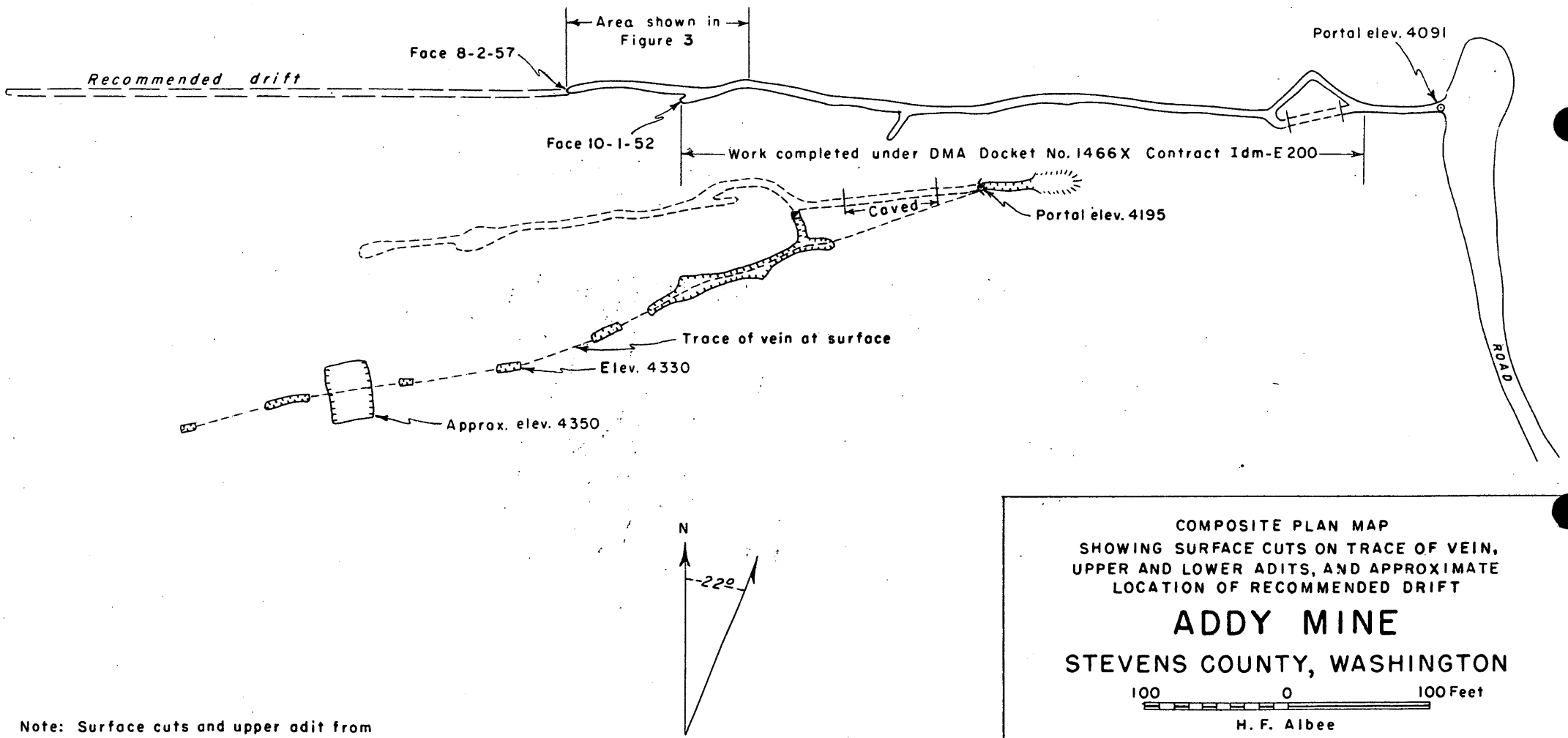


Figure 1. Location map, Addy Development Company, Stevens County, Washington

H.E. Albee, September, 1957



Note: Surface cuts and upper adit from base by C.H. Broedel, August 1951

COMPOSITE PLAN MAP
SHOWING SURFACE CUTS ON TRACE OF VEIN, UPPER AND LOWER ADITS, AND APPROXIMATE LOCATION OF RECOMMENDED DRIFT

ADDY MINE

STEVENS COUNTY, WASHINGTON

100 0 100 Feet

H. F. Albee

Sept. 1957

PLATE I

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
11/21	Chapman	400
11/21	Martin	400
		140

November 21, 1957

MEMORANDUM

To: Associate Solicitor, Division of Mineral Resources

From: Division of Iron and Ferro-Alloys, DMEA

Subject: Preparation of Contract
Docket No. DMEA 4772 - Tungsten
Addy Development Company
Addy mine
Stevens County, Washington

Attached is a rough draft of a proposed contract for your use in preparing it in final form.

W. S. MARTIN

W. S. Martin, Director
Division of Iron and Ferro-Alloys

Attachment

11-21-57
TLChapman:foc
cc to: Docket
Chron. File

8623

MF-200A
(Rev. April 1956)

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	*Commodity*	*Contract No. Idm–E*	*County*	*State*
4772	Tungsten		Stevens	Washington

It is agreed ....., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Addy Development Company

whose mailing address is East 919 - 13rd Street, Spokane 36, Washington

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before ....., and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within ..... months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $ 14,260.00. The Government will contribute 75 percent of the fixed unit cost of the work performed, not exceeding $ 10,695.00, in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: Interests of Lessors

(b) 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 of the land (lessor, seller, optionor, etc.) are attached, as follows: Consent to Lien and Subordination Agreement

(c) 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. 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

EXPLORATION PROJECT CONTRACT
ADDY DEVELOPMENT COMPANY
DOCKET NO. IMEA 4772

ANNEX NO. I

The land referred to in Article 2 of the contract form and outlined on attached Figure 2, comprises the property held by a Mining Lease, dated July 7, 1954, from the owners, Robert J. Weller and Mary E. Weller, husband and wife, doing business as the Addy Mining Company, of Spokane, Washington, to Frank E. Birch, and Paul H. Floyd, both of Kellogg, Idaho; by Dissolution of Partnership, dated October 31, 1955, Mr. Floyd relinquished all rights to the Addy Mining claims, and Mr. Birch released him of any obligations incurred by operation of the Addy Development Company.

The land consists of two patented lode mining claims, View No. 1 and View No. 2, Survey No. 1224, located in section 19, T. 32 N., R. 38 E., W. M. [redacted] Summit Mining District, Stevens County, Washington. The claims are recorded in Book "P" of patents, Page 309.

(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 6. *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 the Operator has rendered a sufficient final report (see Article 5), 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 (for example, if the Operator either transfers or fails to retain his interest in the land), 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, for 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, 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, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(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 thereof in the form in which and at the time 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 7. *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 the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further 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 the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and 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 Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *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 the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *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 10. *Changes and added provisions.*—

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

.....
(Operator)

By .....

By .....

.....

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: 1956—O-383069

EXPLORATION PROJECT CONTRACT
ADDY DEVELOPMENT COMPANY
DOCKET NO. IMEA 4772

EXHIBIT A

Attached maps are as follows:

Figure 1 - Location Map, Addy Development Company, Stevens County, Washington

Figure 2 - Property map of Addy Development Company, showing location of proposed work, Stevens County, Washington

Figure 3 - Geologic Map of part of Addy Mine, Stevens County, Washington

Plate 1 - Composite Plan Map, Addy Mine, Stevens County, Washington

Drift westerly 400 feet from present face of adit as indicated on Figure 2 and Plate 1, following mineralized zone. Drift shall be 5 feet by 7 feet in the clear and timbered as necessary.

From sides of drift on a northerly and southerly course drill 400 feet of long holes to prospect for veins en echelon. This work shall consist of about 8 holes and shall have approval of the Government. Four stations shall be cut in sides of drift for the long hole drilling. The total for this station work shall be equivalent to about 10 feet of drifting.

Mineralized zones in drift and long holes shall be sampled and assayed for tungsten. Samples from long holes shall not exceed 5 feet in length.

