DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE — Idm-E NO. 1081 — DMEA NO. 4653

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [x] 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
- [x] Closing Letter
- [x] Cost Audits
- [x] Termination Notice or Agreement 12-2-57
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [x] Project summary (final)
- [x] Work Completed analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semi-Annual Report for Certified Project
- [x] Final Field Team Report (Tab)
- [x] 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. 2 : Reports
- [x] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [x] Field Team Semi-Annual Report for Certified Project
- [x] Field Team Interim Reports
- [x] 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

REFER ALSO TO FARE MINING COMPANY -- DMEA-4404

17963

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/15	Klugescheid	500
	Maxwell	500
"	Chambers	800
	Martin	190
		~~130~~
		~~130~~
7/16	Johnson	110
"	Wattenberg	100
7/18	J.G.	220
		500

JUL 17 1958

Mr. James Quigley, President
Western Resources, Inc.
c/o Fabian, Clendenin,
Moffat and Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc.
Sunbeam Mine
Juab County, Utah
Contract No. Idm-E1081

Dear Mr. Quigley:

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

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

Your interest in the Defense Minerals Exploration Administration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WPKlugescheid/er 7/15/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Mr. Chambers, DMEA
Mr. J. W. Gallivan, Secretary
New United Sunbeam Mining Co.
Salt Lake City 1, Utah.
Chron.

8623

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED
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REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Western Resources, Inc.
Continental Bank Building
Salt Lake City, Utah.

pertaining to Exploration Project Contract No. Idm-E1081, DMEA No. 4653, and Termination Agreement dated January 31, 1958, for the months of August to November, 1957, inclusive, covering a project for the exploration of Copper-Lead-Zinc on property known as Sunbeam Mine located in Juab County, Utah.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

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

Total cost as billed by Contractor		$12,184.87
Exceptions:		
Prior to this review	$0.00	
Herewith	0.00	0.00
Total Accepted Cost		$12,184.87

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Six thousand, ninety-two and 44/100ths Dollars is valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$6,092.44
Amount reimbursed	5,592.44
Balance due Operator	$ 500.00

March 13, 1958

T. H. Brading, Auditor

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

WESTERN RESOURCES, INC.

CONTRACT NO. Idm-E1081 DOCKET NO. DMEA 4653

(a) The Monthly Reports were supported by documentary proof of that portion ($10,844.00) of the costs which covered work performed at unit rates under independent contracts (per summary attached.)

(b) The balance ($1,340.87) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and

(c) The administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

SUMMARY OF DOCUMENTED COSTS

WESTERN RESOURCES, INC.

Contract No. Idm-E1081 | Docket No. DMEA 4653

Independent Contracts

Drilling:

Non-core	881 feet at $ 6.00 per foot	$5,286.00
Core 0 - 500	119 feet at $ 8.50 per foot	1,011.50
Core 500 - 700	353 feet at $10.50 per foot	3,706.50
Lost Casing	20 feet at $2.25 per foot	45.00
Cementing	13 hours at $15.00 per hour	195.00
Mobilization and demobilization of well equipment and crew		600.00
Total Independent Contracts		$10,844.00

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Government's Lawyer
J. Lynch
Klugescheid
Krause
Selfridge
Stanley

TERMINATION AGREEMENT

It is agreed this 31st day of January, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Western Resources, Inc., hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-E1081 (Docket No. DMEA-4653), dated April 25, 1957, hereinafter referred to as the "Contract," that:

1. Effective December 2, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute to allowable costs incurred prior to said effective date and shall contribute to allowable costs incurred or to be incurred beginning with said effective date in performing winding-up and settlement actions provided for in the Contract, including (a) the preservation and disposal of property to the cost of which the Government has contributed, and (b) the making and rendering of reports and accounts.

3. The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including (a) the disposal of any facilities, buildings, fixtures, equipment, or other items to the cost of which the Government has contributed; and (b) the rendering of the final report and final account.

4. All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

5. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this Termination Agreement.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mittendorf
Administrator, Defense Minerals Exploration Administration

WESTERN RESOURCES, INC.

By James Dugley

Title President

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DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE

Government's copy

MF-200
(Revised June 1954)

Docket No. DMEA 4653

Commodity Copper-Lead-Zinc

Contract No. Idm-E 1081

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 25 APR 1957 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] WESTERN RESOURCES, INC., a Utah corporation, whose mailing address is D. Howe Moffat, Secretary, Fabian, Clendenin, Moffat & Mabey Continental Bank Building, Salt Lake City 1, Utah, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and one map (Fig. 2).

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

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

(b) The Operator represents and undertakes that:

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

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: Interests of lessors.

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: **Consent to Lien and Subordination Agreement of New United Sunbeam Mining Company.**

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of **Copper, Lead, and Zinc.** The work to be performed is described in Exhibit "A." The Operator on or before July 15, 1957 shall commence the work, and on or before November 30, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A"~~. **(See Article 13)**

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $**33,268.00**

The Government shall contribute **50** percent of the allowable costs as they are incurred in a total sum not in excess of $**16,634.00**: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; [redacted] **See Article 13.**

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article ~~13~~8. **(see Article 13.)**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*— **(a) That part of the last sentence of Article 3 beginning with the word "either" is deleted and replaced by the words "have completed the work."**

(b) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon is deleted.

(c) Categories (2) through (7) of Article 6(a) are deleted.

(d) In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the contract.

(e) In the last sentence of Article 6(c), the reference to Article 9 is changed to Article 8.

(f) Notwithstanding any other provision of the contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the contract.

Pinkin
Dunger
Klugescheid
Insured
Chambers
Selfridge
Johnson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitchell

Administrator, Defense Minerals Exploration Administration

WESTERN RESOURCES, INC.
(Operator)

By James Quigley

Title Pres.

I, D. Howe Moffat, certify that I am the _____ secretary of the corporation named as Operator herein; that James Quigley who signed this contract on behalf of the Operator, was then President 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.

D. Howe Moffat

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
WESTERN RESOURCES, INC.
DOCKET NO. DMEA-4653

ANNEX I

The land referred to in Article 2 of the contract consists of a group of patented lode mining claims, in Juab County, Utah, held pursuant to an assignment dated October 17, 1956, from Flare Mining Company of a lease agreement dated July 1, 1956, between Flare Mining Company and New United Sunbeam Mining Company. These claims are set forth below.

The land is outlined on map (Fig. 2) entitled "DMEA Docket No. 4653, Claim Map, Western Resources, Inc. (New United Sunbeam Mining Co. Property), Juab County, Utah," which is attached hereto and made a part hereof.

The New United Sunbeam Mining Company claims are:

Claim	Lot No.
Juab Lawrence Lode and mining claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated)	61
First Southern Extension Lode and mining claim	64
The Kinsey, Beaman, Stubbs, and Triangle Lodes and mining claims	4090
The Woodmansee Lode (also known as Sunbeam Lode)	165
The West Sunbeam Lode and mining claim	3820
The Iron Spar Lode and mining claim	4015
The Elmer Ray Lode and mining claim	66

An agreement between the Operator and Empire Mines Company dated November 1, 1956, permits the Operator for a one-year period to locate drill rigs and to drill to the Sunbeam lode on three patented

mining claims (the Home Rule, Garnet, and Guardian, Patent No. 3852). No mining is permitted on these three claims, and they are not a part of the land referred to in Article 2 of the contract, except for performance of work.

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

Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Western Resources, Inc.
Docket No. DMEA- 4653
Contract No. Idm-E 1081
Contract Date 25 APR 1957

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

To the United States of America:

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

The patented lode mining claims described in a lease dated July 1, 1956, between the undersigned and Flare Mining Company, as amended (said lease having been assigned to Western Resources, Inc., with the consent of the undersigned), the descriptions of said claims, as amended, being incorporated herein by reference.

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 22nd day of May, 1957.

NEW UNITED SUNBEAM MINING COMPANY	[XXXX]	X	[Address]
By J. W. Galliwan	[XXXX]		[Address]
Title Sec	[XXXX]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]
	[Seal]		[Address]

I, J. W. GALLIVAN certify that I am the Secretary (Secretary, etc.) of the corporation named herein; that J. W. Galliwan who signed this agreement was then Secretary (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.

J. W. Galliwan

[Corporate Seal]

EXPLORATION PROJECT CONTRACT
WESTERN RESOURCES, INC.
DOCKET NO. DMEA-4653

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of lead, zinc, and copper by diamond drilling (plus necessary overburden drilling). The drill holes are roughly indicated onthe attached map (Fig. 2), referred to in Annex I, but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

The objective of the work is to investigate the ore potential of the Sunbeam vein, approximately 500 feet below the surface and below the water level and the old workings. Drill holes are expected to be approximately 600 feet in depth. Six drill holes will be required. Not more than 3,600 feet of drilling shall be performed unless the Government, in writing, approves more drilling; but in no event may the estimated total cost of all drilling set forth in this Exhibit "A" be exceeded.

All diamond drilling shall be done with AX size bits or larger. It is estimated that approximately 450 feet of each hole will be drilled with non-coring bits, to approach the calculated position of the vein; the remainder of the hole shall then be drilled with coring bits. All drill holes shall be logged, and all drill cores shall be properly labeled, stored, and made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split and one half thereof shall be properly sampled and the sample assayed for zinc, lead, copper, and silver.

Sludges corresponding to the cores, with intervals not to exceed five feet, shall be retained (if possible) when drilling in significantly mineralized ground and, in the event that core recovery does not exceed 70 per cent, both core and sludge samples shall be taken. Both core and sludge shall be split, and one half thereof properly sampled and the samples assayed for zinc, lead, copper, and silver.

The remaining half of all significantly mineralized core samples, and sludge samples where taken, shall be furnished to the Government upon request.

All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections showing the progress of the work and sample locations.

All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

Drill holes shall be reamed and cased or cemented and redrilled as necessary.

Bulldozing shall be done with a D-8 or equivalent size unit.

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 500-foot depth, non-coring bits, approximately 2,700 feet @ $6.00/ft.	$16,200.00	
Diamond drilling to 500-foot depth, coring bits, approximately 300 feet @ $8.50/ft.	2,550.00	
Diamond drilling from 500-foot to 750-foot depth, coring bits, approximately 600 feet @ $10.50/ft.	6,300.00	
Reaming and casing, 600 feet @ $4.50/ft.	2,700.00	
Cementing and redrilling, 36 hours @ $15.00/hr.	540.00	
Casing lost,[1/] 144 feet @ $2.25/ft.	324.00	
Mobilization and demobilization of drill equipment and crew	600.00	$29,214.00

The drilling rates include charges for water supply, changes of locations, and all other charges which may be incurred by the drill contractor.

Categories (2) through (7)	None	

Fixed Unit Costs (See Article 13 of the contract)

Bulldozing (drill site preparation) 48 hours @ $15.00/hr.	$ 720.00	
Incidental allowance2/ for each foot of drilling completed 3,600 feet @ $0.79/ft.	2,844.00	
Core boxes - 72 @ $1.25/each	90.00	
Assaying - 400 determinations @ $1.00/each	400.00	$ 4,054.00
Estimated Total Cost of the Project		$33,268.00
Government Participation @ 50%		$16,634.00

1/ Neither the cost nor the value of casing left in drill holes at the option of the Operator will be accepted as a charge to the contract.

2/ Includes all costs that might otherwise be allowable costs of the project under Categories (1) through (7) of Article 6(a), except as otherwise scheduled in Exhibit "A".

C O P Y.

February 12, 1957.

Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: W. M. Traver, Executive Officer, DMEA
Field Team, Region III

Re: Docket DMEA 4404 (copper-lead-zinc)
Sunbeam Mine, Juab County, Utah

Dear Sir:

Please withdraw the above numbered DMEA application heretofore made by the Flare Mining Company.

Very truly yours,

FLARE MINING COMPANY

By D. Howe Moffat
Its authorized agent.

DHM:abc

APPLICATION NOT USED.

APPLICATION BY WESTERN RESOURCES INC.

NOTE: THIS APPLICATION WAS NOT USED AND WESTERN RESOURCES ADOPTED THE ORIGINAL APPLICATION MADE BY FLARE MINING COMPANY UNDER DMEA#404

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

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 18 1

DATE	INITIALS	CO...

February 15, 1957

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 4653 (Copper-Lead-Zinc) Western Resources, Inc. (Sunbeam mine) Juab County, Utah

Enclosed is one copy of the subject application in the amount of $33,130.00, which is a revision of application Docket DMEA-4404 Flare Mining Company. We assume you will want to assign a new docket number.

In addition, there are enclosed a photo copy of a letter requesting withdrawal of Docket DMEA-4404 and a copy of an agreement dated July 7, 1956 between New Sunbeam Mining Company and Flare Mining Company and copy of assignment dated October 17, 1956 covering the transfer of New Sunbeam Mining lease with Flare Mining Company to Western Resources, Inc. Also enclosed is a copy of a letter transmitting the various items requested in our letter of January 17, 1957 to Mr. D. Howe Moffat, Agent for Flare Mining Company.

We have by memorandum, today, to E. N. Harshman and S. R. Wilson (copy enclosed) referred the application to the field for reappraisal while Frank Moore is in the area on other assignments.

DMEA Field Team, Region III

W. M. Traver

By W. M. Traver
Executive Officer

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 18 195

DATE	INITIALS	CC.

224 New Customhouse
Denver 2, Colorado

Memorandum

To: E. H. Harshman (2) w/copy of application
S. R. Wilson w/copy of application

From: DMEA Field Team, Region III

Subject: Docket DMEA_____(Copper-Lead-Zinc) Western Resources, Inc. (Sunbeam Mine) Juab County, Utah

Attached hereto is a copy of an application in the amount of $33,130.00 submitted as a revision of former application Docket DMEA-440A by the Flare Mining Company. This was submitted in response to our letter of January 17, 1957 addressed to D. Rowe Moffat of the latter company.

We had assumed the new application would be essentially the same as the previous one; however, such is not the case, and we suggest the present applicant be contacted to determine if he is interested in the former program. If not, a reappraisal will be necessary with a covering joint examination report. The Field Team sees no reason for any shaft rehabilitation or longhole drilling therefrom.

A copy of the agreement between New Sunbeam Mining Company and Flare Mining Company and assignment of transfer of the New Sunbeam Mining lease with Flare Mining Company to Western Resources, Inc. is being forwarded to the DMEA Washington Office for legal review.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures
WMT:jy
cc: Sec. Op. Comm. (2)
Docket _____
Corresp. 440A
Chron.

☑ PLEASE CALL
☐ WILL CALL AGAIN
☐ RETURNING YOUR CALL
☐ WAITING TO SEE YOU
☐ WISHES AN APPOINTMENT

Left This Message:

Received by— emf

☆ U. S. GOVERNMENT PRINTING OFFICE: 1955 O-367995 16—65931-1

MF-103
(Revised April 1952)

RECEIVED
FEB-18-1957
D.M.E.A.

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
FEB 15 1957
REGION II
DENVER, COLORADO

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. 4653
Metal or Mineral Copper, Lead, Zinc
Date Received 2/18/57
Estimated Cost $33,130.00
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address a. Western Resources, Inc., b. a corporation organized under the laws of Utah; c. James Quigley, President, Eureka, Utah; Sanford M. Stoddard, Vice-President, Salt Lake City, Utah; D. Howe Moffat, Secy-Treasurer, Salt Lake City, Utah.