Estimated Cost of the Project
Fixed Unit Costs

Drifting 410 feet at $31.00/ft. (includes drift and stations for long drill holes)	$12,710.00	
Timber 100 feet of drift at $6.00/ft.	600.00	
Drill 400 feet of long holes at $1.25/ft.	500.00	
Assaying 90 samples for tungsten at $5.00 each	450.00	
Total estimated cost of project		$14,260.00
Government participation at 75 percent		$10,695.00

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 7 1957

DATE	INITIALS	CODE
11/7	gb	220
	WSM	400

November 7, 1957

4772

Tungsten
Addy Exploration Company
Addy Mine
Stevens County, Washington

W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals and Ferroalloys
R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals and Ferroalloys

Memorandum Report of Examination by Field Team

	Oct. 14, 57	Nov. 1, 1957
	X	
		X
	X	
	X	

DMA - 1466X

	X	X

I concur in the Field Team recommendation for approval.

R. W. Holliday

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

November 4, 1957

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Field Examination Report, DMEA 4772, (tungsten), Addy Exploration Company, Addy Mine, Stevens County, Washington

The examining team believe that an exploration project in the Addy Mine would have a good chance of discovering tungsten ore deposits of commercial grade.

The examiners recommend approval of an exploration project that would begin where DMEA 1466 left off. DMEA 1466 was not certified as a discovery. The field men clearly point out, however, that the tungsten-bearing vein has changed character, continuity, thickness, and grade since the previous DMEA work was suspended.

Because of the several improvements in the ore vein, revealed by work on the applicant's part, I am in agreement with the Field Team's recommendation for approval of the application. The modest exploration project outlined by the examining team seems likely to be successful in finding moderate-sized ore bodies.

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 4 1957

DATE	INITIALS	CODE
11/4	gb	220
11/5	WSM	400

E. H. Kiloguard
For: W. P. Williams

USGS memo

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

ORIGINAL FILE COPY
DMEA
RECEIVED NOV 4 1957

DATE	INITIALS	CODE
11/4	C	220
11/4	WSM	400

October 30, 1957

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

Re: Docket No. DMEA-4772 (Tungsten)
Addy Development Company
Addy Mine
Stevens County, Washington

Dear Mr. Selfridge:

Reference our letter of October 25, 1957. Enclosed are the original and four copies of the Consent to Lien and Subordination Agreement signed by R. J. Weller and his wife, Mary E. Weller, lessors.

Sincerely yours,

A. E. Weissenborn

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

Enclosures

cc: USBM (2)
Albee

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

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 29 1957

DATE		CODE
10/29	C	220
11/1	2B	130
		220
11/4	WSOY	400

October 25, 1957

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

Re: Docket No. DMEA-4772 (Tungsten)
Addy Exploration Company
Addy Mine
Stevens County, Washington

Dear Mr. Selfridge:

Enclosed are three copies of a memorandum examination report by H. F. Albee, Geologist, U. S. Geological Survey and G. G. Waddell, Mining Engineer, U. S. Bureau of Mines on the subject property.

Exploration on this property under a former contract, Docket No. DMEA-1466X, Contract Idm-E200, was not successful. However, since termination of Contract Idm-E200 a new operator, the present applicant, has extended the drift about 100 feet disclosing a scheelite zone 100 feet long, having an average grade of 0.86 percent WO_3 over a mining width of 2 feet. This mineral zone starts at a fault in which the prior work was stopped. The character of the vein in the new drifting is more pegmatitic than the quartz vein previously followed.

Because of the improved character of the vein, Albee and Waddell conclude that further work is justified and recommend that the applicant's proposal, somewhat reduced in scope, be approved.

The Field Team concurs with these conclusions and recommendations.

Also enclosed are three copies of "Dissolution of Partnership" dated October 31, 1955 and signed by Paul H. Floyd and Frank E. Birch whereby Paul H. Floyd relinquishes all rights to the Addy Mining claims and the agreements concerning these claims.

Reviewed by
DMEA OPERATING COMMITTEE
11/1/57
(date)

The Consent to Lien and Subordination Agreement submitted by the applicant had to be returned to R. J. Weller to obtain his wife's signature. As soon as we receive it, it will be mailed to you. Rec'd 11/4

We wish to inform you that a change of address notice has been received from the applicant and should be used in the event a contract is written. The new address is:

Please see that this is endorsed on application

Addy Development Company
E. 949 - 43rd Street
Spokane 36, Washington

By Field Team, Region I

for: Thomas E. Howard
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: USBM (2)
USGS (SRO)
Albee

DMEA

OFFICIAL FILE COPY
DMEA
RECEIVED OCT 29 1957

DATE	INITIALS	CODE
11/1	2/B	130
		220
11/4	WSM	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
So. 157 Howard Street
Spokane 4, Washington

October 14, 1957

MEMORANDUM

To: DMEA Field Team, Region I

From: H. F. Albee, Geologist, U. S. Geological Survey, and
G. C. Waddell, Mining Engineer, U. S. Bureau of Mines

Subject: Field Examination Report, Docket No. DMEA-4772 (Tungsten), Addy Exploration Company, Addy Mine, Stevens County, Washington

INTRODUCTION AND SUMMARY

The Addy Development Company, Addy, Washington, applied on June 24, 1957, for DMEA aid to explore their patented View claims which are located about 17 miles southwest from Addy, Washington (fig. 1).

The applicant proposes to explore for tungsten minerals in the Addy mine in which DMEA previously has participated in a contract (pl. 2). The proposed exploration would consist of 1,300 feet of drifting from the present face to the western end line of the property at an estimated cost of $52,000, of which the Government's share would be 75 percent or $39,000.

ON SITE EXAM

The property was examined by the writers on August 12, 1957, accompanied by Sui-Ju Kung, a trainee from Formosa, and the applicant partners, Frank E. Birch and George A. Monroe.

The previous DMEA contract (Docket No. DMA-1466X, Contract No. Idm-E200, pl. 2) consisted of about 510 feet of drifting on a tungsten-bearing quartz vein that ranges from 2 to 6 inches in width. The work started from 45 to 50 feet in from the portal. From the portal to about 360 feet vein material consists almost wholly of quartz and sparse concentrations of wolframite and scheelite. From about 360 feet from the portal to the face as of October 1952 (fig. 3) the vein assumes a pegmatitic character, although it remains a quartz vein, and tungsten minerals occur more continuously. The drifting was stopped at a point about 557 feet from the portal where the face shows about ½-inch of gouge but no vein material. The project work

OK

Reviewed by
DMEA OPERATING COMMITTEE

11-1-57
(date)

was suspended September 20, 1952. At that time there remained $839.40 of unexpended funds. It was believed that the objective of the contract had been attained and no attempt was made to induce the operator to complete the work. A certification of discovery was not recommended.

Since the DMEA contract was suspended, the applicant (a new operator) has drifted west for about 100 feet, starting his drift about 20 feet back from the old face (fig. 3). The 100 feet of drift has exposed a pegmatite vein that is a continuation of the pegmatitic and quartz vein exposed by the earlier drifting. The pegmatite phase is more continuous and wider than the quartzitic phase. Assay results of samples taken by the applicant show the face to average 1.60 percent WO_3 over a mining width of 2 feet. Assay results of samples taken by the examining team show the face to average about 0.86 percent WO_3 over a mining width of 2 feet. In the 100 feet of drifting the applicant has explored an ore zone almost 100 feet in length and 12-18 inches wide which, over a mining width of 2 feet, yielded a mill head of slightly less than 1 percent WO_3.

RECOMMENDATIONS

Because of the improved character of the vein shown by the work done by the applicant since the DMEA contract was suspended, the examining team recommends approval of a modified program that will explore not only the vein but also the vein walls for parallel tungsten-bearing structures.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Addy mine is in the S½ of sec. 19, T. 32 N., R. 38 E., W.M. (fig. 2). The property is reached by going southwesterly 12 miles from Addy on the paved Addy-Gifford road, thence westerly for 5 miles on a graded county road, and then northerly about half a mile on a steep, unimproved mine road.

The altitude ranges from about 1,600 feet at Addy to 4,090 feet at the mine. The property lies on the divide between the drainage areas of the Colville and the Columbia Rivers. The mountain is steep, though not precipitous, and covered with underbrush and evergreen timber which is suitable for mine supports.

Ample labor is available since two large mines have closed in the area. Materials and supplies are available from Spokane about 70 miles from the mine.

Snowfall is moderate but snow may lie on the ground from October to late April. Light rainfall occurs during the summer. Temperatures vary considerably through the seasons, though prolonged extremes are uncommon. Work can be continuous throughout the year.

HISTORY AND PRODUCTION

The first reported production from the mine was 400 units of WO_3 mined from the surface trenching and the upper level in 1932-33. From 1933 to 1955, when the present lessees began operations, the production is unknown. Approximately 330 tons that assayed between 1 percent to 2.4 percent were reported mined by the applicant from the lower level.

Two different mills have been erected to process the ore. Both have been dismantled. The last one was too poorly constructed to operate efficiently. There is a good mill site within 5 miles of the mine.

OWNERSHIP

The property is owned by Robert J. Weller and Mary E. Weller of the Addy Mining Company. It is being worked on a lease-purchase agreement originally held by Frank E. Birch and Paul H. Floyd. Subsequently Mr. Floyd relinquished his interest in the property to George A. Monroe by virtue of Dissolution of Partnership. Mr. Birch and Mr. Monroe formed a partnership which they call the Addy Development Company.

COMPETENCY OF APPLICANT

Mr. Birch is a graduate mining engineer with 10 years of varied practical experience and Mr. Monroe has had 15 years of experience in contract mining. The men are competent to carry out an exploration program in an efficient manner.

GEOLOGY

A short report on the Addy mine was published in "Tungsten Resources of Washington", Bulletin No. 34, Washington Department of Conservation and Development, p. 69-70, by H. E. Culver and W. A. Broughton (1945). According to this report, the granitic rocks in which the mine occurs are part of a stock, roughly circular in plan, measuring 2½ miles from north to south and 1½ miles from east to west, which has intruded argillites, quartzites, and some undifferentiated limestones, all members of the Stevens series of Paleozoic age. In general, the sedimentary beds dip away from the intrusive body but faulting has produced a reversal of attitude in many places giving rise to complicated structures.

A final Field Team report, dated January 15, 1954, was written by W. S. Anderson, U. S. Bureau of Mines and W. P. Puffett, U. S. Geological Survey. Information has been drawn freely from that report and the accompanying maps for more detailed local geology.

The rocks in the Addy mine are granitoid rocks that range from granitic phases to coarsely pegmatitic phases. The pegmatitic rocks are composed predominantly of coarse-grained potassic feldspars with minor amounts of quartz and rarely muscovite mica. Generally, the granites are moderately coarse-grained with porphyritic facies showing phenocrysts of orthoclase and accessory biotite.

For about the first 250 feet of the lower adit two sets of faults are prominent; however, vein material is exposed in only a few places. One set of faults strikes about N. 50° E. and dips steeply to the southeast and the other set strikes N. 60°-70° W. and dips steeply to the northeast. The vein material is in several quartz stringers that range from 1 inch to 3 inches thick and have the same attitude as the northeast-striking set of faults. Tungsten in these stringers is sparse.

From about 290 feet to about 515 feet from the portal of the lower tunnel a vein is exposed almost continuously with only a minor amount of faulting. At 515 feet, which is about 8 feet west of USBM Station 119 (fig. 3), the vein is faulted and was not again picked up by the miners. The fault was followed to the tunnel face, as of October 1, 1952 (fig. 3), at which point the DMEA contract was suspended. The work was stopped because the drifting had exposed only a narrow vein and the values would not carry over a a mining width. No minable reserves were found.

The applicant has drifted 100 feet west from a point about 15 or 20 feet back from the old face where he found the offset portion of the vein. In the first 10 feet of this drifting the vein changed from a quartz vein to a pegmatite vein. The pegmatite phase of the vein is consistently wider than the quartz phase and shows a more persistent tungsten content.

Several westerly trending, parallel faults are exposed in this 100 feet of drift. The faults were first exposed where the quartz vein changes to a pegmatite vein and can be traced westerly for about 65 feet.

In the 100 feet of drift the pegmatite vein averages from 12 to 14 inches wide. It was mined on a 2-foot mining width and, according to the applicant, the mill returns showed slightly less than 1 percent WO_3. Under the old DMEA work, 15 systematic samples taken at 10-foot intervals along the quartz vein and across 2.5-foot widths averaged 0.47 percent WO_3.

Some areas were stoped above the drift and a raise was carried from one stope to the upper tunnel. The vein in the upper tunnel, where it can be seen, shows an average width of about 9 inches. Several large stopes from this level indicate that a

considerable tonnage was mined and in places the shape of the stopes indicates a thickening of the vein. The vein pinched to about 2 inches wide in one stope about 50 feet above the sill, and toward the west end of the stope the vein was lost in a strongly faulted zone. One stope, inaccessible because of caving, had been mined to the surface.

Twelve samples, the locations and assay results of which are shown on figure 3, were cut during the examination. The weighted average of the assays is 1.07 percent WO_3, and the average length of sample cuts is 1.2 feet. Examination of figure 3, however, shows an erratic distribution of the ore, both on strike and up dip of the vein, but the general tenor and width of the pegmatite phase definitely is better than the quartz phase of the vein. ?

Surface exposures of the vein were examined and traced as far as the westernmost cut shown on plate 1. Production is reported from the long cut shown on plate 1 and some tungsten minerals, though sparse, were seen in the cuts to the west. If the lower drift was extended westerly the backs, measured in the plane of the vein to the surface cuts, would range from about 400 to 450 feet.

The applicant estimates that the area blocked out by his work will produce 1,500 short ton units of tungsten concentrates. Under present market conditions, however, 1,500 units of WO_3 would not make the blocked out material more than submarginal in grade. If, in advancing the drift, the width and grade of the present face were maintained, appreciable reserves of a higher grade could be blocked out.

Although the previous DMEA work found that the vein was too narrow and spotty to be of much interest, the work done by the applicant since the contract has shown much more favorable results. The chances that the width and grade will remain the same or increase are good and approval of an exploration program is recommended.

APPLICANT'S PROPOSED PROGRAM AND DISCUSSION

The applicant proposes to extend the lower tunnel drift westerly on the vein structure for 1,300 feet to the west end line of the property, contracting the exploration work for a total cost of $40 per lateral foot of 5- by 7-foot drift. This contract price includes labor, supervision, consultants, operating materials and supplies, operating equipment, cost of moving in equipment, pipe, rail, rehabilitation and repairs of present buildings and portal sets of the present drift, costs of new buildings, a 100-foot snow shed over the track, purchase of gas-electric power plant and motor

battery, installations necessary for the job, and miscellaneous costs of repairs and accounting, with no need for any extra allowances and contingencies.

Although the recent work performed on the property by the applicant has made the mine potential look more favorable, the field examiners believe a smaller program that will also explore for possible parallel veins would be more valuable at this stage of the mine exploration.

RECOMMENDED EXPLORATION PROGRAM

A total of 400 feet of drifting, a maximum of 150 feet of raising, and a maximum of 400 feet of long holing, all under one stage, are recommended.

Four hundred feet would extend the drift to a point approximately 100 feet west of the westernmost trench (pl. 1). One hundred and fifty feet of raising would allow for testing the continuity of the vein up dip and 400 feet of long holing would allow for eight 50-foot horizontal holes, with one north and one south hole at each of four stations located at intervals of 100 feet along the drift.

Allowance for 95 samples is recommended. If one sample for each 10 feet of drift and raise is cut, 55 samples would be required. Long holing is recommended to test laterally for possible parallel structures. There is no evidence to indicate sampling requirements of the drill holes but on the basis of one sample per 10 feet of hole or five samples per hole, it is estimated that 40 samples will be sufficient for the drill holes.

Only a small expenditure has been recommended for rehabilitation and new buildings. Approximately one week's work will be necessary to straighten the sharp corners in the drift to enable an air trammer to have clearance. The applicant preferred a battery locomotive to the air trammer, but this, along with a portable gasoline-electric charger, would be too costly for such a small project. Therefore, the rental of an air trammer is provided for in the calculated cost.

The applicant also wanted a 100-foot snow shed over the track and a new building for the portable compressor. Although such an arrangement might be desirable, it is not necessary as the mine is not in a heavy snow belt.