(*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 a. Exploration work is to be acoomplished on the New Sunbeam Mining Co.property,consisting of 9 patented mining claims in the south section of Tintic Mining District, Juab County, Utah; b. Sunbeam Mine; c. property is controlled by lease from the New Sunbeam Mining Company, Kearns Bldg.,Salt Lake City,Utah. Copies of this Agreement are incorporated as part of this report in the Appendix.

(*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 No liens or encumbrances exist on the property.

(*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. It is anticipated that exploratory work will be completed by independent contractors who have men and equipment available for completing the described work. Water can be obtained at Silver City,a distance of 1 mile,and power from Utah Power & Light Co's 5000 Volt substation at the Dragon Mine,approx.1/2 mile from Sunbeam Mine.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore copper, lead, silver and gold ores.

(*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 [ ] 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 ....., 195...

By James Dugley
(Applicant)

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

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

5. (b) As shown on the enclosed maps and more fully described in accompanying report, work is designed to explore the Sunbeam vein at a depth of 600 ft. below the surface at a depth beyond that reached by early day operations, and to investigate possibilities of parallel veins. The Sunbeam Mine was a producer in early days - 1870 to 1890 - with a production record in excess of $500,000.00 in copper, lead, silver and gold ores. No exact records or maps are available, but past reports indicate that work was stopped shortly below the water table where a flow of 4,000 gallons per day was encountered. It is proposed to explore the Sunbeam vein at depth by diamond drilling after rehabilitating the Sunbeam Shaft, mapping and testing the vein with longhole drilling. The estimates are that this will require 490 feet of shaft rehabilitation, 1000 ft. longhole drilling, 3000 ft. diamond drilling, covering a period of 15 months.

6. (a) Independent contractors will be used for underground work and diamond drilling.

(b) Wage Scale: Standard S.W.A. labor contract in Tintic District:

Supervision	$550.00 per month
Consultants	$500.00 per month

(c)

Timber	@	$100.00 per M.B.F.
2" pipe	@	.45
½" pipe	@	.20

(d) & (e) Estimated costs - Rehabilitation of the Shaft:

490 ft. shaft $13,230.00

Breakdown: - 10 ft. Advance per shirt -

Labor

2 - Miners	@	$20.00	$40.00/shift	
1 - Hoistman	@,	17.25	17.25	
1 - Supervisor	@	22.00	22.00	
			79.25	
10% fringe - 10% overtime			15.95	
			95.20	
$95.20 - 10 ft. av. daily advance				10.00

Supplies

100 BF Lagging - Stulls & ladder @ 100.00/M.B.F.	10.00	
Pipe, bell line, etc.	1.00	
Repair parts	.30	11.30

Equipment			
Hoist	$50.00 per mo.		
Compressor	400.00 per mo.		
Machines	50.00 per mo.		
Pickup	100.00 per mo.		
	600.00 per mo. ÷ 250		2.40
Misc. Tools			
Saws, axes, hoses, powder, drill steel		$500.00	1.00
Fuel			
250 gal. Diesel per mo.	@ .16	40.00	
25 qts. lil	@ .40	10.00	
Filters, grease, etc. per mo.		25.00	
		75.00	
	$75.00 ÷ 250		.30
Contingencies			2.00
			27.00

Total 490' x $27.00 = $13,230.00

Longhole Drilling - Contemporaneous with shaft rehabilitation on upper levels.

- -

1000 ft. @ $1.00		$1,000.00	
Air line & water per ft. of hole	@.50	500.00	
Hauling water per ft.	@.25	250.00	
Contingencies		250.00	$ 2,000.00
Diamond Drilling			
2500 ft. @ $6.00			14,400.00
Contractor's Fee			2,500.00
Engineering Fee			1,000.00

Summary of Costs:

Rehabilitation	13,230.00
Longhole Drilling	2,000.00
Diamond Drilling	14,400.00
Engineering Fee	1,000.00
Contractor's Fee	2,500.00
Total Costs	$33,130.00

AGREEMENT &
ASSIGNMENT

A G R E E M E N T

THIS AGREEMENT, made and entered into this 1st day of July, 1956, by and between NEW UNITED SUNBEAM MINING COMPANY, hereinafter referred to as "Sunbeam", a Utah corporation with its principal place of business at Salt Lake City, Utah, and FLARE MINING COMPANY, hereinafter referred to as "Flare", a limited partnership, with its principal place of business at Anaheim, California.

WHEREAS, Sunbeam is the owner of certain patented mining claims located in the Eureka Mining District in Juab County, Utah, more particularly hereinafter described, and Sunbeam is desirous of leasing said mining claims to Flare under the terms and conditions more particularly hereinafter set forth, and

WHEREAS, Flare is desirous of taking possession of said mining claims, performing the work all as more particularly described hereinafter.

Witnesseth:

NOW, THEREFORE, for and in consideration of the mutual promises and covenants hereinafter contained it is agreed by and between the parties hereto as follows:

1. That from date hereof for a period of 120 days Flare shall be entitled to the possession of the mining claims hereinafter described and during said time shall be entitled to explore said property, which shall include the right to go upon all of the same, including any of the workings now existing thereon, including shafts, tunnels and any and all other development work; perform rehabilitation of old workings, prepare maps, have samples assayed. Sunbeam shall be supplied with copies of any maps so prepared and copies of all assays made of any samples taken of said workings. During this period Flare shall be entitled to mine and ship any ore discovered in out-croppings and pay to

Sunbeam the royalties provided for in the terms and conditions of the lease, hereinafter set forth.

2. During the 120 day period provided in paragraph 1 hereof Sunbeam shall have the right to at all times go upon said claims and inspect the same.

3. During said period of 120 days all work performed by Flare shall be in compliance with all of the laws of the State of Utah and the United States of America and particularly those with regard to the mining laws, workmen's compensation laws and the social security laws; and will at all times keep said property free and clear of any liens of mechanics or material men.

Paid notes

4. Flare may at any time within 120 days from date hereof by written notice delivered to Sunbeam at its office in the Kearns Building at Salt Lake City, Utah, acquire the rights under and pursuant to the lease hereinafter set forth.

5. The terms and conditions of said lease shall be as follows:

A. That Sunbeam lets and leases to Flare the following described patented lode mining claims, to-wit:

Juab Lawrence Lode and mining claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

First Southern Extension Lode and mining claim, Lot # 64.

The Kinsey, Beaman, Stubbs and Triangle Lodes and mining claims, Lot No. 4090.

The Woodmansee Lode, (also known as Sunbeam Lode), Lot No. 165.

The West Sunbeam Lode and Mininc claim, Lot No. 3820.

The Iron Spar Lode and mining claim, Lot No. 4015.

The West Elmer Ray Lode and mining claim, Lot No. 66.

B. The term of said lease shall be for a period of one (1) year from date of exercise of the option hereinbefore set forth and for additional periods of one (1) year until a total of seven (7) years shall have lapsed; provided that Flare performs the work upon the demised claims and otherwise fully and completely complies with the obligations imposed upon Flare as more

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particularly hereinafter set forth.

C. Within one (1) year of the exercise of the option hereinbefore referred to and annually thereafter for said seven (7) year period Flare will expend by way of exploration and development upon said demised claims an amount not less than Ten Thousand Dollars ($10,000.00) each year; provided, however, that if during said period merchantable ore is discovered, then the actual mining expense of said ore shall apply against said minimum work requirement.

D. Flare will pay to Sunbeam by way of royalty:

Ore sold at $20.00 a ton or less -- royalty shall be 10%

Ore sold at more than $20 a ton, but less than $35 -- royalty shall be 15%

Ore sold at more than $35 per ton, but less than $50 there shall be paid a royalty of 20%, and

All ore sold for more than $50 per ton shall pay the Sunbeam a royalty of 25%.

The values of the ore shall be determined at the point of sale, from which shall be deducted the transportation expense from the mine to point of sale for the purpose of determining the value for the royalty purposes herein set forth.

E. All ore shipped by the Lessee shall be shipped in the name of the Lessor. All checks and payments for ore, together with settlement sheets shall be delivered by the smelter to the Lessor. The Lessor, after deducting its royalties and such other sums as it may have expended for or in behalf of the Lessee pursuant to the terms hereof, shall remit the balance to the Lessee.

F. Flare will pay all taxes upon all personal property located upon the demised premises during the term of this lease. Mine occupation tax or any tax imposed in lieu thereof or in addition to said tax which shall be measured by the production from said mine shall be paid by the parties hereto as

their respective interests may appear. Real property taxes will be paid by the Lessor.

G. Flare agrees to hold Sunbeam harmless from all liens, claims and demands and liabilities of every nature whatsoever which might arise out of its operations upon the demised premises.

H. It is agreed between the parties hereto that Flare may apply to the United States Government for a DMEA loan to assist in defraying the exploration costs upon said property, and it is agreed that said application will be submitted to Sunbeam for its approval and Sunbeam does not by this lease agreement agree to approve or enter into any DMEA loan agreement or arrangement.

I. Flare agrees annually to submit a written report of expenditures made under and pursuant to this lease agreement and should Flare in any year fail to make the expenditures herein provided for or after the discovery of ore, mine the same with due diligence or fail or refuse to make any of the reports herein provided for to said Sunbeam or in any other way violate any of the terms and conditions of this lease then and in that event this lease shall immediately terminate.

J. Flare shall have sixty (60) days after the termination of this lease, whether by default or otherwise, in which to remove all machinery, equipment and other personal property located upon the demised premises.

K. Flare shall at any time, while this lease is in good standing terminate the same upon giving thirty (30) days written notice to Sunbeam of its intention to so relinquish this lease.

L. Flare is hereby given an option to acquire shares of stock in the Lessor to the extent of forty per cent (40%) of

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY, UTAH

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FEB 1

the issued and outstanding shares to be exercised as follows:

(1) If a merchantable ore body shall have been discovered upon the demised premises.

(2) To be exercised while the lease is in good standing and the Lessee shall have performed all of the terms and conditions imposed upon it.

(3) By paying to the Lessor the sum of Two Hundred Fifty Thousand Dollars ($250,000.00).

IN WITNESS WHEREOF, Flare Mining Company, a partnership, has caused these presents to be executed by its general partner, Arnold Feuerstein and New United Sunbeam Mining Company has caused these presents to be executed by its officers thereunto duly authorized on the day and year first hereinbefore written.

FLARE MINING COMPANY, a partnership

By Arnold D. Feuerstein
Arnold Feuerstein

NEW UNITED SUNBEAM MINING COMPANY
A Utah corporation

By [illegible]
Vice Pres.

ATTEST:
[illegible]

STATE OF California)
: SS
COUNTY OF Los Angeles)

On the 2nd day of July, 1956, personally appeared before me Arnold Feuerstein, who being by me duly sworn did say that he is a general partner of FLARE MINING COMPANY, a partnership, and that the within and foregoing instrument was signed in behalf of said Company, and acknowledged to me that said Company executed the same.

Helen Callahan
Notary Public
Residing at Riverside, Calif

My commission expires:
My Commission Expires August 2, 1957

STATE OF Utah)
: SS
COUNTY OF Salt Lake)

On the 12th day of July, 1956, personally appeared before me Thomas F Kearns Jr and J. W. Galliven who being by me duly sworn did say, each for himself, that he, the said Thomas F Kearns Jr is the President, and he, the said J. W. Galliven is the Secretary of NEW UNITED SUNBEAM MINING COMPANY, a Utah corporation, and that the within and foregoing instrument was signed in behalf of said corporation by authority of a resolution of its board of directors and the said Thomas F. Kearns Jr and J. W. Galliven each duly acknowledged to me that said corporation executed the same and that the seal affixed is the seal of said corporation.

Notary Public
Residing at Salt Lake City, Utah

My commission expires:
11-21-56

KLEEWELL
FEB 13 1951
D.M.E.P.

ASSIGNMENT

For and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, FLARE MINING COMPANY, a co-partnership, does hereby sell, assign and transfer to WESTERN RESOURCES, INC., a Utah corporation, all of its right, title and interest in and to said agreement dated the 1st day of July, 1956, between NEW UNITED SUNBEAM COMPANY, a Utah corporation, and FLARE MINING COMPANY, a co-partnership, giving and granting unto said WESTERN RESOURCES, INC., all of the rights, privileges and benefits which accrued to FLARE MINING COMPANY by, under and pursuant to said agreement hereinbefore referred to.

Dated this 17th day of October, 1956.

FLARE MINING COMPANY

By Arnold F. Feuerstein
Arnold Feuerstein, Partner

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On this 17th day of October, 1956, personally appeared before me ARNOLD FEUERSTEIN, the signer of the within and foregoing instrument, who duly acknowledged to me that he executed the same.

Helen Callahan
Notary Public
Residing at: 8804 Duke Ave
Rivera Calif

My commission expires:

My Commission Expires August 2, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE

SALT LAKE CITY, UTAH
October 1, 1953

Flare Mining Company
801 Continental Bank Building
Salt Lake City, Utah

Gentlemen:

We are advised by your attorney, D. Howe Moffat, of your desire to gain a leasehold on the Silver Moon lode mining claim, Survey No. 2953, which embraces 1.358 acres and is owned by Tintic Mining & Milling Company, and adjoins claims presently under lease to Flare by New United Sunbeam Mining Company. Mr. Moffat explains that the project you have defined in application for a DMEA loan includes exploration of the Silver Moon claim and that the DMEA inspection team has requested you take steps to legally include that claim in your proposed project.

Tintic Mining & Milling Company, in which title to the Silver Moon claim is vested, lost its Utah charter in 1910 for non-payment of franchise tax. No directors of the company are known to survive, who might, as trustees, lease you this property.

New United Sunbeam Mining Company owns 508,371 shares of Tintic Mining & Milling Company. This obviously would constitute control, since 700,000 shares was the number authorized that corporation. The number of outstanding shares, however, is not known. Kearns-Tribune Corporation, which in turn controls United Sunbeam Mining and Milling Company has paid property taxes on the Silver Moon in behalf of Tintic for the past many years so there exists no problem in that regard.

Since so small a piece of ground is involved in the Silver Moon Claim, since reorganization of Tintic Mining and Milling Company, through receivership proceedings would be costly as to time and money, and since New United Sunbeam Mining Company has control of Tintic Mining and Milling Company by virtue of its ownership of the majority of authorized stock, we suggest adoption of the attached resolution by the Board of Directors of New United Sunbeam as a practical solution.

If the procedure directed by the resolution is an acceptable solution for Flare and DMEA, please advise us and we shall take immediate steps to effect adoption of the resolution.

Sincerely yours,
NEW UNITED SUNBEAM MINING COMPANY

By W. Galliver
Secretary

WHEREAS, Flare Mining Company has made application for a D.M.E.A. loan to aid in the financing of an exploration project on claims it has leased from New United Sunbeam Mining Company, and

WHEREAS Flare and D.M.E.A. have indicated the desirability of including the Silver Moon Claim, Survey No. 2953, in the project and consequently in the leaseholdings of Flare, and

WHEREAS the Silver Moon claim is the property of Tintic Mining and Milling Company, a defunct Utah corporation, the majority of whose outstanding stock is owned by New United Sunbeam, and

WHEREAS the Silver Moon claim consists of only 1.358 acres which would not normally appear to warrant the cost of reorganization of its proprietor into a functional legal entity, and

WHEREAS no directors of Tintic Mining and Milling Company, who might as trustees lease the Silver Moon claim, are known to survive, and

WHEREAS New United Sunbeam wishes to cooperate with Flare and DMEA in this matter,

NOW, THEREFOR, BE IT RESOLVED, that if it should appear from exploration work carried on by Flare that said Silver Moon Claim probably contains veins containing ore of merchantable value, New United Sunbeam Mining Company will, upon such determination, forthwith vote its controlling stock interest in Tintic Mining and Milling Company to take the necessary steps through receivership or other legal proceedings to reorganize that company into a legally functional entity; and, thereafter, to cause such entity to lease its Silver Moon lode mining claim to Flare Mining Company on terms and conditions compatible with the existing lease agreement between New United Sunbeam Mining Company.