It is estimated that it will take 10 months to complete the project.

ESTIMATED COSTS OF PROJECT

New Buildings

Building to protect portable compressor from the weather. Size 15' x 8' x 7' high, with single pitch tarpaper roof. All rough grade lumber. Two men can construct this shed in one day.

Total cost	$100.00

Rehabilitation (5 days)

Mine. - Slab-off sharp corners where drift detours around caved area; also some repair on open chutes that will need new timber and repair of air, water and vent pipe where needed.

Surface. - Repair roof and replace windows in shop.

Labor

2 miners - 5 days @ $18.00/day	$180.00	
1 supervisor - 1 day @ 24.00/day	24.00	
		$204.00

Material

Powder 100# @ $25.00/100#	25.00	
Fuse 500 ft. @ 13.40/1000'	6.70	
Caps 50 @ 24.75/1000	1.24	
Tar paper, 16# (216 sq. ft. in 1 roll)	4.65	
Timber, 2 light sets or 10 ft. @ $3.28/ft.	32.80	
Windows 2 @ 5.00	10.00	
Vent pipe (replace 10-ft. section @ .59/ft.	5.90	
		86.29

Operating Equipment

Use 1/4-month x the cost of operating equipment for drifting:

1/4 x 324.13 = 81.03	81.03

Miscellaneous

Unemployment comp., Indust. insur., etc. 14.9% x payroll ($204)	30.40
Total rehabilitation cost	$401.72

Drift and/or Crosscut

400 feet 5'x7' in the clear
Estimated daily advance: 3.8 feet
Estimated completion time: 5.0 months

1. Independent contracts — none

2. Labor and supervision

2 miners	- 105 days @ $18.00/day	$3,780.00
1 trammer/helper	- 105 days @ 18.00/day	1,890.00
1 supervisor (20% of time)	- 21 days @ 24.00/day	504.00
		$6,174.00

3. Operating materials and supplies

16# rail - 800 ft. or 4,272# @ $12.10/100# (~~50%~~ 35% salvage)		258.46
Splice bars - 40 pr. @ $0.75/pr.		30.00
Bolts (broken keg) @ 28.13/100#		28.13
Spikes 200# @ 17.15/100#		34.30
Ties 200 @ 0.40/ea.		80.00
2" black pipe 375' @ 0.50/ft.	(50% salv.)	93.75
1" black pipe 375' @ 0.23/ft.	(50% salv.)	43.13
Fittings - 25% of 2" and 1"	(50% salv.)	34.22
8" vent pipe, 26 gauge 400' @ 0.59/ft.	(50% salv.)	118.00
Vent pipe fittings - 20% of total	(50% salv.)	23.60
Powder, 40% g. @ 26.00/100# (400' @ 7#/ft. adv.)		~~728.00~~
Fuse - 13,000' @ 13.40/1000'		174.20
Caps ~~1,300~~ 1,200 @ 24.75/1000		32.18
2 - 1/2" water hose, 50 ft. complete		28.80
2 - 1" air hose, 50 ft. complete		41.70
Drill steel and bits, 4' and 6' lengths, aver. $18.70 (1 every 18.7 ft. of adv.)		400.00
Small tools		50.00
Repair parts & lub. 400' @ 1.50/ft.	(old equip.)	600.00
Diesel fuel - $0.21/gal. average ~~13~~ 12 gpd x 105 days		~~286.65~~ 431.00
Sample sacks & transportation 60 @ 0.40/ea.		~~24.00~~
		$3,109.12

4. Operating equipment

The applicant owns or will purchase the following equipment to be used on the proposed exploration project.

No.	Equipment	Value	No. deprec.
1	Sullivan 210 diesel compressor	$5,000	$83.30
1	Finley 11-B loader	1,000 ?	16.67
3	Mine cars - 22 cu. ft.	100 each	5.00
1	Air blower	680	11.33
1	IR-38 jackleg	950	15.83
1	Air receiver tank - 30" x 7'	535 ?	8.92
4	Miners lights and charger	60 ?	4.00
1	Water tank	60	1.00
1	Portable bit grinder	185	3.08
			$149.13

Rental equipment

6½ HP Universal air trammer @ $175/mo.	175.00
	$324.13
5.0 months @ $324.13 =	$1620.65

5. Rehabilitation — none

6. New buildings — none

7. Miscellaneous

Snow removal	100.00 - ?	
Unemploy. comp., Indust. insur., etc. 14.9% x payroll ($6,174.00)	919.93	
Long holes - 400 ft. @ $1.25/ft.	~~500.00~~	
Samples:		
Drift - 40 for WO_3 @ $5.00/ea.	~~200.00~~	
Long holes - 40 for WO_3 @ 5.00/ea.	~~200.00~~	
		$1,919.93

12,419.19

8. Contingencies — none

Total drift and/or crosscut cost — $12,823.70

32.04

31 ft.

Recapitulation of Drift and/or Crosscut Costs

400 feet of Drifting

1.	Independent contracts		none
2.	Labor and supervision		$6,174.00
3.	Operating materials and supplies		3,109.12
4.	Operating equipment		
	Depreciation	$745.65	
	Rental	875.00	1,620.65
5.	Rehabilitation		none
6.	New buildings		none
7.	Miscellaneous		
	Snow removal	100.00	
	Unempl. comp., Indust. Insur., etc.	919.93	
	Long holes - 400 ft. @ $1.25/ft.	~~500.00~~	
	Samples - 80 @ 5.00/ea.	~~400.00~~	1,919.93
8.	Contingencies		none
	Total cost		$12,823.70
	Less: Long holes	500.00	
	Sample assays	400.00	900.00
	Cost of drifting		$11,923.70

Cost per foot = $29.81

Long Hole Drill Stations

4 long hole drill stations are needed. One slab-round per station will give adequate room.

A slab-round equals 2½ feet of drifting @ $30/ft. =

$75 per station x 4 stations = $300.00

Timbering in Drift

Estimate up to 50 feet of light timbering - 2 days time

1. Independent contracts — none

2. Labor and supervision

2 miners - 2 days @ $18.00/day ea.	72.00	
1 trammer - 2 days @ 18.00/day ea.	36.00	$108.00

3. Operating materials

		Bd.Ft.	
Timber (5'x7' in clear and 5' long)			
Posts (6" x 6" x 7.5')	= 22.5 x 22	495	
Caps (8" x 8" x 6')	= 32 x 11	352	
Girts (4" x 6" x 4.5')	= 9 x 20	180	
Lagging (2" x 5' x 10')	= 100 x 10	1000	
Blocking (3" x 1' x 1')	= 3 x 22	66	
		2093 ?	
2093 x $70/M			146.51 ?
Wedges - 75¢ bundle x 10			7.50
Nails - 20¢/lb. x 50#			10.00
			$164.01

4. Miscellaneous

Unempl. comp., Indust. Insur., etc. 14.9% of payroll ($108.00)	16.09
Total	$288.10

Cost of timber per foot advance = $5.76/ft.

0.00 - 350.00

Raising

150 feet of raise is recommended as a maximum in mineralized areas approved by the Government. Two 75-ft. raises are provided in the following calculations. The specifications are:

> 2 cap raise with lagging only between the manway and the muck chute. The manway will hold pipes, a narrow slide, and a safe ladder. To reduce ore dilution only a 4'x8' excavation need be blasted.

1.	Independent contracts		none
2.	Labor and supervision		
	2 miners - 40 days @ $18.00/day ea.	$1,440.00	
	1 nipper - 40 days @ 18.00/day	720.00	
	1 supervisor - (20% of time) 8 days @ 24.00/day	192.00	
			$2,352.00
3.	Operating materials and supplies		
	1" pipe - 125' @ $0.23/ft. (50% salvage)	14.38	
	2" pipe - 125' @ 0.50/ft. (50% salvage)	31.25	
	Fittings - 25% of pipe total ($45.63)	11.41	
	1" valve - $6.00/ea.	6.00	
	2" valve - 19.00/ea. (50% salvage)	9.50	
	8" vent pipe - 125 feet 26 gauge @ $0.59/ft. (50% salvage)	36.88	
	Vent pipe fittings - 20% of total ($73.75)	14.75	
	1/2" water hose - 50 ft. complete	28.80	
	1" air hose - 50 ft. "	41.70	
	Drill steel and bits - 6 x $18.70 aver.	112.20	
	Small tools	25.00	
	Explosives		
	Powder - 40% @ $26/100# (150' @ 6#/ft. advance)	234.00	
	Fuse - $13.40/1000' x 4,500 ft.	60.30	
	Blasting caps $24.75/1000 - 500	12.38	
	Timber for chutes (two)		
	Caps (8" x 8" x 6') = 32 bd.ft. x 6 = 192		
	Girts (8" x 8" x 5') = 27 x 8 = 216		
	Posts (8" x 8" x 4') = 21 x 8 = 168		
	Lagging (2" x 32' x 10') = 640 x 2 = 1280		
	1856		
	1856 @ $70/M	129.92	

3. Operating materials and supplies

Timber raise (sets 5' x 4' x 5')

Caps	(8" x 8" x 4')	= 21.3 x 60	=	1278
Posts	(8" x 4" x 5')	= 13.3 x 120	=	1596
Girts	(8" x 4" x 4.5')	= 12 x 60	=	720
Lagging	(2" x 4' x 5')	= 40 x 30	=	1200
Slides	(1" x 24" x 5')	= 10 x 30	=	300
				5094

5094 @ $70/M	$356.58
Wedges - $1.00/set x 30 sets	30.00
Ladder - 150 ft. @ $0.50/ft.	75.00
Nails - 100# @ 19.00/100#	19.00
Maintenance - $0.75/ft. x 150'	112.25
Diesel fuel - 0.21/gal. (aver. 13 gpd x 40)	109.20
3/8" steel core (6x19) - 200' x $0.186/ft.	37.20
Cable block - $35/ea.	35.00
	$1,542.70

4. Operating equipment

No.	Equipment		Value	Mo. deprec.
1	Sullivan 210 diesel compressor		$5,000	$83.30
3	Mine cars - 22 cu. ft.	each -	100	5.00
1	Air blower		680	11.33
1	Air hoist - single drum		650	10.83
1	Stoper (Thor 100#)		790	13.17
4	Miners lights & charger	each -	60	4.00
				127.63

Rented equipment

6½ HP Universal air trammer @ $175/mo. 175.00

2 x 302.63 = $605.26

5. Initial rehabilitation none

6. New buildings none

7. Miscellaneous

Unemploy. comp., Indust. insur., etc. 14.9% of payroll ($2,352.00)	350.45
Sample assays for WO_3 - 15 @ $5.00/ea.	75.00
Total	$4,925.41

Recapitulation of Raise Costs

150 feet raise, two-cap, light timber.
Two months

1.	Independent contracts		none
2.	Labor		$2,352.00
3.	Operating materials and supplies		1,542.70
4.	Operating equipment		605.26
5.	Initial rehabilitation		none
6.	New buildings		none
7.	Miscellaneous		
	Unemploy. comp., Indust. insur., etc.	350.45	
	Samples - 15 @ $5.00/ea.	75.00	425.45
	Total raise cost		$4,925.41
	Less: Samples		75.00
	Cost of raise		$4,850.41

Cost per foot - $32.33

SUMMARY OF ESTIMATED COST OF PROJECT (ROUND FIGURES)

New building for portable compressor		$ 100.00
Rehabilitation of mine and buildings - job		400.00
400 feet of drift and/or crosscut	@ $30.00/ft.	12,000.00
50 feet of timbering	@ 5.75/ft.	287.50
4 long hole drill stations (slab-round equal to 2½ feet of drifting @ $30/ft.) i.e., stations $75/ea. x 4		300.00
150 feet two-cap raise	@ 32.50/ft.	4,875.00
95 samples assayed for WO_3	@ 5.00/ea.	475.00
400 feet of long hole drilling	@ 1.25/ft.	500.00
Total cost of project		$18,937.50
Government participation @ 75%		$14,203.12

It is estimated that 10 months will be needed to complete the project.

Attachments 5

Distribution:
DMEA (3)
USBM (5)
USGS(SRO)
Docket
Albee

Figure 1. Location map, Addy Development Company, Stevens County, Washington

H.E. Gibson, September, 1957

"ALBANENE" NO. 1000M K & E CO., N. Y.
FEB. 5, '54, 40.00, 40662

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7-8	Holt	400
7-8	Martin	400
7/10	GLL	130
"	Jones	110
"	Gutteridge	100
7/11	P.K	220
		400

JUL 11 1957

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

Re: Docket No. DMEA 4772 - Tungsten
Eddy Development Company
Eddy mine
Stevens County, Washington

Dear Mr. Weissenborn:

The above-docketed application for exploration assistance is being referred to your office for a field examination of the property.

Copies of memoranda dated July 1 and July 5, 1957, by W. E. Nelson, Geological Survey, and R. W. Holliday, Bureau of Mines, respectively, relating to the application, are enclosed.

Also enclosed is an extra copy of the application for the use of the Field Team.

Please note that this is the same property which was explored under Contract No. Idm-3200 (Docket No. DMEA 1466X).

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GLB)

APPROVED:

O. M. Bishop (GLB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GLB)
Member, Geological Survey

SPHolt/dlm 7-8-57
cc to : Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG I
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

Enclosures

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7-8	Holt	400
7-8	Martin	400
7/10	Selfridge	130
7/10	Johnson	110
4	Mittendorf	100
		220

JUL 11 1957

Addy Development Company
Addy, Washington

7/10 Kilsgaard (130)

Re: Docket No. DMEA 4772 - Tungsten
Addy Mine
Stevens County, Washington

7/10 Bishop (130)

Gentlemen:

The above-docketed application for exploration assistance for tungsten ores has been reviewed by the Division of Iron and Ferro-Alloys of the Defense Minerals Exploration Administration and referred to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I, South 157 Howard Street, Spokane 4, Washington, for a field examination of the property.

Any assistance that you can give the members of the Field Team will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

SPHolt/dlm 7-8-57
cc to: Docket
Code 400
Admr. R. File
Oper. Comm.
FT. REG. I
Messrs. R. W. Holliday, USBM
T. H. Kiilsgaard, USGS

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 5 1957

DATE	INITIALS	CODE
7/5	E	220
7/5	GLC	400
July 5, 1957		

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division-DMEA
Through: Acting Chief, Branch of Ferrous Metals and Ferroalloys

From: R. W. Holliday, Commodity Specialist, Branch of Ferrous Metals and Ferroalloys

Subject: Docket No. DMEA-4772 (Tungsten)
New Application
Addy Development Company
Washington Metals Mine or Addy Mine
Stevens County, Washington

The subject application proposes 1300 feet of drifting which would, in effect, be an extension of the previous project, DMEA 1466.

The applicant's claim that new work shows additional mineralization should be appraised by the Field Team even though no Certification of Discovery was issued for the previous project.

R W Holliday
R. W. Holliday

IN REPLY REFER TO:

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 2 1957

DATE	INITIALS	CODE
7/2	C	220
7/3	GRP	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

July 1, 1957
Re: DMEA 4772
Addy Development Company
Addy Mine
Stevens County, Washington
$52,000.00 - Tungsten

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

The applicant requests assistance in extending an adit drift on a tungsten-bearing vein, a distance of 1,300 feet. Most of the adit was driven under DMEA contract 1466, Idm-E200 at a total cost of $20,450.00 of which the Government share was 75% or $15,337.95.

The work resulted in placing in reserve 1,576 units of tungsten in ore averaging (cut grade) 0.47% WO_3 in a vein, expanded for mining purposes, with a width of 2.5 feet. In the opinion of the examiners such material could not be profitably mined and certification was not recommended.

The present applicant claims the real vein has been found in an extension of the DMEA adit and for 90 feet averages 12 inches wide and contains about $2\frac{1}{2}$% WO_3 which, if expanded to a $2\frac{1}{2}$ foot mining width, would average about 1% WO_3. If the main vein was not followed in the long adit and is there in the hanging wall, as the new work suggests, the total tonnage of perhaps 1% material might be substantial.