U. S. Government Messenger Envelope

Standard Form No. 65 (Rev. 1/46)

1. Use blocks consecuti
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADD
~~Mr. H. Ray Lee~~ ~~Rm 4137~~	RUN STOP	Defense Minerals Exploration Ad
Mr. Mahony Realty	RUN STOP	
	RUN STOP	
~~Wilkinson~~ ~~3076~~	RUN STOP	
~~[illegible]~~	RUN STOP	
~~Payroll Section~~ ~~Rm. 5313~~	RUN STOP	
Mr Tellis Personnel	RUN STOP	
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Send surplus envelopes to supply room for reissue.

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Use RUN and STOP only when messenger service between Government buildings in Washington is requir
Your mail room has RUN and STOP information.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
AUG - 2 1956

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. 4404
Metal or Mineral Copper-Lead-Zinc
Date Received 8-2-56
Estimated Cost $34,602.50
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: FLARE MINING COMPANY - - - a Partnership
801 Continental Bank Building
Salt Lake City, Utah

(*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 all of the property of the New Sunbeam Mining Company, Tintic Mining District, Juab County, Utah, consists of eight patented mining claims shown on accompanying map and described in accompanying report.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Held by lease, copy of which is attached from the New Sunbeam Mining Company.

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

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

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

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 it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each ether 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 nts. (a-d) Described in report by Centennial Development Co., Eureka, Utah

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

Work will be carried out by independent contractors.

16—66551-1

FLARE APPLIC.

5. *The exploration project.*—(a) State the mineral or minerals for which you wish to explore Copper, lead, zinc, gold and silver

(*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. 3,600 ft. of diamond drilling as shown on accompanying map in report.

(*c*) The work will start within 2 weeks notice days and be completed within 4 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)? Yes.

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated July 27, 1956

Flora Mining Co
(Applicant)

By O. Hawk McIlhat
agent

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

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

FLARE MINING COMPANY

NAMES AND ADDRESSES OF PARTNERS

RECEIVED

General Partners

Arnold Feuerstein	1220 North Palm Anaheim, California
James M. Feuerstein	1220 North Palm Anaheim, California

Limited Partners

Eli Reinhard	1220 North Palm Anaheim, California
Edith Reinhard	1220 North Palm Anaheim, California
Isador Reinhard	1220 North Palm Anaheim, California

AGREEMENT

THIS AGREEMENT, made and entered into this 1st day of July, 1956, by and between NEW UNITED SUNBEAM MINING COMPANY, hereinafter referred to as "Sunbeam", a Utah corporation with its principal place of business at Salt Lake City, Utah, and FLARE MINING COMPANY, hereinafter referred to as "Flare", a limited partnership, with its principal place of business at Anahiem, California.

WHEREAS, Sunbeam is the owner of certain patented mining claims located in the Eureka Mining District in Juab County, Utah, more particularly hereinafter described, and Sunbeam is desirous of leasing said mining claims to Flare under the terms and conditions more particularly hereinafter set forth, and

WHEREAS, Flare is desirous of taking possession of said mining claims, performing the work all as more particularly described hereinafter.

Witnesseth:

NOW, THEREFORE, for and in consideration of the mutual promises and covenants hereinafter contained it is agreed by and between the parties hereto as follows:

1. That from date hereof for a period of 120 days Flare shall be entitled to the possession of the mining claims hereinafter described and during said time shall be entitled to explore said property, which shall include the right to go upon all of the same, including any of the workings now existing thereon, including shafts, tunnels and any and all other developemtn work; perform rehabilitation of old workings, prepare maps, have samples assayed. Sunbeam shall be supplied with copies of any maps so prepared and copies of all assays made of any samples taken of said workings. During this period Flare shall be entitled to mine and ship any ore discovered in out-croppings and pay to

Sunbeam the royalties provided for in the terms and conditions of the lease, hereinafter set forth.

2. During the 120 day period provided in paragraph 1 hereof Sunbeam shall have the right to at all times go upon said claims and inspect the same.

3. During said period of 120 days all work performed by Flare shall be in compliance with all of the laws of the State of Utah and the United States of America and particularly those with regard to the mining laws, workmen's compensation laws and the social security laws; and will at all times keep said property free and clear of any liens of mechanics or materialmen.

4. Flare may at any time within 120 days from date hereof by written notice delivered to Sunbeam at its office in the Kearns Building at Salt Lake City, Utah, acquire the rights under and pursuant to the lease hereinafter set forth.

5. The terms and conditions of said lease shall be as follows:

A. That Sunbeam lets and leases to Flare the following described patented lode mining claims, to-wit:

Juab Lawrence Lode and mining claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

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The Woodmansee Lode, (also known as Sunbeam Lode), Lot no. 165.

The West Sunbeam Lode and Mining claim, Lot No. 3820.

The Iron Spar Lode and mining claim, Lot no. 4015.

The West Elmer Ray Lode and mining claim, Lot No. 66.

B. The term of said lease shall be for a period of one (1) year from date of exercise of the option hereinbefore set forth and for additional periods of one (1) year until a total of seven (7) years shall have lapsed; provided that Flare performs the work upon the demised claims and otherwise fully and completely complies with the obligations imposed upon Flare as more

particularly hereinafter set forth.

C. Within one (1) year of the exercise of the option hereinbefore referred to and annually thereafter for said seven (7) year period Flare will expend by way of exploration and development upon said demised claims an amount not less than Ten Thousand Dollars ($10,000.00) each year; provided, however, that if during said period merchantable ore is discovered, then the actual mining expense of said ore shall apply against said minimum work requirement.

D. Flare will pay to Sunbeam by way of royalty:

Ore sold at $20.00 a ton or less -- Royalty shall be 10%

Ore sold at more than $20 a ton, but less than $35 -- royalty shall be 15%

Ore sold at more than $35 per ton, but less than $50 there shall be paid a royalty of 20%, and

All ore sold for more than $50 per ton shall pay the Sunbeam a royalty of 25%.

The values of the ore shall be determined at the point of sale, from which shall be deducted the transportation expense from the mine to point of sale for the purpose of determining the value for the royalty purposes herein set forth.

E. All ore shipped by the Lessee shall be shipped in the name of the Lessor. All checks and payments for ore, together with settlement sheets shall be delivered by the smelter to the Lessor. The Lessor, after deducting its royalties and such other sums as it may have expended for or in behalf of the Lessee pursuant to the terms hereof, shall remit the balance to the Lessee.

F. Flare will pay all taxes upon all personal property located upon the demised premises during the term of this lease. Mine occupation tax or any tax imposed in lieu thereof or in addition to said tax which shall be measured by the production from said mine shall be paid by the parties hereto as

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY, UTAH

their respective interests may appear. Real property taxes will be paid by the Lessor.

G. Flare agrees to hold Sunbeam harmless from all liens, claims and demands and liabilities of every nature whatsoever which might arise out of its operations upon the demised premises.

H. It is agreed between the parties hereto that Flare may apply to the United States Government for a DMEA loan to assist in defraying the exploration costs upon said property, and it is agreed that said application will be submitted to Sunbeam for its approval and Sunbeam does not by this lease agreement agree to approve or enter into any DMEA loan agreement or arrangement.

I. Flare agrees annually to submit a written report of expenditures made under and pursuant to this lease agreement and should Flare in any year fail to make the expenditures herein provided for or after the discovery of ore, mine the same with due diligence or fail or refuse to make any of the reports herein provided for to said Sunbeam or in any other way violate any of the terms and conditions of this lease then and in that event this lease shall immediately terminate.

J. Flare shall have sixty (60) days after the termination of this lease, whether by default or otherwise, in which to remove all machinery, equipment and other personal property located upon the demised premises.

K. Flare shall at any time, while this lease is in good standing terminate the same upon giving thirty (30) days written notice to Sunbeam of its intention to so relinquish this lease.

L. Flare is hereby given an option to acquire shares of stock in the Lessor to the extent of forty per cent (40%) of

the issued and outstanding shares to be exercised as follows:

(1) If a merchantable ore body shall have been discovered upon the demised premises.

(2) To be exercised while the lease is in good standing and the Lessee shall have performed all of the terms and conditions imposed upon it.

(3) By paying to the Lessor the sum of Two Hundred Fifty Thousand Dollars ($250,000.00).

IN WITNESS WHEREOF, Flare Mining Company, a partnership has caused these presents to be executed by its general partner, Arnold Feuerstein and New United Sunbeam Mining Company has caused these presents to be executed by its officers thereunto duly authorized on the day and year first hereinbefore written

FLARE MINING COMPANY, a partnership

By /s/ Arnold D. Feuerstein
Arnold Feuerstein

NEW UNITED SUNBEAM MINING COMPANY
a Utah corporation

By _____
Vice President

ATTEST:

/s/ J. W. Gallivan

(Seal Affixed)

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY, UTAH

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On the 2nd day of July, 1956, personally appeared before me Arnold Feuerstein, who being by me duly sworn did say that he is a general partner of FLARE MINING COMPANY, a partnership, and that the within and foregoing instrument was signed in behalf of said Company, and acknowledged to me that said Company executed the same.

/s/ Helen Calahan
Notary Public
Residing at Rivera, Calif.

My commission expires:
August 2, 1957.

STATE OF UTAH)
: SS
COUNTY OF SALT LAEK)

On the 12th day of July, 1956, personally appeared before me Thomas F. Kearns Jr., and J. W. Gallivan who being by me duly sworn did say, each for himself, that he, the said Thomas F. Kearns, Jr., is the President, and he, the said J. W. Gallivan is the Secretary of NEW UNITED SUNBEAM MINING COMPANY, a Utah corporation, and that the within and foregoing instrument was signed in behalf of said corporation by authority of a resolution of its board of directors and the said Thomas F. Kearns, Jr., and J. W. Gallivan each duly acknowledged to me that said corporation executed the same and that the seal affixed is the seal of said corporation.

/s/ P. J. Hession
Notary Public
Residing at Salt Lake City, Ut.

My commission expires:
11-21-56

the approvals reached by Overseas Navigation Corporation and the ministration, permission will be granted for the transfer to foreign ry of four war-built Liberty ships in consideration of the placement of the contract.

The transferred ships are to be kept under effective American control and to be made available to the United States in case of war or emergency. The transferred ships are prohibited from trading with Iron Curtain countries or from engaging in trades otherwise denied to American flag ships.

COPY

July 12, 1956

Flare Mining Company
Anahiem, California

RECEIVED
JUL 1956

Gentlemen:

The undersigned has this day executed and delivered to Mr. D. Howe Moffat, your attorney, that certain agreement dated July 1, 1956, whereunder you are given an option to lease from the undersigned its mining claims as therein described, which provides an option to you to acquire shares of stock of the under signed to the extent of 40% of its issued and outstanding shares for $250,000, with the understanding that the undersigned will not be bound under the provisions for said option unless and until its articles of incorporation are amended to give its board of directors authority to sell or otherwise dispose of its treasury or unissued capital stock, in such amounts, to such persons or corporations for such consideration as it deems fit, without offering the same to its stockholders, and the undersigned and Kearns-Tribune Corporation who owns a majority of the outstanding stock of the undersigned, by signing this letter, agree to proceed diligently to effect such amendment. It is also understood that if at the time of the exercise of said option there may not be available treasury or unissued stock of this corporation in excess of 33-1/3% of its issued and outstanding shares, to the extent that the undersigned will have available under said option at least 33-1/3% but less than 40% of its issued and outstanding shares, said option shall be limited to the amount of shares so available and the option purchase price reduced in proportion to the amount of shares less than 40%, so available.

It is also understood that that portion of paragraph 5-D of said agreement referring to royalty is amended to read as follows:

"d. Flare will pay to Sunbeam by way of royalty:

Ore sold at $20.00 a ton or less -- royalty shall be 10%

Ore sold at more than $20 a ton, but not more than $35 -- royalty shall be 15%

Ore sold at more than $35 a ton, but not more than $50 -- royalty shall be 20%, and

All ore sold for more than $50 per ton -- royalty shall be 25%."

Flare Mining Company July 12, 1956

It is also understood that said agreement may not be assigned or the lease therein assigned or sublet without the written consent of the undersigned.

NEW UNITED SUNBEAM MINING COMPANY

By /s/ J. W. Galliven, Secy.

The undersigned hereby agrees to vote its stock at a stockholders meeting of New United Sunbeam Mining Company to amend its articles of incorporation as above set forth.

KEARNS-TRIBUNE CORPORATION

By /s/ J. F. Fitzpatrick
President

The undersigned hereby accepts and approves the above reservations and conditions with respect to said agreement of July 1, 1956.

FLARE MINING COMPANY

By /s/ D. Howe Moffat

COPY

SPRAGUE & HEMWOOD, INC.
Contractors for
DIAMOND DRILLING

P.O. Box 645
Grand Junction, Colo.

June 18, 1956

Centennial Development Co.
Eureka
Utah

Attn: Mr. James Quigley

Gentlemen:

In accordance with our conversations we herewith submit our proposal for exploratory drilling at the Sunbeam Mine near Silver City, Utah.

PROPOSAL:

Non-Core Drilling
Item 1. (a) From 0 to 500 ft. . . . . $6.00 per ft.
(b) From 500 to 750 ft. . . . . 8.00 per ft.

Core Drilling
Item 2. (a) From 0 to 500 ft. . . . . 8.50 per ft.
(b) From 500 to 750 ft. . . . . 10.50 per ft.
(c) From 750 to 1000 ft. . . . . 13.00 per ft.

Reaming and Setting Casing
Item 3 . . . . . 4.50 per ft.

Cementing and drilling out cement
Item 4. . . . . 15.00 per hr.

Casing
Item 5. Any casing lost in holes will be charged to the customer at the following prices:
NX . . . . . $ 3.00 per ft.
BX . . . . . 2.25 per ft.
AX . . . . . 1.75 per ft.

Transportation of crew and equipment
Item 6. Lump sum $600.00

This proposal is subject to the following conditions:

1. Any cement used will be charged to the customer at cost.

2. This proposal covers drilling in igneous formations and does NOT include any drilling in limestone formations. Any drilling required in limestone formation would be subject to a negotiated agreement made to cover drilling in limestone formation.

3. In the event that quartz veins or stringers are encountered in non-core portion of the hole, then the price schedule of Item 2 for core drilling will apply for drilling through quartz.

4. All drill hole locations and access roads to drill sites will be constructed and maintained to accommodate Sprague & Henwood, Inc. truck mounted drills and water trucks. Any bulldozer work required for preparation of sites and roads will be furnished by the customer at no cost to Sprague & Henwood, Inc.

5. Cores will be delivered at drill hole locations, and storage and preservation of cores will be the responsibility of the customer.