Referral of the application to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

June 28, 1957

Addy Development Company
Addy, Washington

Subject: DMEA-4772

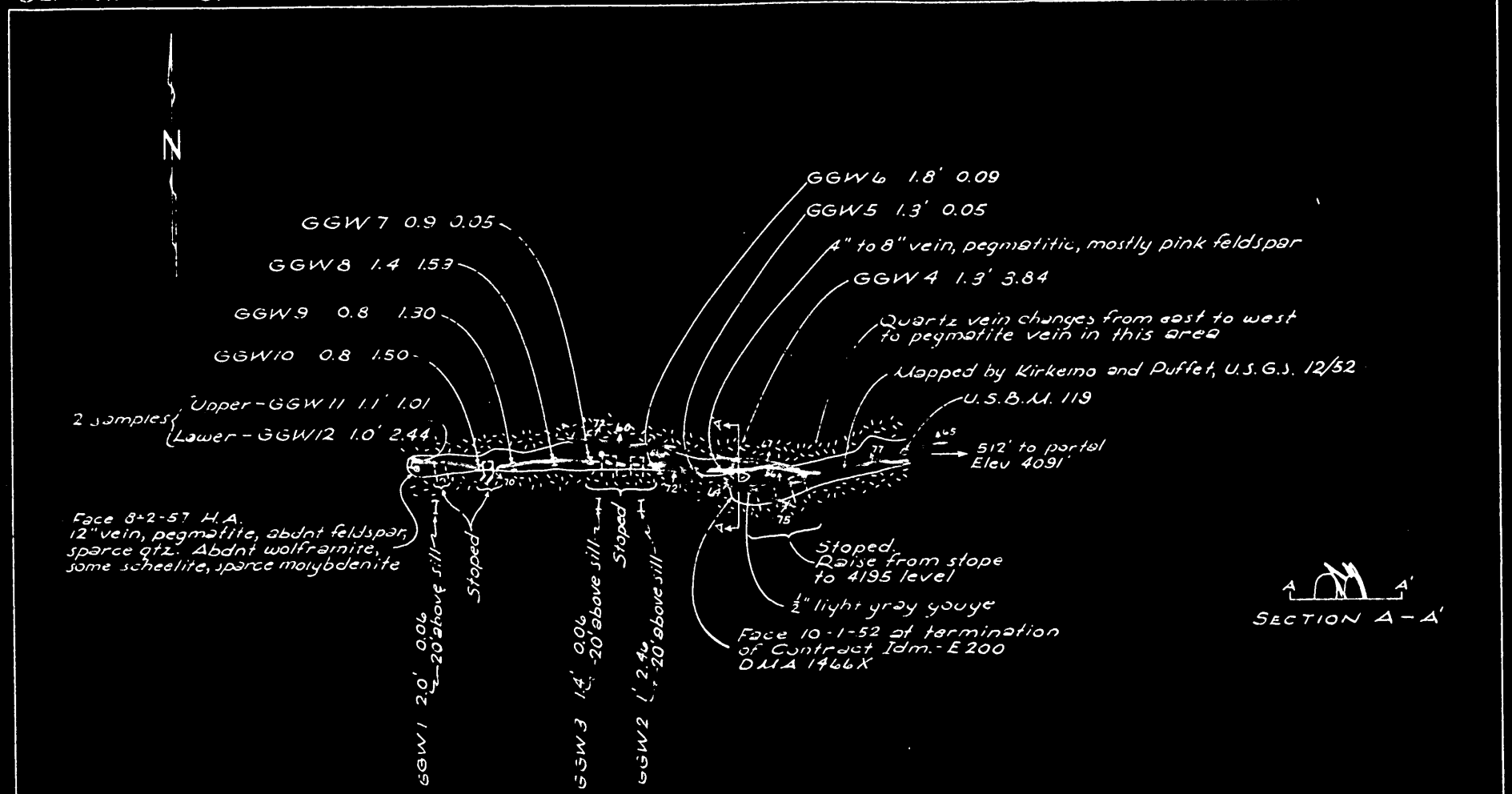
Gentlemen:

Your application for exploration assistance, dated June 24, 1957 submitted to our office at Spokane, Washington has been assigned Docket Number DMEA-4772 and referred to the Iron & Ferro Alloys Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to: Region I N.W.



GEOLOGY MAPPED 1957 BY
H. F. ALBEE, U.S.G.S.

GEOLOGIC MAP OF PART OF THE
ADDY MINE
STEVENS COUNTY, WASHINGTON

40 0 40 FEET

BY H. F. ALBEE

SEPTEMBER 1957

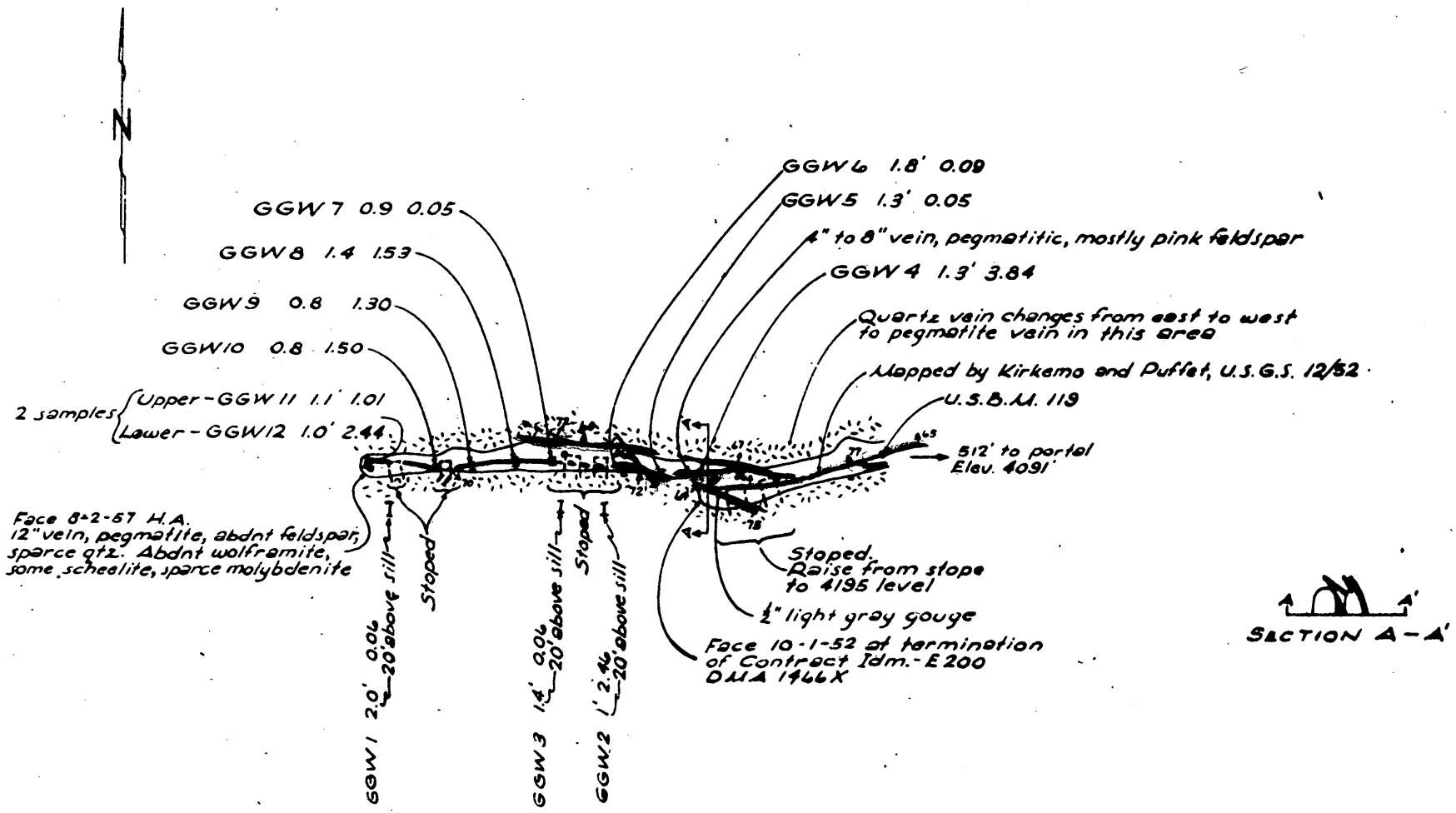
FIGURE 3

United States | Prepared for

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
APPLICATION REPORT

DOCKET NO. DMEA 4772



EXPLANATION

Granite

Fault, showing dip

Vein, showing dip

ASSAY DATA

Sample No.	Length (ft.)	Percent WO_3
GGW 11	1.1	1.01

GEOLOGY MAPPED 1957 BY
H. F. ALBEE, U.S.G.S.