6. The minimum size core is to be AX (1 1/8") unless otherwise agreed to by the customer. Holes are to be started NX size and reduced to BX size and AX size as required by drilling conditions as determined by the contractor. The contractor also reserves the right to determine when reaming or cementing is required.

We thank you for the opportunity of submitting this proposal and hope to be favored with your order.

Very truly yours,

SPRAGUE & HENWOOD, INC.

/s/ R. R. Carver
R. R. Carver
Western Manager

RRC:jmt

CC: Scranton
File

6.

(a) Sprague & Henwood's firm price bid is lowest in district for many years. Most drilling has been on daily rental plus footage fee. Estimating on average hole on S. & H. prices.

600 ft. hole

450 ft. non core	@ 6.00	2,700.00
50 ft. core	@ 8.50	425.00
100 ft. core	@10.50	1,050.00
Estimate casing 100 ft. @ 4.50		450.00
Estimate Cementing time 6 hrs. @ 15.00		90.00
Estimate casing bars 25 Ft. @ 2.25		56.25
Proportion of mobilization charge		100.00
		4,871.25

Job Estimate	
6 holes @ 4,871.25	29,227.50
(b) Supervision and Engineering - part time	
550.00 per mo. including fringe	
550.00 X 4 mo.	2,200.00
Core boxes and core storage	
900 ft. @ .10 per ft. for boxes	90.00
Sample sacks 300 @ .25	75.00
Labor bucking samples	
5 days @ 20.00 including fringe	100.00
Assaying - 20 per hole	
Average cost of 3.25 per sample	
20 X 6 X 3.25	390.00
Freight on samples	20.00
(c) Drill site preparation @ 200.00 per hole	1,200.00
(d) Pick-up truck rental @ 100.00 per mo.	400.00
Instrument rental @ 25.00 per mo.	100.00
Expenses, gas, oil and minor repairs	
@ 50.00 per mo.	200.00
(e) None	
(f) None	
(g) None	
(h) Estimated contingencies	600.00
	34,602.50

CENTENNIAL DEVELOPMENT COMPANY

June 18, 1956

D. H. Moffat
Flare Mining Company
Continental Bank Building
Salt Lake City, Utah

Dear Mr. Moffat:

Enclosed please find a report covering our examination and exploration proposal on your lease on the property of the New Sunbeam Mining Company in the Tintic District, Juab County, Utah.

Very truly yours,

Centennial Development Co.

James Quigley

James Quigley

SUNBEAM EXPLORATION PROJECT
TINTIC MINING DISTRICT
JUAB COUNTY, UTAH

SUMMARY

The Sunbeam vein occurs in an intrusive monzonite porphyry stock lying to the south of the limestone replacement orebodies of Tintic. The New Sunbeam Mining Company property covers about 3,000 feet along the strike of this vein, which has been worked along the length of the property through several shafts. Some of the workings extended below the water level at approximately 425 feet. The Sunbeam claim is the earliest recorded location in the Tintic District. The property has produced substantial amounts of gold, silver, copper and lead. Records are incomplete, but ores from the Sunbeam claim alone had a gross value of over $500,000.00 before 1894.

The purpose of the project is to test the favorable structure on the Sunbeam vein below the water level by diamond drilling to establish a tonnage to warrant reopening the Sunbeam Shaft. Six drill holes, averaging 600 feet deep and inclined to the vein below the water table will test the structure adequately.

LOCATION AND PROPERTY

The Sunbeam Mine is the property of the New Sunbeam Mining Company and includes the following patented lode mining claims, covering a total of 127 acres.

Sunbeam

Triangle

Sunbeam & 1st Southern Extension - Sunbeam

Silver Moon

First Southern Extension Sunbeam

Elmer Ray

West Sunbeam

Iron Spar

These claims lie in Sec. 31, R3W, T11S in the southern part of the Tintic Mining District, Juab County, Utah. The mine is connected to Silver City, 2 miles to the west on U.S. Highway 50-6 by a good gravel road. Silver City is 4 miles south of Eureka, a town of about 1,000, and a supply center for a wide area. The Sunbeam lies one-half mile southwest of the Dragon Mine, immediately west of the Undine and one mile south of the Mammoth Mine.

HISTORY

The Sunbeam vein on the property has been worked on through four major shafts ranging up to 650 feet in depth and through many smaller pits, incline shafts and open stopes. Records are very sketchy since most of the work was carried on shortly after the original discovery in 1870 until the early '80's. The notes and assay records attached as an appendix give all of the information on record. The Sunbeam was re-opened in 1934 by P. J. Fennell and Sons, local merchants, and was closed down after a short time. No records other than word of mouth are available. One story holds that there is eight feet of "low grade" ore with "high zinc" on the 350 level. Other stories tell of narrow high copper streaks. These type of stories are common about mines that have closed down. However, it is apparent that the production has been substantial, but that most of the ores mined were high grade and small. The Sunbeam shaft is probably 490 feet deep with the water at 425 feet.

GENERAL GEOLOGY

The geology of the Tintic District has been described by Tower & Smith in the 19th

annual report of the U.S.G.S., 1897-98; by Lindgren and Loughlin in the U.S.G.S. professional Paper (107) 1919; and by many others.

The district covers a range of mountains rising to 8,000 ft. elevation between Goshen Valley on the east and Tintic Valley on the west. The principal structural feature is a syncline of sediments ranging from Pre-Cambrian quartzites through Paleozoic limestones and shales which has been intruded by two large monzonite porphyry stocks and many smaller plugs. A thick series of Tertiary flows mask the range to the east and south.

The syncline has been broken by northeast trending tear faults and much minor fissuring and breaking. The ore masses seem to be related to fissuring and small faults subsidiary to these tears.

ORE DEPOSITS

Over $400,000,000.00 in gold, silver, copper, lead and zinc ores have been mined in Tintic from two types of orebodies. The principal production has came from irregular shaped limestone replacement bodies in the form of vertical pipes and chimneys, flat mantos and gently plunging pipes. A portion of the ores has been won from fissure veins in the igneous rocks. This vein production has come entirely from the older part of the district centering between Silver City and Diamond in the southern part of the range.

The limestone replacement bodies of Tintic have been adequately described in Professional Paper 107. Because the fissure veins in the igneous rocks were largely worked out by the 1890's, very little is known of occurrence of these ores. The mineralization varied from silver-lead, silver-lead-zinc, to gold-silver-copper and gold-silver-copper-lead. All the veins carried abundant pyrite.

The Swansea vein, which has the largest recorded production of the fissure veins, was worked to the 900 ft. level and abandoned when the pumps failed in about 1910. Approximately $800,000.00 in dividends was paid from high grade lead shoots in a pyrite vein. The vein

continues downward, but nothing is known of its nature. Most of the work was confined to the vein with little cross-cutting. The outcrop and the surface stopes are not conspicuous, although continuous ore was mined underneath them.

GEOLOGY OF SUNBEAM

The Sunbeam is the next largest deposit in igneous rock, and has been worked over a length of 3,000 ft. and to a maximum depth of 700 ft. in the El Ray Shaft. The ores were narrow gold-silver-copper-lead streaks enriched in silver and copper at the water level which stood at about 425 ft. in the central part of the property. Most of the work was in the vein with very little cross-cutting. The water level varies along the length of the vein, and the southernmost shaft, the El Ray, was apparently the deepest and the driest.

In the south, the vein is up to 5 ft. wide on the surface striking N 60 E, and dipping 70-80 degrees to the west. At the Sunbeam Shaft the vein swings northerly for 200 ft. turning northeasterly again at the northern end of the workings, where a large mass of quartz fills the fissure at the surface. This change in strike appears to have localized the best ores since the stopes on surface appear widest south of this swing. The deep El Ray Shaft lies well to the south of this area, and one drift on the 600 level appears to be well to the south of the downward projection of the good surface ore deposits.

The enclosed surface map shows this change in strike. No maps of the underground workings are known so any changes in strike and dip in the stoped portions of the vein cannot be projected. This abrupt change in strike north of the Sunbeam Shaft is of particular interest since it bears close resemblance to the cymoid loops discussed by McKinstry in his "Mining Geology". Chauncey Thornburg has described the position of cymoid loops in the vein structures at Pachuca in volume 40, pages 283-297 of Economic Geology.

The quartz outcrop at the surface north of the point where the vein swings northeasterly again is loose and vuggy. Some good ore has been mined from underneath this outcrop. It is

impossible to determine how much, since several stopes, tightly packed with gobs, have been encountered in an open cut on the south side of this quartz.

In a like manner, the vein south of the cymoid loop seems to have been almost continuously mined. The most favorable ground for replacement at depth would appear to be that portion of the vein structure immediately north of the cymoid loop and immediately south. The loop itself deserves some attention, since shearing and multiple veins crossing from one strand to another might offer a structure receptive to broad mineralization to make mill grade ore at depth.

Although there is no indication of direction of movement on the Sunbeam fissure on the surface, the U.S.G.S district office believes that the movement on similar fissures in the area is southward, on the west side, and northward on the east. Some of these displacements might be as much as 200 ft. This direction of movement would tend to open the cymoid loop area, and perhaps provide a favorable host structure for mineralization over a broad zone.

OTHER INFORMATION

The local office of the U.S.G.S. headed by Hal T. Morris, is familiar with the Sunbeam area and is interested in a test of the mineralization below the water table. Lindgren & Loughlin in Professional Paper 107 page 257 repeat the general information given by Tower & Smith and state, "such a vein would seem to have possibilities in depth, but a very heavy flow of water, encountered at 490 feet stopped operations." In private conversation, Martin Fennell, son of P. J. Fennell who opened the mine in 1934, stated that there was an 8 ft. face of ore on the 350 level which could not be shipped because of the high zinc content. ?

Notes, assays and miscellaneous papers representing all of the files of the New Sunbeam Mining Company and of the Old United Sunbeam Mining & Milling Company, have been summarized and are attached to this report as an appendix.

OBJECTIVES OF THE EXPLORATION PROGRAM

The first objective of the exploration is the development of substantial tonnages of mill grade copper-lead-zinc sulphide ores for shipment to custom mills in Salt Lake, or for treatment in a concentrator erected on or near the property.

A second objective, not properly part of the exploration program, but perhaps incidental to it, might be the discovery of oxidized ores above the water level which could be shipped directly to Salt Lake Smelters: and, or secondarily enriched copper-silver ores at or near the water table.

The order of importance of these objectives is clear. However, relative values are difficult to assign, since there is no way of telling how far under the quartz outcrop the operators, who had abandoned the venture by the time of Tower & Smith in 1898, carried their workings or how well they prospected the complexities of the cymoid loop.

EXPLORATION TARGETS

The water level in the Sunbeam Shaft stands at the 425 ft. level. How much work was carried out on this level or below is impossible to determine. The sulphide dump at the collar of the shaft indicates about 250 feet of drifting. This would not explore very much ground. Again whether or not the former operators thoroughly prospected the complexities of the cymoid loop cannot be determined. An examination of the old workings in the shaft shows a fissure peeling off the northeast and other strands turning northerly. The upper part of the shaft is being rehabilitated at the present time, but it is doubtful if this repair will proceed to a depth to throw much light on structure without undue expense.

MEANS OF EXPLORING TARGETS

Despite the lack of information regarding the underground workings, the evidence on the surface is sufficient to limit the target area to the downward projection below the water

table of the cymoid loop and the positions of the vein immediately north and south of the loop. Most ore shoots in Tintic rake to the north. The principal shoot in the Swansea, which is the only mine in the igneous rocks, described in detail in Professional Paper 107, shows a northerly rake. However, since no positive evidence on rake can be established, the first drill hole should be spotted immediately under the cymoid loop to a point about equal to the 500 ft. level of the Sunbeam Shaft. Depending on mineralization and geological evidence, holes south and north of this area can be placed to test the structure fully. The gulch to the west offers easy drilling locations for holes at about 65 degrees.

Although no comparable ratio of ore discovery to feet of drilling can be established for past production in the Sunbeam Mine, since no records exist, in the Swansea roughly 25% of the area opened up by levels was in ore. If the Sunbeam pattern is as consistent, the six holes might open up a block of ore 500 X 200 X 6 or 50,000 tons of ore. Development cost would be difficult to estimate since the Sunbeam Shaft could be rehabilitated to mine a small orebody; and, undoubtedly some upper level ore could be mined. However, a major operation would require a new vertical shaft and consequently a substantial orebody would have to be developed.

RECOMMENDATIONS

We recommend the drilling of six holes to an average depth of 600 feet to test the Sunbeam vein below the water table. After completion of these holes, if the results are favorable, the incline shaft can be reopened, and the oxidized and enriched ores remaining can be mined in conjunction with sinking to a new level to mine the ores discovered by drilling.

Respectfully submitted,

Centennial Development Company
Eureka, Utah

James Quigley

James Quigley

UNITED SUNBEAM MINING COMPANY ASSAY'S

COMPANY & LEASER'S PRODUCTION & SAMPLES - 1903 & LATER

(From Miscellaneous Papers Loaned To Centennial Development Company)

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
Oct. 3, 1903 - Lot #10 54.5 Tons					26.6	50.4	.08	18.8	Grab Sample Assayed: F.E. Higson, Eureka
Oct. 10, 1903 - Lot #10 109,030 lbs.	15.1	9.0	23.3	3.5	21.2	52.4	.06	14.5	Union Assay
					25.0	53.7	.07	13.3	Officer
		9.8	16.2		22.3	54.9	.065	13.3	A. S. & R.
Aug. 22, 1904 Sorted Dump Ore Shipment					18.0	39.3	.10	7.0	Assays only by F.E. Higson, Eureka
					3.0	22.0	.14	3.2	
April 9, 1906 (S.E. Ware) Best Dump Samples					11.0	17.7	.06	4.5	Assay samples by F.E. Higson, Eureka
May 30, 1906 (S.E. Ware) Dump Sampling	67.4	8.8	19.2	0.0		7.7	.02	2.6	Union Assay
	9.8	12.9	18.0	3.2	13.0	32.0	.04	9.3	Union Assay
July 6, 1906 - Lot #6 "Concentrates"					5.0	28.0	.04	6.5	
Aug 20, 1906 - Lot 21 S.E. Ware Lease					5.5	17.0	.06	6.7	Assays only by F.E. Higson, Eureka
Oct. 8, 1906 Lot #22 S.E. Ware Lease					7.0	17.0	.04	4.5	Assays only by F.E. Higson, Eureka
Jan 29, 1907 - Lot #24 62807 dry lbs					19.2	53.4	.05	7.7	Assays only-Ellis
	27.0	13.3	2.3	2.5	17.9	53.9	.05	7.2	Union Assay
Jan. 29, 1907 - Lot #23 39,616 dry lbs.	56.0	13.1	15.8	2.2	2.9	12.7	.03	3.7	Assays only-Ellis
					0.0	13.7	.025	3.5	Union Assay
Jan 31, 1907 - Lot #23 39,616 lbs.	56.0	13.1	1.58	2.2		13.2	.025	1.8	Sold to American Smelting & Ref.
May 18, 1907 - Lot #25 Grab Sample					3.5	19.5	.08	4.5	F.E. Higson, Assayor, Eureka
May 22, 1907 - Lot #25 47,240 lbs.	44.6	17.6	19.3	0.0	2.7	18.5	.04	4.62	Union Assay, sold Bingham Mng-Smelt

UNITED SUNBEAM MINING COMPANY ASSAYS

1903 & LATER - con't.

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
June 28, 1907 - Lot #26 53,751 dry lbs.	32.5	12.55	21.7	8.2	16.45	39.65	.55	4.08	U. S. Smelting Co.
June 31, 1907 - Lot #24 62087 dry lbs	27.0	13.3	2.3	2.5	18.55	53.65	.05	7.45	
July 16, 1907 - Lot #27 64,012 dry tons	46.4	17.6	20.7	1.3	4.1	16.5	.04	3.55	U.S.Smelting Co.
Aug. 10, 1907 - Lot #28 70,460 dry tons	59.6	13.3	15.5	4.7	9.25	9.9	.0225	2.5	Bingham Cons. Mng.&Smelting
Aug 10, 1907 - Lot #29 74,021 dry tons	38.9	14.3	20.8	4.7	9.25	29.0	.045	4.3	American Smelt & Refng Co.
Sept. 6, 1907 Lot #30 97,148 dry tons	46.2	19.3	24.2	0.0	1.15	10.2	.0325	3.405	Bingham Cons. Mng & Smelting
Oct. 10, 1907 - Lot 32 60,000 lbs (?)	30.8	14.3	22.3	4.9	19.2 17.9	40.2 34.0	.04 .42	3.7 4.0	F.E.Higson, Eureka - Assayer
Nov. 5, 1907 - Lot #32 61,336 dry lbs.	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	
July 27, 1908	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	Bid from AS&R.
July 27, 1908	30.8	14.3	22.3	4.9	19.55	39.6	.035	3.9	Bid - Bamberger & McMillan
Aug. 29, 1908 U.S.S.&R. Thornburg-Leaver Lease 23,957 tons	28.6	10.5	20.7	5.8	24.7	37.85	.043	3.85	Settlement
July 9, 1912 Dump Samples						15.0	.08	3.0	P.N.Anderson
						11.9	.06	2.3	P.N.Anderson
		21.1	2.1	0.0	3.2	7.7	.02	0.83	Union Assay
		7.9	9.9	1.0	1.1	5.8	trace	2.25	Union Assay
Nov. 15, 1912 - Dahle-Mission Lease, 78,902 lbs.	53.5	17.0	6.7	0.0	4.3	14.83	.045	1.88	International Smelting Co.

UNITED SUNBEAM MINING COMPANY ASSAY'S

1903 & LATER - con't.

Dates-Lessees-Weights Lot No's. - Buyers	% SiO_2	% Fe	% S	% Zn	% Pb	oz Ag	oz Au	% Cu	Notes-Settlements, Assays
Nov. 21, 1912, I.S.& R. Settlement 90,736 lbs.	55.4	16.2	13.2		2.7	10.67	.03	2.3	
Feb. 20, 1913 - Lot #3 Dahle-Mission Lease 42,670 dry lbs.	36.55	12.85	21.4	2.5	19.04	39.75	.042	3.37	American Smelting Co.
July 1, 1913 - 8440 lbs. Southland Lease			21.9		21.0	42.5	.06	3.98	Chris. & Nichols
N. E. Dahle Lease	29.7	12.6			20.3	41.5	.05	3.9	Tintic Smelting
July 14, 1913 - Lot #4 41,060 lbs.	58.9	13.5				15.6	.04	2.41	Garfld Smelting
	59.4	14.0				15.4	.05	2.58	Garfld Smelting
	59.15	13.75				15.5	.045	2.49	Garfld Smelting
	59.4	14.0				15.4	.05	2.58	Tintic Smelting
Feb. 20, 1914 - Lot #1 Westburg Lease					7.75	31.5	.0425	8.67	
July 14, 1915 - 12,800 lbs Andrew Baxter Lease	28.4	17.5	21.2	6.7	8.2	29.2	.07	7.91	Union Assay-sold to Utah Ore
Lot #31 - (N.G.)					4.5	8.0	.04	2.0	

EXCERPTS FROM LETTERS WORTH NOTING

Letter - Feb. 1, 1907 - F. J. Westcott to S. E. Ware: "Lots 23 & 24 brought $1,530.62. Lot 24 brought $65.25 per ton."

Letter - Feb. 7, 1907 - S. E. Ware to F. J. Westcott: "Water in El Ray Shaft is within 375 ft. of top of shaft."

Letter - Jan. 26, 1911 - F. J. Westcott to C. H. Buller, Washington, D.C.: The United Sunbeam Mine was closed down about nine years ago on account of a heavy flow of water encountered in its working shaft, and there is to-day about 300 feet of water in the shaft, and it is permanent, neither rising or falling."

Letter - Frank Thornburg - May 3, 1915: "The boys are taking out some very good ore - small streak from drift just north of Woodmansee Shaft."

Letter - Frank Thornburg - April 4, 1915: "The Knight-Christensen Mill burned to the ground last night."

NOTE: Since the company operation of the United Sunbeam ceased in 1902, please note that the ore shown on the following sample sheets must have been a skinning job above the water level and does not necessarily represent the value of virgin shipped by the Company.

Most of the papers submitted are leases, bids, correspondence with leasers and smelters and railroad, etc.; They do not throw much light on the operations. Some one stole and destroyed the mining equipment which would now be obsolete.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

PROJECT SUMMARY REPORT

By: J. W. Alt August 8, 1958

1. Docket No. DMEA-4653 (Copper-Lead-Zinc)
Contract No. Idm-E1081
Property: Sunbeam Mine
Juab County, Utah

Operator: Western Resources, Incorporated
D. Howe Moffat, Secretary
Continental Bank Building
Salt Lake City 1, Utah

Operator's Property Rights: Lessee
Lease Agreement dated July 1, 1956.
Assignment of Lease dated October 17, 1956.
Consent to Lien and Subordination Agreement dated May 22, 1957.

2. Contract dated April 25, 1957. To complete - November 30, 1957.

Work Authorized

The objective of the work is to investigate the ore potential of the Sunbeam vein, approximately 500 feet below the surface and below the water level and the old workings. Drill holes are expected to be approximately 600 feet in depth. Six drill holes will be required and not more than 3,600 feet of drilling shall be performed.

8623

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 500-foot depth, approximately 2,700 feet @ $6/ft.	$16,200.00	
Diamond drilling to 500-foot depth, approximately 300 feet @ $8.50/ft.	2,550.00	
Diamond drilling from 500 to 750 foot depth, approximately 600 feet @ $10.50/ft.	6,300.00	
Reaming and casing, 600 feet @ $4.50/ft.	2,700.00	
Cementing and redrilling, 36 hrs @ $15/hr.	540.00	
Casing lost, 144 feet @ $2.25/ft.	324.00	
Mobilization and demobilization of drill equipment and crew	600.00	
		$29,214.00

Fixed Unit Costs

Bulldozing (drill site preparation) 48 hours @ $15/hr.	$720.00	
Incidental allowance for each foot of drilling completed, 3,600 feet @ $0.79/ft.	2,844.00	
Core boxes - 72 @ $1.25/each	90.00	
Assaying - 400 determinations @ $1/each	400.00	
		4,054.00

Estimated Total Cost of Project	$33,268.00
Government Participation @ 50%	$16,634.00

Amendments

None

Work Completed

Non-core drilling, 881 feet @ $6/ft.	$ 5,286.00
Core drilling to 500 feet, 119 feet @ $8.50/ft.	1,011.50
Core drilling, 500 to 700 feet, 353 ft. @ $10.50/ft.	3,706.50
Lost casing, 20 feet @ $2.25/ft.	45.00
Cementing, 13 hours @ $15/hr.	195.00
Mobilization and demobilization	600.00
Bulldozing, 13½ hours @ $15/hr.	200.00
Incidental expense, 1,353 feet @ $.79/ft,	1,068.87
Core boxes, 48 @ $1.25/each	60.00
Assays, 12 @ $1/each	12.00
Total Cost of Project	$12,184.87
Government Participation @ 50%	$ 6,092.44

Total Amount of drilling completed - 1,353 feet.

Work under the terms of the contract was started in July 1957, and the project was terminated by mutual agreement. Effective date of Termination agreement, December 2, 1957.

3. Report of Review dated March 13, 1958.

Total cost as billed by Contractor	$12,184.87
Exceptions	0.00
Total Accepted Cost	$12,184.87
Government Participation @ 50%	$ 6,092.44

Operator's final report dated December 11, 1957.
Field Team final report dated June 20, 1958.

4. Certification date: No Certification made as there was no discovery of ore.

5. Comments

The two holes drilled (out of 6 proposed), hole No. 1 - 590 feet and hole No. 2 - 763 feet, to test the downward continuation of ore below the water table encountered only small quantities of lead-zinc-copper minerals. The two completed holes were drilled in the northerly-striking segment of the Sunbeam vein where, it was hoped, a change in strike from the general north-northeast direction would effect a widening of the vein. One hole (No. 2) cut rather heavy quartz and pyrite over an effective vein width of about 8 feet. The results from No. 1 were inconclusive; no single structure was cut but rather a series of small mineralized fissures. The remaining four holes were not drilled owing to the poor results of the first two. Therefore, it appears unlikely that significant quantities of ore are present in the vein at depth.

Additional exploration work on this property with Government assistance is not warranted.

J. W. Alt

J. W. Alt

JWAlt/ss 8/7/58
Copy to: Docket
Chron.

☒ Audited 3/13/58. B.R. WORK ANALYSIS SHEET - DMEA PROJECT ☒ Actual Cost

☐ Certified Analysis as of _____ * ☒ Agreed Unit Costs

Incl. Voucher for November 1957.

Name WESTERN RESOURCES, INC. Docket No. 4,653

State UTAH Commodity COPPER-LEAD-ZINC Idm-E No. 1,081

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Overburden drilling and D.D. non-coring to 500' depth	2,700' @ $6.00/ft.	$16,200.00	881'	5,286.00 ✓	
D.D. to 500' coring bits	300' @ $8.50/ft.	2,550.00	119'	1,011.50 ✓	
D.D. 500' - 750' coring bits	600' @ $10.50/ft.	6,300.00	353'	3,706.50 ✓	10,844.00
Reaming and Casing	600' @ $4.50/ft.	2,700.00	Total Drilling 1,353		
Cementing & Redrilling. (Specify)	36 hours @ $15.00/hr.	540.00	13	195.00 ✓	
Surface Excavation Bulldozing 48 hours @ $15.00/hour *		720.00	13⅓	200.00 ✓	200.00
Mobilization & demobilization		600.00	1	600.00 ✓	
Core Boxes-72 @ $1.25 each *		90.00	48	60.00 ✓	60.00
Assaying--400 determinations @ $1.00 ea. *		400.00	12	12.00 ✓	12.00
Incidental Allowance @ $0.79/ft. drilled 3,600' *		2,844.00	1,353'	1 1,068.87 ✓	1,068.87
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Casing Lost 144' @ $2.25 per foot.		324.00	20	1 45.00 ✓	
Totals		$33,268.00		$12,184.87	$12,184.87

Checks Report of Review

Date of contract--April 25, 1957.
Expiration date of Royalty Payments April 25, 1967.
Termination Agreement dated--January 31, 1958.
Terminal Letter dated--July 17, 1958.
Operator's Final Report received--January 10,1958.
Field Team Final Report Received--July 21, 1958.

Prepared by A.K. Klugescheid

7162

Overburden Drilling & D.D. to 500' non-coring bits 2700' @ 6.00/ft.	$16,200.00
D.D. to 500' coring bits. 300' @ $8.50/ft.	2,550.00
D.D. 500'-750' coring bits. 600' @ $10.50/ft.	6,300.00
Reaming & Casing 600' @ 4.50/ft.	2,700.00
Cementing & Redrilling 36 hrs @ $15.00/hr.	540.00
Casing lost 144' @ $2.25/ft.	324.00
Mobil & Demobil.	600.00
Fixed Hart Costs.	
Bulldozing 48 hrs @ $15.00/hr.	720.00
Incidental Allowance per foot. 3,600' @ $0.79	2,844.00
Core Boxes - 72 @ $1.25 ea.	90.00
Assaying - 400 determinations @ 1.00 ea.	400.00
Total	$33,268.00

Spent 1957 ~~August~~ ~~September~~ November,

Bulldozing 13 1/3 ~~12~~ hrs @ 15.00		200.00 ✓ ~~150.00~~
Non Coring Drilling @ 6.00/ft	881' ~~430'~~	5,286.00 ✓ ~~2,580.00~~
Cementing @ 15.00/hr 13 hrs		195.00 ✓
Core Drilling 0-500' @ 8.50/ft	119' ~~70'~~	1011.50 ✓ ~~595.00~~
Core Drilling 500'-750' @ 10.50/ft	353' ~~88'~~	3,706.50 ✓ ~~945.00~~
Incidental Allowance @ ~~$.79/ft~~	1353' ~~590'~~	1,068.87 ✓ ~~466.10~~
Core Boxes @ ~~$1.25~~ ea ~~16~~ 48		60.00 ✓ ~~20.00~~
Assays determinations @ $1.00 ea 12		12.00 ✓
Mobilization @ $300.00 } Demobilization @ 300.00 }		600.00 ✓ ~~800.00~~
Lost Casing, 20'		45.00 ✓
		~~5,263.10~~ 12,184.87

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
July 17, 1958

DMEA
RECEIVED JUL 21 1958

DATE	INITIAL	CODE
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"		110
	ey	130
		220
		500

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA ~~4664~~ 4653 (Lead-Copper-Zinc), Contract No. Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah - FINAL SUMMARY REPORT

Enclosed are the original and two copies of a Joint Final Engineering and Geologic Report, dated June 20, 1958, by F. B. Moore, Geologist, Geological Survey, and M. H. Howes, Mining Engineer, Bureau of Mines. The original and one copy of the Operator's final report were forwarded by memorandum of January 14, 1958.

The contract was terminated before completion of all work originally provided for, by a TERMINATION AGREEMENT, dated January 31, 1958, which was made effective December 2, 1957.

Final payment to the Operator was processed by this office March 24, 1958, in conformance with the Report of Review of reported project costs, by the Contract Administration and Audit Division, DMEA, dated March 13, 1958.

Exploration work completed consisted of the drilling of two holes, aggregating 881 feet of non-core drilling and 472 feet of core drilling, to a total drill footage of 1,353 feet.

Additional work or service incident to the drilling consisted of 13 hours charged for cementing and redrilling, the cost of 20 feet of lost casing, 13-1/2 hours of bulldozing time, incidental allowance on 1,353 feet of drilling, the purchase of 48 core boxes, and analysis of 12 samples for copper-lead-zinc content; all at a total accepted cost of $12,184.87, toward which the Government contributed 50 percent, or an amount of $6,092.44.

Reviewed by
DMEA OPERATING COMMITTEE
7/23/58
(date)

The exploration work completed did not result in the discovery or development of a significant quantity of lead-zinc-copper ore. Therefore, certification of the project is not recommended.

By J. W. Townsend
J. W. Townsend
Alternate Acting Executive
Officer

Enclosures

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DATE | INITIAL | CODE

DMEA
DEPARTMENT OF THE INTERIOR
JUL 14 1958
REGION III
DENVER, COLORADO

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT FINAL REPORT BY EXAMINING TEAM
REGION III

FIELD TEAM FINAL REPORT.

DMEA 4653

Contract Idm-E 1081

Western Resources, Inc.