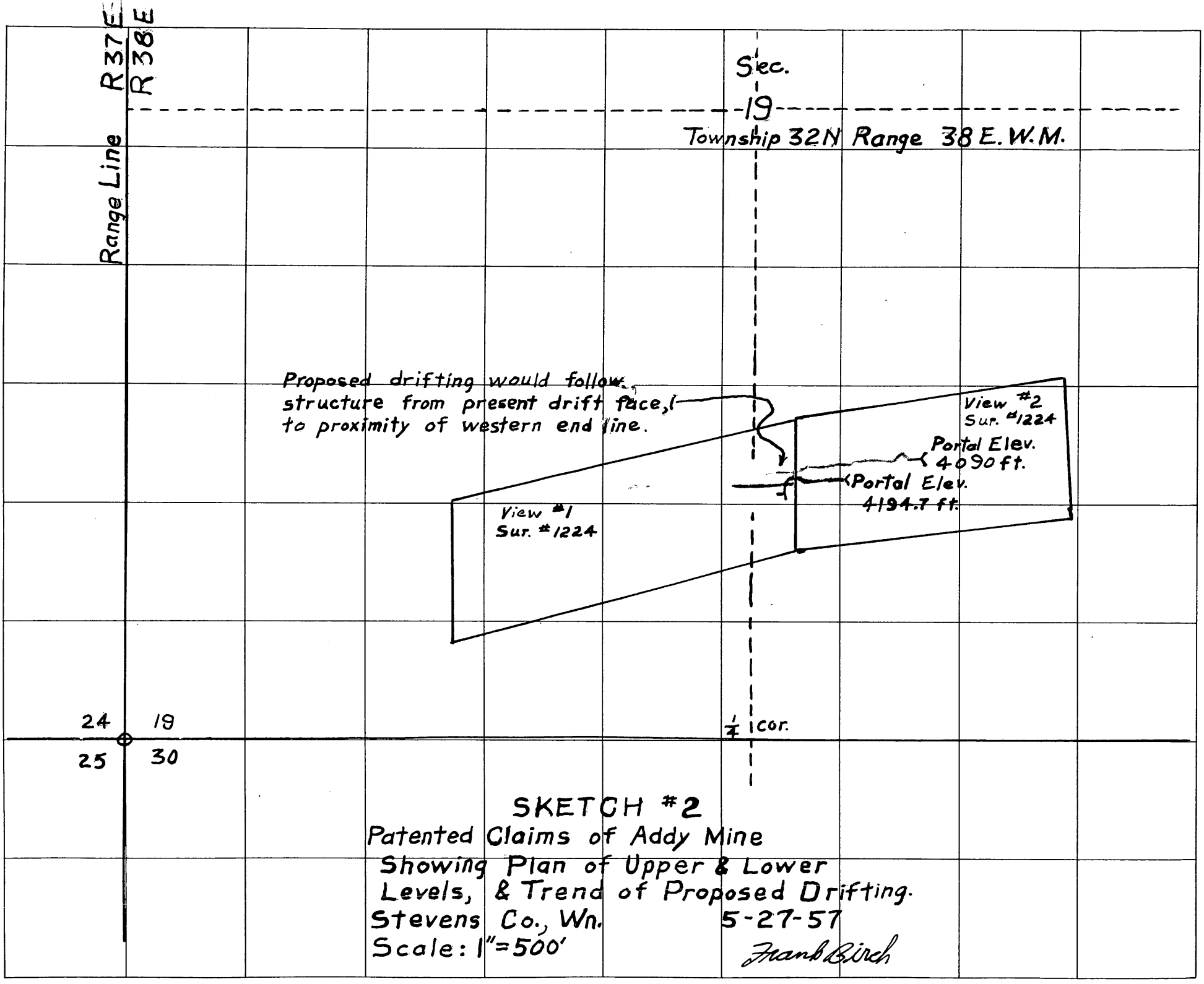
GEOLOGIC MAP OF PART OF THE
ADDY MINE
STEVENS COUNTY, WASHINGTON

40 0 40 FEET

BY H. F. ALBEE

SEPTEMBER 1957

FIGURE 2



SKETCH #2
Patented Claims of Addy Mine
Showing Plan of Upper & Lower
Levels, & Trend of Proposed Drifting.
Stevens Co., Wn. 5-27-57
Scale: 1"=500'
Frank Birch

"ALBANENE" REG. U.S. PAT. OFF. No. 188M K&E CO., N.Y.
J. A. Gendron Co., Spokane

Structure & Late Work at the Addy Mine

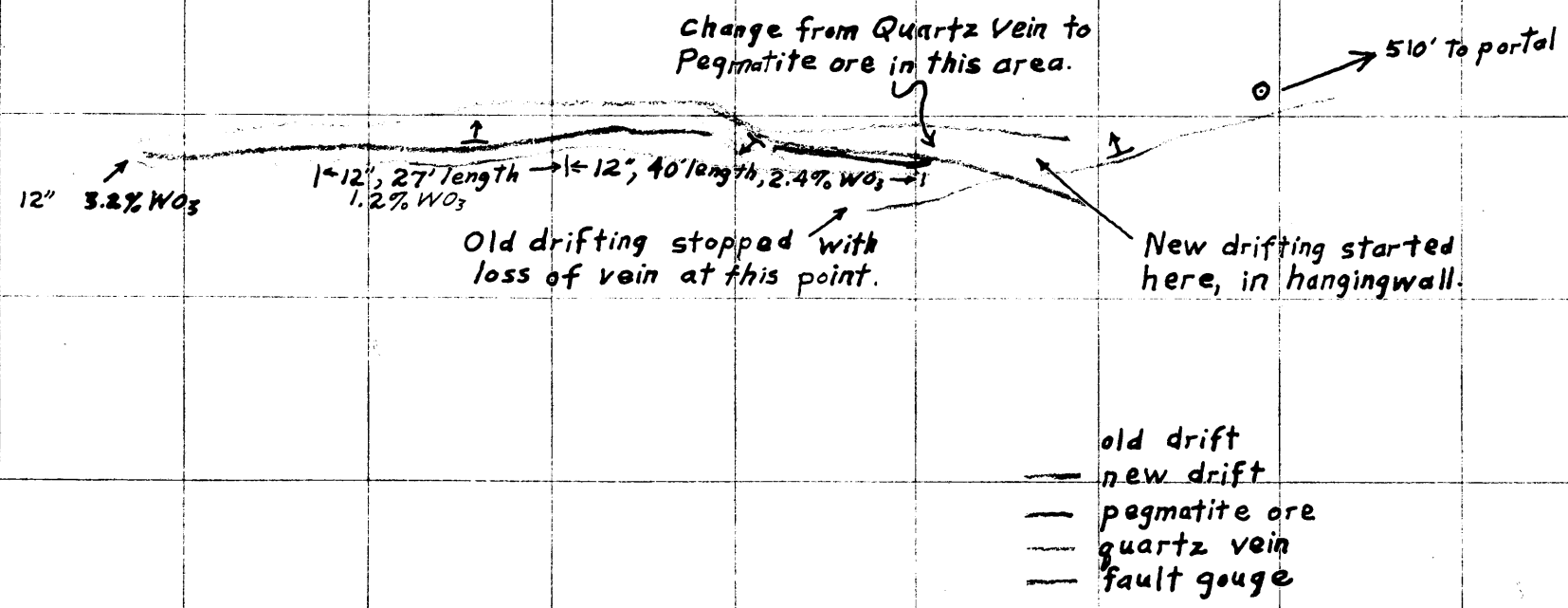
Stevens Co., Wn. 3-24-'57

Scale: 1" = 20'