New United Sunbeam Mining Co. property

Juab County, Utah

Copper-lead-zinc

Joint Final Engineering and Geologic Report

by

F. B. Moore, Geologist
Geological Survey

M. H. Howes, Mining Engineer
Bureau of Mines

June 20, 1958

Reviewed by
DMEA OPERATING COMMITTEE
7/23/58
(date)

CONTENTS

	Page
Summary	1
Introduction	2
Location and accessibility	3
Property	4
History and production	6
Geology and ore deposits	7
Description of the contract work	10
Expenditures	16
Conclusions and recommendations	17
Appendix I	18
Appendix II	19

ILLUSTRATIONS

Figure		Follows page
1.	Location map, Western Resources, Inc., (New United Sunbeam Mining Co. property) Juab County, Utah. DMEA 4653	3
2.	Claim map, Western Resources, Inc. (New United Sunbeam Mining Co. property) Juab County, Utah	22
3.	Plan and section Diamond Drill Hole No. 1 of Western Resources, Inc. (New United Sunbeam Mining Co. property) Juab County, Utah	22
4.	Plan and section Diamond Drill Hole No. 2 of Western Resources, Inc. (New United Sunbeam Mining Co. property), Juab County, Utah	22

DMEA 4653

CONTRACT Idm-E 1081

WESTERN RESOURCES, INC.
NEW UNITED SUNBEAM MINING CO. PROPERTY
JUAB COUNTY, UTAH

SUMMARY

An exploratory drilling project, under Docket No. DMEA 4653 (Copper-lead-zinc), Contract No. Idm-E 1081, was conducted by Western Resources, Inc., on the property of the New United Sunbeam Mining Co. The project work described in the contract consisted of 6 holes to be drilled to an average depth of 600 feet for a total of 3,600 feet, at a maximum cost of $33,268, of which the Government's participation at 50 percent is $16,634. The purpose of the drilling was to investigate the ore potential of the Sunbeam vein approximately 500 feet below the surface and below the water level and the old mine workings. As reported in U.S.G.S. Nineteenth Annual Report, 1897-98, the Sunbeam lode mining claim, overlying a portion of the Sunbeam vein, had produced oxidized copper-lead-zinc ores having values in excess of $500,000. From 1903 to 1939 the property is reported to have produced 7,371 tons of ores containing 287,294 pounds of lead, 261,406 pounds of copper, 92,077 ounces of silver, and 191 ounces of gold. The possibilities of discovering commercial sulphide ore bodies below the water level and under the old

mine workings appeared to be very favorable. However, the negative nature of the data obtained from drill holes nos. 1 and 2 was the deciding factor in terminating the contract. Total cost of the work completed is $12,184.87, of which the Government's share at 50 percent participation is $6,092.44. No certification of a discovery should be issued and no further work on the property is recommended.

INTRODUCTION

Flare Mining Co. submitted an application, dated July 27, 1956, for Government aid in a copper-lead-zinc exploratory project estimated to cost $34,602.50. The proposed project on property leased from the New United Sunbeam Co., consisted of 3,600 feet of diamond drilling in six inclined holes, for the purpose of exploring the Sunbeam vein below the water table. The application was assigned docket No. DMEA 4404.

A field examination of the property was made September 11, 1956, by Frank B. Moore, Geological Survey, and M. H. Howes, Bureau of Mines, accompanied by James Quigley, representative of the applicant. Recommendation was made to approve the project as originally proposed, with the exception that the three northernmost holes be slightly flattened if the vein continued to dip easterly in its downward course.

On October 17, 1956, Flare Mining Co. assigned all of its right, title and interest in the New United Sunbeam Mining Co. property to Western Resources, Inc. Flare Mining Company's application was cancelled by DMEA in Washington. A new application, containing the same proposals

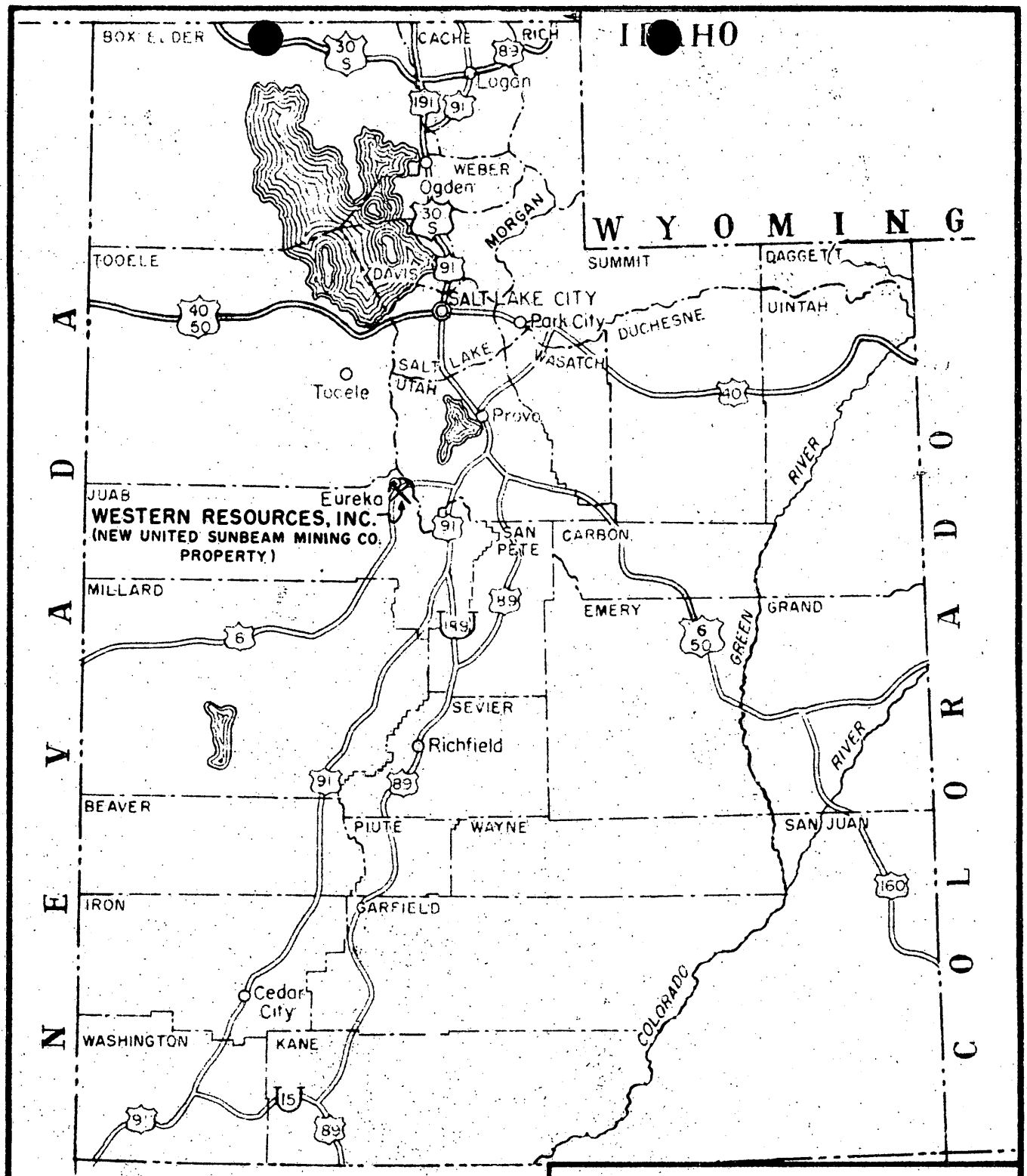
as the original application was submitted by Western Resources, Inc., to which Docket No. DMEA 4653 was assigned.

Negative results obtained in drill holes nos. 1 and 2 convinced both the operator and the Government that further drilling held little promise of significant ore discovery, and therefore the contract was terminated.

LOCATION AND ACCESSIBILITY

The property held under lease from the New United Sunbeam Mining Co. is approximately 3 airline miles south of Eureka, Utah, in sec. 31, T. 10 S., R. 2 W., and sec. 6, T. 11 S., R. 2 W., S.L.B. and M., in the Tintic mining district, Juab County, Utah. The claims lie along a low, north-south ridge to the south of Mammoth peak in the East Tintic mountains, at altitudes ranging from 6,150 to 5,680 feet. The property may be reached by traveling approximately 3 miles southwesterly from Eureka, Utah, on U. S. Highway 6 to its junction with the road to Silver City, thence about 2 miles southeasterly on the Silver City road and along the old L. A. and S. L. Railroad to the mine.

The climate is semiarid. Summers are warm and winters are cold, with moderately heavy snowfall. Ordinarily, access to the mine is maintained by infrequent snow removal from the roads.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. I DMEA Docket No. 4653
Location Map

WESTERN RESOURCES, INC.
(NEW UNITED SUNBEAM MINING CO. PROPERTY)
JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: MAR. 13, 1958
TRACED: MAR., 1958, A.P.T.S.	1500-1221-G
CHECKED:	

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 21 1958

DATE	INITIALS	CODE

PROPERTY

Western Resources, Inc., 801 Continental Bank Building, Salt Lake City, Utah, is a Utah corporation.

James Quigley, President

Eureka, Utah

D. Howe Moffat, Secretary,

801 Continental Bank Building,

Salt Lake City, Utah

At the time of original application for DMEA assistance, Flare Mining Co. held an option, dated July 1, 1956, on a group of patented lode mining claims owned by New United Sunbeam Mining Co., 1017 Kearns Building, Salt Lake City, Utah. The option included a clause that at any time within 120 days, a lease on the claims could be acquired for 1 year from the date of exercise of the option, and for additional periods of 1 year until 7 years shall have lapsed. The option to hold the following patented lode mining claims was exercised.

October 26, 1956:

Name	Survey or Lot No.
Sunbeam and First Southern Extension Sunbeam Consolidated	Lot 61
First Southern Extension Sunbeam	Lot 64
Elmer Ray	Lot 66
Sunbeam	Lot 165

Name	Survey or Lot No.
West Sunbeam	Sur. 3820
Iron Spar	Sur. 4015
Triangle	Sur. 4090

Flare Mining Co., October 17, 1956, assigned to Western Resources, Inc., all of its rights, title, and interest in the agreement dated July 1, 1956, between New United Sunbeam Mining Co. and Flare Mining Co. (Appendix I).

Because the collars of drill holes nos. 1, 3, and 5 were actually located out of bounds of the above listed lode mining claims it was necessary for Western Resources, Inc., to acquire permission to place equipment on and drill from these sites. An agreement, dated November 1, 1956, was drawn up by Empire Mines Co. allowing Western Resources, Inc., to construct roads and move machinery on the following claims for the purpose of drilling holes to the Sunbeam lode mining claim (Appendix II):

Home Rule	Patent No. 3852
Garnet	Patent No. 3852
Guardian	Patent No. 3852

HISTORY AND PRODUCTION

The Sunbeam claim is the earliest recorded location in the Tintic district. The vein has been worked through numerous shafts for a length of nearly 4,000 feet and to a depth of 700 feet in the El Ray shaft. However, production records and mine maps for the various workings are not available. Tower (U. S. Geol. Survey Nineteenth Annual Report, 1897-98, p. 762) states that oxidized ores having a value of over $500,000 were produced from the Sunbeam claim alone. In 1902, a heavy flow of water in the bottom of the Sunbeam shaft (490 feet deep) forced suspension of the deeper mining operations. From 1902 to 1915, numerous small lots of ore were shipped from above the water level at 425 feet. These ores contained as much as 26 percent lead, 18 percent copper, and 8 percent zinc. The group of claims comprising the present property covers approximately 3,000 feet of the Sunbeam vein from the El Ray shaft on the south to a point approximately 1,000 feet north of the Sunbeam shaft. It is reported that from 1903 to 1939 production from the property was 7,371 tons of ore containing 287,294 pounds of lead, 261,406 pounds of copper, 92,077 ounces of silver, and 191 ounces of gold. The average grade of the ore was 1.95 percent lead, 1.77 percent copper, and 12.491 ounces silver and 0.026 ounces gold per ton. None of the workings is now accessible; most appear to have been inaccessible for many years.

GEOLOGY AND ORE DEPOSITS

Two types of rocks occur in the Tintic district--Paleozoic sedimentary rocks and Tertiary igneous rocks. The sedimentary rocks are quartzite, over 6,000 feet thick, overlain by 6,500 to 7,000 feet of limestone including a small amount of shale. The igneous rocks are in part intrusive rhyolite, porphyry, and monzonite and in part effusive rhyolites and latites or andesites.

The sedimentary rocks have been folded into a series of northerly-trending anticlines and synclines; the mining district proper is occupied almost entirely by a large asymmetric syncline which has a steep west limb and a more gently dipping east limb. Faults, mostly northeast or east in strike, cut the sedimentary rocks and younger north-northeasterly striking faults cut the intrusive igneous rocks as well as the older sedimentary rocks. These faults have been one of the major factors in the localization of the Tintic ore deposits.

The ore deposits are of two types--replacement deposits in the limestones and fissure-filled deposits in the igneous rocks. The replacement deposits have accounted for most of the production from the Tintic district; however, several of the vein deposits, including those of the Sunbeam mine, have had notable production. The ores have been valued, in order of decreasing importance, for silver, lead, gold, copper, and zinc.

The Sunbeam vein is in Tertiary intrusive rocks: the northern portion around the Sunbeam shaft is in monzonite. The vein strikes generally N 30° E except for a short segment near the Sunbeam shaft which strikes nearly due north. Dips are variable but steep. The vein generally appears to dip to the west at about 85° but in the north-striking segment surface dips are 70° to 85° to the east. Drilling confirmed a steep eastern dip for this segment.

Surface exposures of the vein show a strong, persistent shear 1 foot to 10 feet wide which can be traced for a strike length of nearly 4,000 feet. Quartz and barite are the chief gangue minerals but essentially no sulfide minerals are visible in the surface material. Samples of vein material found on the dumps contained galena, sphalerite, gray copper, pyrite and chalcopyrite. At the north end of the property, where the vein turns from a northerly to northeasterly strike, a mass of loose, vuggy quartz about 10 feet wide, fills the vein. Old stopes underneath the quartz indicate past production from this area.

The direction of movement along the Sunbeam vein is not known. However, in several northeast-trending faults 1-1/2 miles to the north (H. T. Morris, oral communication), the northwest side moved southwest with respect to the southeast side. Such a movement, if applicable to the Sunbeam vein, would tend to open the north-striking segment of the vein near the Sunbeam shaft.

The two holes drilled under the contract were both in the north-striking segment of the vein. Hole No. 1 was drilled to a depth of 590 feet in monzonite. Between 534 and 581 feet small stringers containing sphalerite, galena, pyrite, and quartz occur in a zone of altered and silicified monzonite. Figure 3 is based on the applicant's interpretation as given in his final report. A subsequent survey of the drill hole showed that it had steepened from 50 to 57° as shown in green on figure 3. The vein, therefore, must be nearly vertical at this point. Hole No. 2 was drilled in monzonite to a depth of 763 feet or to a below surface depth of about 700 feet. The vein, cut at 695 to 715 feet, contained chiefly quartz and pyrite. The width of the vein here is estimated to be 8 feet.

The sparseness of lead-zinc-copper minerals in the holes at depth may be due to barren areas along the vein or, possibly, to a general lack of high grade ore below the water table in the deposits in igneous rocks. Lindgren (USGS Prof. Paper 107, p. 257) states that in the Sunbeam vein "no ores of high grade have been found below the water level" but that "such a vein would seem to have possibilities in depth". The Swansea mine, in the same general area, has been worked to a depth of 790 feet or 140 feet below the water level. However, no other vein in igneous rocks in the district contained minable ore below the water level. From the limited data available, it appears that the Sunbeam vein is no exception.

DESCRIPTION OF THE CONTRACT WORK

Contract work is described in Exhibit "A" of the Contract as follows:

"The purpose of the project is to explore for ores of lead, zinc, and copper by diamond drilling (plus necessary overburden drilling). The drill holes are roughly indicated on the attached map (fig. 2 *), referred to in Annex I, but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

"The objective of the work is to investigate the ore potential of the Sunbeam vein, approximately 500 feet below the surface and below the water level and the old workings. Drill holes are expected to be approximately 600 feet in depth. Six drill holes will be required. Not more than 3,600 feet of drilling shall be performed unless the Government, in writing, approves more drilling; but in no event may the estimated total cost of all drilling set forth, in this Exhibit "A" be exceeded.

"All diamond drilling shall be done with AX size bits or larger. It is estimated that approximately 450 feet of each hole will be drilled with non-coring bits, to approach the calculated position of the vein; the remainder of the hole shall then be drilled with coring bits. All drill holes shall be logged, and all drill cores shall be

---

* Fig. 2 of this report corresponds to fig. 2 of the contract.

properly labeled, stored, and made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split and one-half thereof shall be properly sampled and the sample assayed for zinc, lead, copper, and silver.

"Sludges corresponding to the cores, with intervals not to exceed five feet, shall be retained (if possible) when drilling in significantly mineralized ground and, in the event that core recovery does not exceed 70 percent, both core and sludge samples shall be taken. Both core and sludge shall be split, and one-half thereof properly sampled and the samples assayed for zinc, lead, copper, and silver.

"The remaining half of all significantly mineralized core samples, and sludge samples where taken, shall be furnished to the Government upon request.

"All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections showing the progress of the work and sample locations.

"All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

"Drill holes shall be reamed and cased or cemented and redrilled as necessary.

"Bulldozing shall be done with a D-8 or equivalent size unit."

The contract work was started on July 15, 1957, by preparing the drill site for hole No. 1 by bulldozer stripping. Subsequent drilling

was conducted in a satisfactory and workmanlike manner. All regulations, as set forth in the contract, were carefully observed, and the operator was very cooperative.

The following is a drill log of Diamond Drill Hole No. 1 (fig. 3):

Date started: July 26, 1957 Depth of hole - 590 feet

Date finished: September 26, 1957

0-120.5	Non-core bit
120.5-147	Monzonite
147-148	Small quartz fissure - quartz and pyrite
148-154	Monzonite - quartz and pyrite
154-167	Monzonite
167-188	Monzonite - dark mineral (magnetite), fine-grained pyrite
188-193	Monzonite - small 1/8" quartz seams, fine-grained pyrite
193-225	Monzonite - quartz and pyrite in vug holes. Increased alteration of monzonite
225-259	Monzonite - small quartz veinlets, pyrite mineralization
259-277	Monzonite - decreasing amounts of biotite
277-304	Monzonite increased alteration
304-324	Monzonite - disseminated fine-grained pyrite
324-405	Monzonite - scattered pyrite
405-482	Monzonite - increasing amounts quartz
482-526	Monzonite - increased silicification and pyrite
526-534	Monzonite quartz and pyrite

534-554	Sunbeam fissure - quartz monzonite, pyrite, scattered chalcopyrite, small seams sphalerite, and minor amounts galena
554-557	Sunbeam fissure - altered monzonite with minor mineralization, at 557' one inch fissures of quartz and pyrite
557-569	Sunbeam fissure - altered monzonite, pyrite, biotite, and quartz seams
569-581	Sunbeam fissure - altered monzonite, quartz and pyrite
581-585	Quartz monzonite - altered with broken quartz
585-590	Monzonite - fresh; end of hole

Assays D D H No. 1

Core samples	Oz. per ton		Percent		
Depth	Au	Ag	Cu	Ph	Zn
529-536	Tr	0.20	0.10	[illegible]	[illegible]
536-549	Tr	0.30	0.15		
549-552	0.03	2.10	0.10		
552-558	Tr	0.10	0.15		
558-561	Tr	0.20	0.15		
561-577	Tr	0.30	0.20		
577-581	0.01	0.10	0.10		
Sludge samples					
534-536	0.02	1.00	0.90		
536-546	0.01	0.10	0.25	0.10	Tr
546-554	0.01	0.10	0.20	0.10	Tr
554-563	0.01	0.10	0.30	0.10	Tr

The following is a drill log for Diamond Drill Hole No. 2 (fig. 4):

Date started: September 28, 1957 Depth of hole - 763 feet

Date finished: November 27, 1957

0-369	Non-core bit
369-373	Monzonite
373-455	Non-core bit
455-501	Monzonite
501	Quartz fissure 1" - no mineralization
501-599	Monzonite - fine-grained pyrite, biotite
599	Quartz fissure 4" - no mineralization
599-695	Monzonite - fine-grained pyrite. At 680' altered monzonite clayey appearance
695-705	Sunbeam fissure - quartz, large pyrite crystals. No ore minerals
705-716	Sunbeam fissure - quartz, pyrite
716-745	Monzonite - altered; fine-grained pyrite
745-763	Monzonite - altered; end of hole

Assays D D H No. 2

Core samples	Oz. per ton		Percent		
Depth	Au	Ag	Cu	Pb	Zn
625-629	0.01	0.50			
629-632	0.01	0.20			
632-634	0.01	0.20			
634-637	Tr	Tr			
637-643	0.01	0.20			
643-645	0.01	0.20			

Assays D D H No. 2 (cont'd)

Core samples	Oz. per ton		Percent		
Depth	Au	Ag	Cu	Pb	Zn
645-647	0.01	0.20			
695-700	0.01	0.20	0.20		
700-705	0.01	0.30	0.20		
705-712	Tr	0.20	0.30		
712-715	Tr	0.20	0.20		
715-722	Tr	0.20	0.15		
Sludge samples					
706-710	0.01	0.40	0.50		
710-712	0.01	0.30	0.20		
712-716	0.01	0.30	0.20		

Holes Nos. 1 and 2 (fig. 2) were drilled in what was considered by the applicant to be the most favorable area on the New United Sunbeam Mining Co. property. Since both of these holes produced negative results it was considered extremely unlikely that significant quantities of ore would be discovered in the other proposed holes. Therefore a termination agreement between the Government and Western Resources, Inc., was drawn up with effective termination date December 2, 1957.

EXPENDITURES

Report of review, March 13, 1958, of the Monthly Reports (form MF-104) and supporting documents pertaining to contract No. Idm-E 1081, by T. H. Brading, auditor, discloses that the total accepted cost of the project is $12,184.87, of which the Government's share at 50 percent participation is $6,092.44.

A summary of costs is as follows:

Independent contracts:

Drilling

Non-core	881 feet at $6.00 per foot	$ 5,286.00
Core 0-500	119 feet at $8.50 per foot	1,011.50
Core 500-700	353 feet at $10.50 per foot	3,706.50
Lost casing	20 feet at $2.25 per foot	45.00
Cementing	13 hours at $15.00 per hour	195.00
Mobilization and demobilization		600.00
Bulldozing	13-1/3 hours at $15.00 per hour	200.00
Incidental expense	1,353 feet at $0.79 per foot	1,068.87
Core boxes	48 at $1.25 each	60.00
Assays	12 at $1.00 each	12.00
	Total cost of project	$12,184.87
	Government's share at 50 percent participation	$ 6,092.44

CONCLUSIONS AND RECOMMENDATIONS

The two holes drilled (out of 6 proposed) to test the downward continuation of ore below the water table encountered only small quantities of lead-zinc-copper minerals. The two completed holes were drilled in the northerly-striking segment of the Sunbeam vein where, it was hoped, a change in strike from the general north-northeast direction would effect a widening of the vein. One hole (No. 2) cut rather heavy quartz and pyrite over an effective vein width of about 8 feet. The results from hole No. 1 were inconclusive; no single structure was cut but rather a series of small mineralized fissures. The remaining four holes were not drilled owing to the poor results of the first two.

The sparseness of lead-zinc-copper minerals in the drill holes supplements the statement of Lindgren (USGS Prof. Paper 107, p. 257) that, in the Sunbeam vein "no ores of high grade have been found below the water level". Therefore, it appears unlikely that significant quantities of ore are present in the vein at depth. Further work on the vein is not believed to be warranted at this time, and it is recommended that no certification of discovery be made.

C O P Y

APPENDIX I

A S S I G N M E N T

For and in consideration of the sum of Ten Dollars (10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, FLARE MINING COMPANY, a co-partnership, does hereby sell, assign and transfer to WESTERN RESOURCES, INC., a Utah corporation, all of its right, title and interest in and to said agreement dated the 1st day of July, 1956, between NEW UNITED SUNBEAM COMPANY, a Utah corporation, and FLARE MINING COMPANY, a co-partnership, giving and granting unto said WESTERN RESOURCES, INC., all of the rights, privileges and benefits which accrued to FLARE MINING COMPANY by, under and pursuant to said agreement hereinbefore referred to.

Dated this 17th day of October, 1956.

FLARE MINING COMPANY

By /s/ Arnold Feuerstein
Arnold Feuerstein, Partner

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On this 17th day of October, 1956, personally appeared before me ARNOLD FEUERSTEIN, the signer of the within and foregoing instrument, who duly acknowledged to me that he executed the same.

/s/ Helen Callahan
Notary Public
Residing at: 8804 True Ave.
Rivera, Calif.

My commission expires:
August 2, 1957

C O P Y

APPENDIX II

A G R E E M E N T

THIS AGREEMENT, made and entered into this 1st day of November, 1956, by and between EMPIRE MINES COMPANY, a corporation with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "LESSOR," and WESTERN RESOURCES, INC., a Utah corporation with its principal place of business as Salt Lake City, Utah, hereinafter referred to as "LESSEE."

WITNESSETH:

WHEREAS, the LESSEE is the owner of and entitled to all of the benefits of a certain Lease Agreement, bearing date the 1st day of July, 1956 between New United Sunbeam Mining Company and Flare Mining Company, (the interest of said Flare Mining Company having heretofore been assigned to Western Resources, Inc., the LESSEE herein), under and pursuant to said Lease Agreement the following described patented lode mining claims situated in the Eureka Mining District, State of Utah, are leased and let to said LESSEE, to-wit:

Juab Lawrence Lode and Mining Claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

First Southern Extension Lode and mining claim, Lot 64.

The Kinsey, Beaman, Stubbs and Triangle Lodes and mining claims, Lot No. 4090.

The Woodmansee Lode, (also known as Sunbeam Lode), Lot No. 165.

The West Sunbeam Lode and Mining Claim, Lot No. 3820.

The Iron Spar Lode and Mining Claim, Lot No. 4015.

The West Elmer Ray Lode and Mining Claim, Lot No. 66.

and,

WHEREAS, the LESSEE, as successor to Flare Mining Company, has applied to DMEA for a loan under and pursuant to which it proposes to drill certain exploratory holes for the purpose of exploration of the Sunbeam lode at depths generally of 500 feet or more below the surface, and

WHEREAS, said Sunbeam lode, as it projects below the surface of the earth, dips under certain patented mining claims owned by the LESSOR, to-wit:

Home Rule	Patent No. 3852
Garnet	Patent No. 3852
Guardian	Patent No. 3852

and in order to economically drill the Sunbeam lode it is necessary that the drill rigs be located upon the mining claims last hereinbefore described, and that the surface and subsoils of said claims be penetrated by said drills.

NOW, THEREFORE, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, the LESSOR does hereby let and lease to the LESSEE the right to place drilling rigs and to drill on the surface of the following described mining claims:

Home Rule	Patent No. 3852
Garnet	Patent No. 3852
Guardian	Patent No. 3852

for a term of one (1) year, commencing November 1, 1956 for the purpose of drilling holes to the Sunbeam lode and for no other purpose whatsoever, and that the rights granted hereby shall include the right to construct roads upon the surface of said mining claims for the purpose of moving machinery useful in drilling said holes on and off said property, for the purpose of establishing drill sites thereon and maintaining drilling machinery and for the purpose of drilling holes to the Sunbeam lode and for no other purposes whatsoever.

Said LESSEE further warrants to operate as an independent contractor and agrees to indemnify and hold harmless the LESSOR from any claims, actions at law or in equity arising out of or on account of LESSEE'S operations on said mining claims.

THE LESSEE, for and in consideration of the grants hereby given, covenants and agrees:

1. To keep said mining claims free and clear of all liens, claims or demands of any nature whatsoever which might arise by reason of the conduct of said LESSEE upon or about said mining claims. The above described mining claims of LESSOR are not to be included as a part of the property in the DMEA loan and LESSOR does not consent to any lien or claim by reason of a DMEA loan or any other loan on said property.

2. To make available to and to report to said LESSOR any mineral discovery made upon the demised premises as a result of the drill holes

to be drilled by said LESSEE and said LESSOR shall have the right to all geological data, drill hole logs, maps and other information as a result of drilling upon said premises.

3. It is understood and agreed between the parties hereto that this is a lease on the surface of the above described premises for the purpose of drilling and no rights to mine the demised premises are granted to LESSEE.

4. Upon the expiration of this lease to surrender said property to said LESSOR in the same condition in which it now is, aside from the road work, drill sites and drill holes hereinbefore referred to.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their officers hereunto duly authorized.