Frank Birch

N

SKETCH #1



United States
Department of the Interior

Prepared for
Defense Minerals Exploration Administration
Examination Report

Docket No. DMEA 4772,

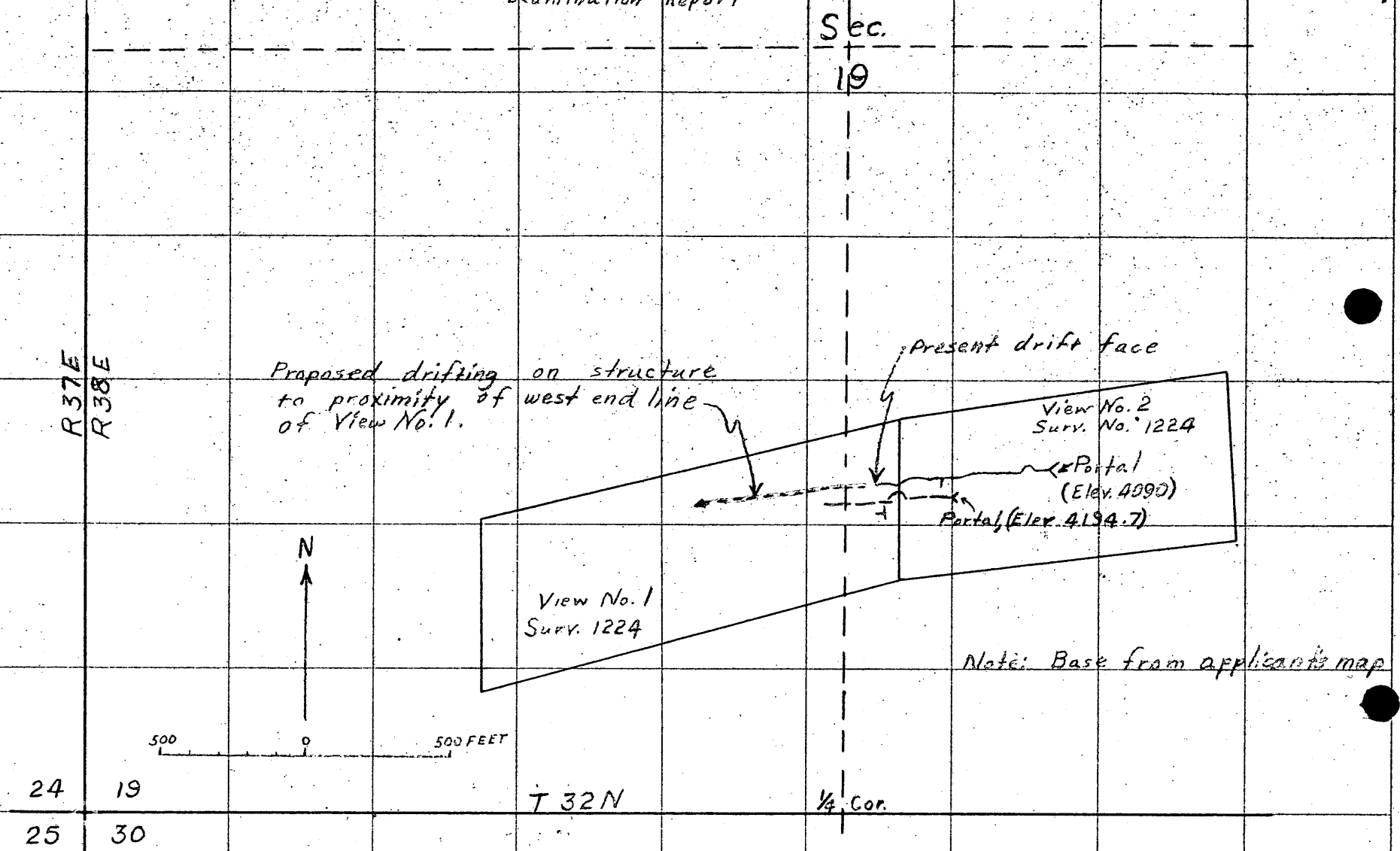
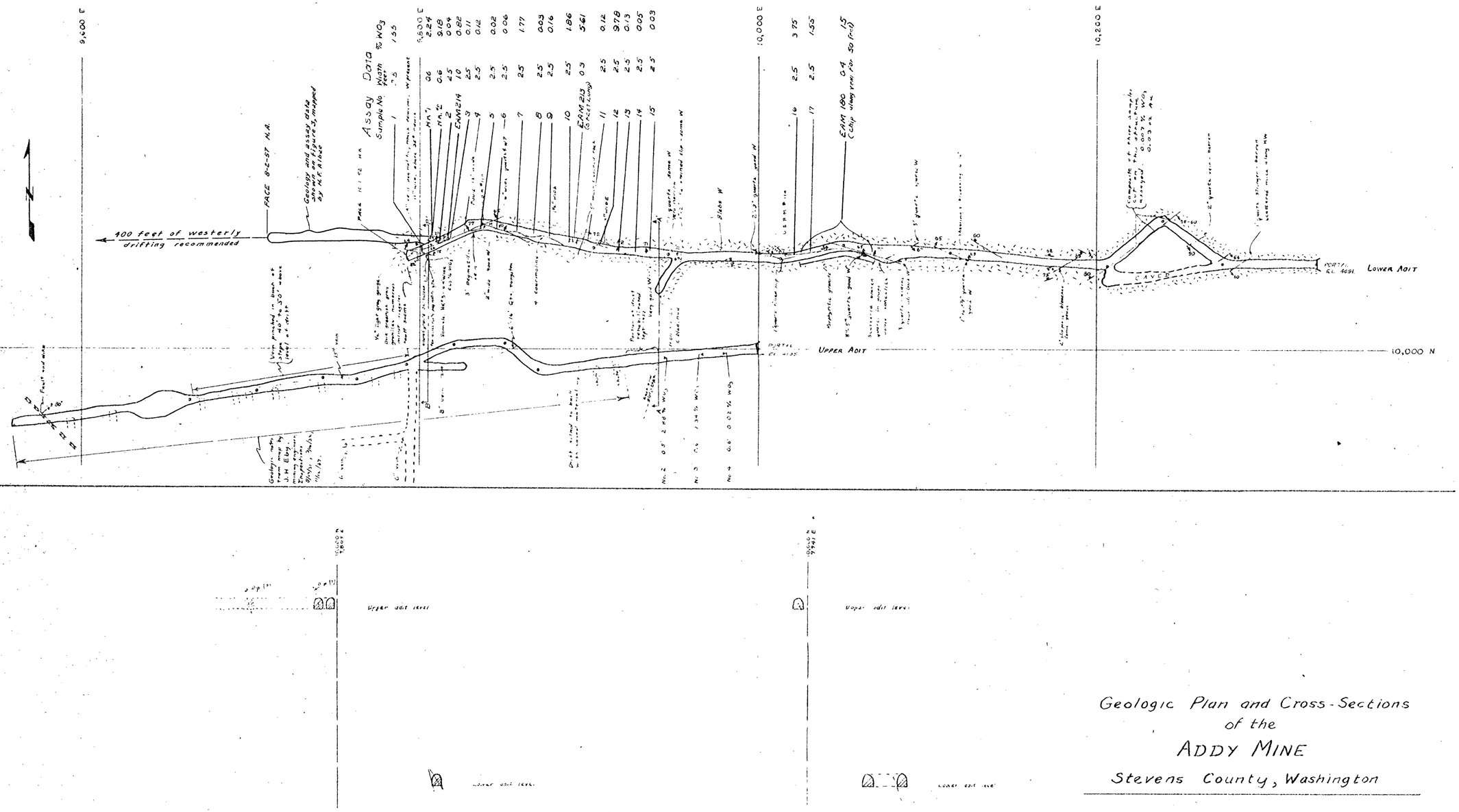


Figure 2. Property map of Addy Development Company showing location of the proposed work, Stevens County, Washington

H.F. Albee, September 1957

"ALBANENE" No. 195M K&E CO., N.Y. REG. U.S. PAT. OFF.



Geologic Plan and Cross-Sections of the

ADDY MINE

Stevens County, Washington

By H Kirkemo and W Puffett, U.S.G.S.

40 0 40 FEET

Note: Base from map prepared December 1952 for DMA 1466X (Tungsten)

September 1957