EMPIRE MINES COMPANY

ATTEST:

/s/ Rom Warburton
Its Secretary-Treasurer

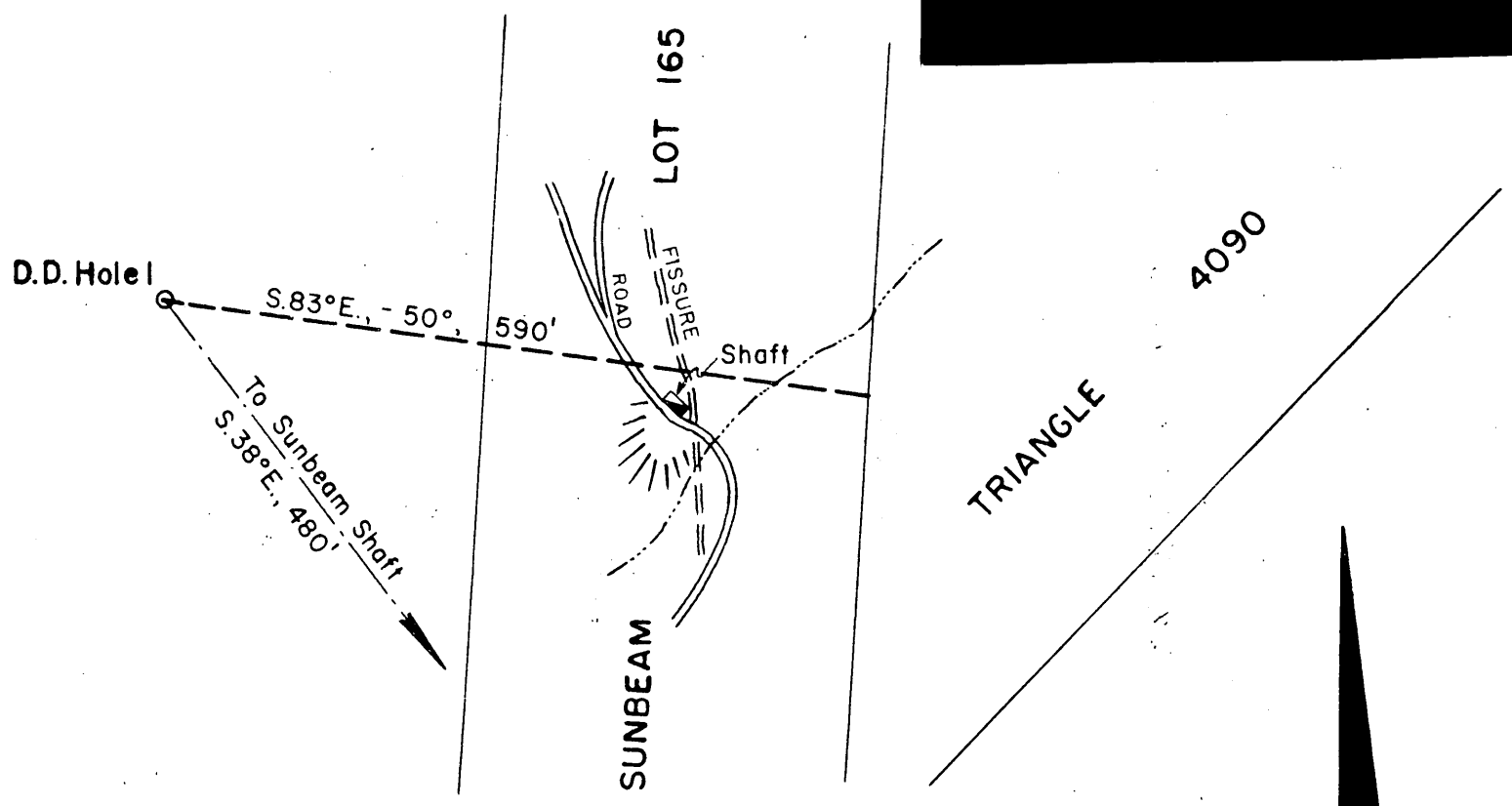
By /s/ Richard Knight
Its Vice President

WESTERN RESOURCES, INC.

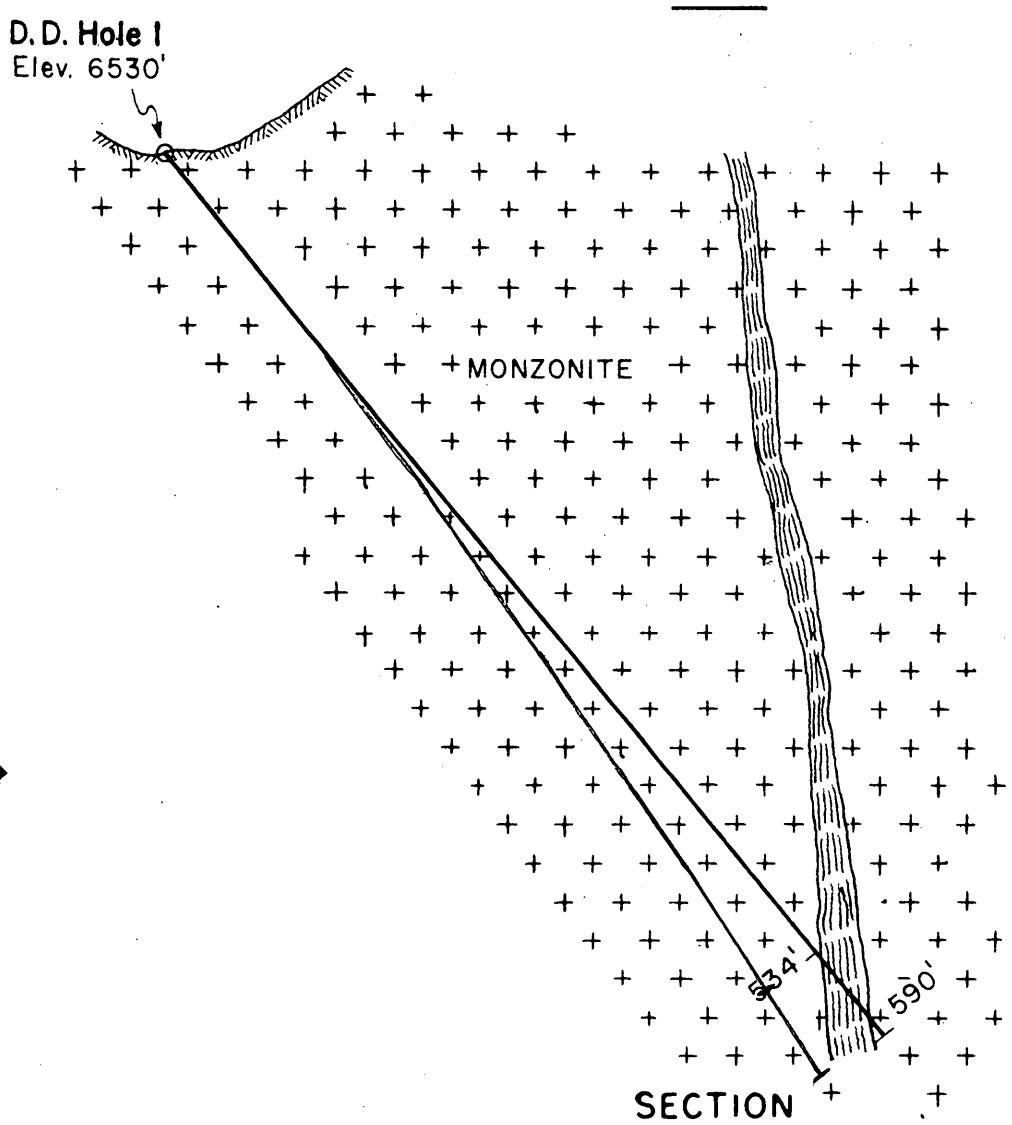
ATTEST:

/s/ D. Howe Moffat
Its Secretary

/s/ James Quigley
Its President



PLAN

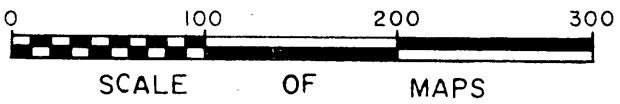


SECTION

LOOKING N. E.

NOTE

DATA FROM APPLICANT'S MAPS.

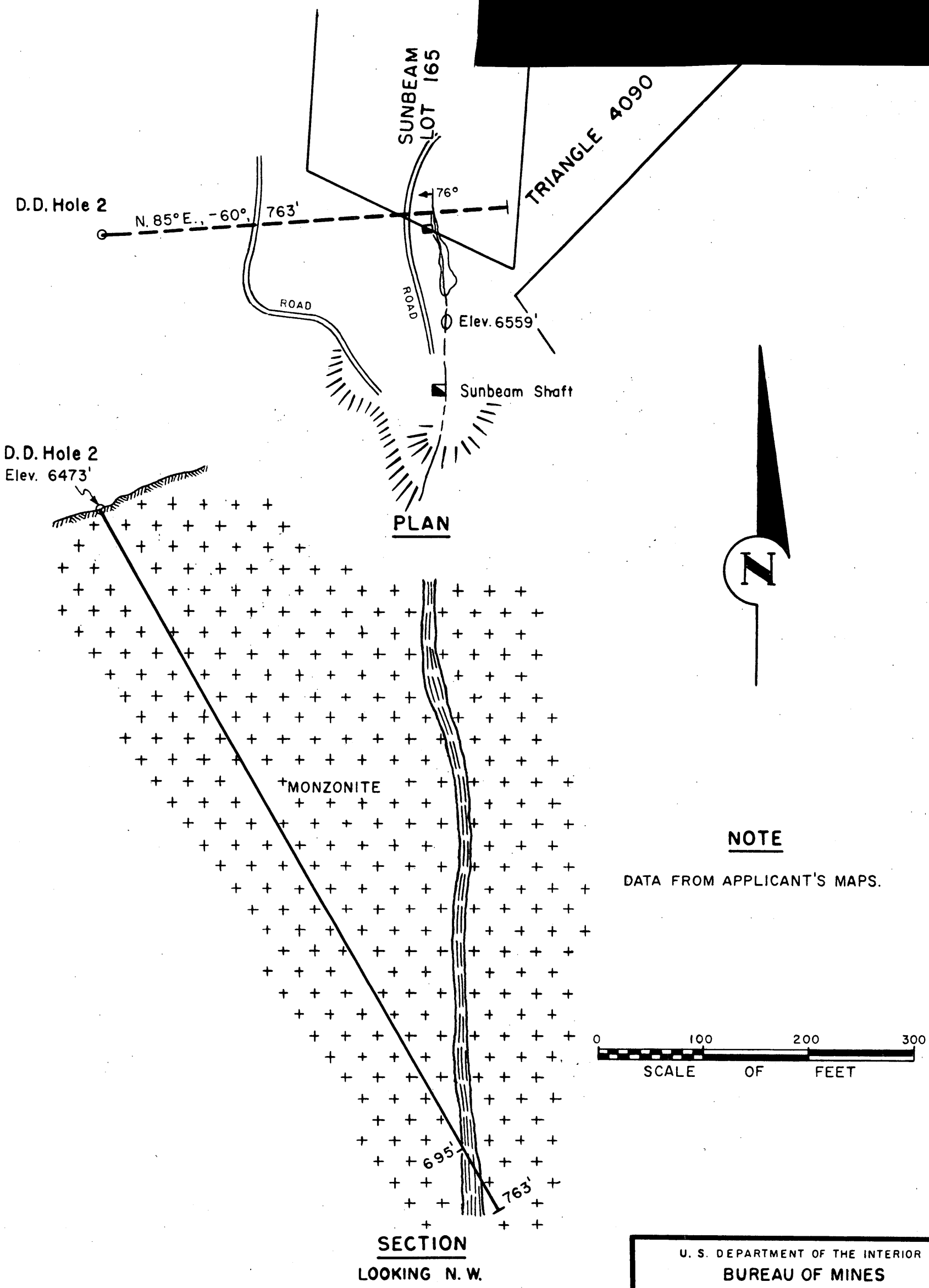


U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 3 DMEA Docket No. 4653

Plan and Section
DIAMOND DRILL HOLE NO. I OF
WESTERN RESOURCES, INC.
(NEW UNITED SUNBEAM MINING CO. PROPERTY)
JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: MAR. 19, 1958
TRACED: MAR., 58; A.P.T.S.	1500 - 1223 - F
CHECKED:	



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 4 DMEA Docket No. 4653

Plan and Section

DIAMOND DRILL HOLE NO. 2 OF

WESTERN RESOURCES, INC.

(NEW UNITED SUNBEAM MINING CO. PROPERTY)

JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: MAR., 18, 1958
TRACED: MAR., 1958; A.P.T.S.	1500-1224-F
CHECKED:	

(JS-29)
DMEA FORM 1

OFFICIAL FILE COPY

Date	Surname	Code
7/15	Klugescheid	500
	Lusin	500
"	Chambers	800
	Martin	190
		~~130~~
		~~130~~
7/16	Johnson	110
"	Mittendorf	100
		220
		500

JUL 17 1958

Mr. J. W. Gallivan, Secretary
New United Sunbeam Mining Company
c/o Fabian, Clendenin, Moffat
and Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc.
Sunbeam Mine
Juab County, Utah
Contract No. Idm-E1081

Dear Mr. Gallivan:

Enclosed is a copy of a self-explanatory letter of today to the Operator under the above-cited contract.

This correspondence relates to the Consent to Lien and Subordination Agreement signed by you on May 22, 1957.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

WPKlugescheid/er 7/15/58

Enclosure

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Mr. Chambers, DMEA
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado
March 28, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 31 1958
DATE | INITIALS | CODE
3/31 | C | 226
" | | 110
3/31 | [illegible] | [illegible]

Memorandum

To: Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4653 (Copper-Lead-Zinc) Contract Idm-E1081, Western Resources, Inc., (Sunbeam mine) Juab County, Utah - FINAL PAYMENT

Enclosed are two copies of a memorandum to T. A. Christensen, dated March 24, 1958, relative to final payment under the terms of the subject contract.

E. N. Harshman

E. N. Harshman

Enclosures

224 New Customhouse
Denver 2, Colorado
March 24, 1958

Memorandum

To: T. A. Christensen

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4653 (Copper-Lead-Zinc) Contract Idm-E1081, Western Resources, Inc., (Sunbeam mine) Juab County, Utah - FINAL PAYMENT

Reference is made to our memorandum of January 24, 1958, whereby we transmitted the final Form MF-104, Operator's Monthly Report and Voucher, for the month of November 1957, and requested that you withhold the amount of $500.00, from reimbursement to the Operator, pending resolution of matters prerequisite to closing the account.

The Operator's final report has been received, therefore, we recommend that final payment be made to the Operator on the following basis, which is in conformance with the Report of Review of the reported project costs by the Contract Administration and Audit Division, dated March 13, 1958.

Basis for Final Payment

Total accepted cost	$12,184.87
Government participation at 50 percent	6,092.44
Total prior payments	5,592.44
Balance due the Operator	$ 500.00

Original signed by
E. N. HARSHMAN

E. N. Harshman

JBC:hmh

cc: Chmn. Op. Comm. (2)
DMEA/SLC
Harshman (2)
Townsend
MF-104 file, Reg. III
Corres-file, Reg. III
Chron

$500.00
3/26/58 DMA 58-102

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/17	Alley	800
3/17	Tolbert	800
3/18	C	220
~~3/18~~	~~[illegible]~~	~~500~~

MAR 17 1958

Mr. T. H. Brading
DMEA Auditor
224 New Customhouse
Denver 2, Colorado

Re: DMEA-4653, E-1081
Western Resources, Inc.

Dear Mr. Brading:

Your report of review covering the above-cited project is acceptable. You are authorized to make normal distribution.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

AMAlley/ama
March 17, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

DMEA
RECEIVED MAR 12 1958
3/12 C 220
500

March 7, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA ~~4664~~ 4653 (Lead-Copper-Zinc), Contract No. Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Enclosed are the Government's and Audit copies of the TERMINATION AGREEMENT, which was forwarded by your letter of February 3, 1958 for signature by the Operator.

Copies of the Termination Agreement have been distributed to the Operator, the Finance Office, Region III, and to others concerned.

W. H. King

W. H. King

Enclosures

DMEA

RECEIVED 12 1958

3/12 C 220 ~~500~~

224 New Customhouse
Denver 2, Colorado
March 7, 1958

Memorandum

To: T. H. Brading, DMEA Auditor

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA ~~4664~~ 4653 (Lead-Copper-Zinc), Contract No. Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

The subject contract was terminated before completion of all the work provided for, by a TERMINATION AGREEMENT dated January 31, 1958, which was made effective December 2, 1957. A copy of the Termination Agreement is enclosed for your records.

The Operator has rendered a Final Engineering and Geologic Report and a final accounting, as required by the contract. Therefore, final payment of the Operator's account is in order, contingent on release to this office of a Certificate and Report of Audit or Report of Review of reported project costs, whichever the case indicates.

Acceptable units of work or service completed on a Fixed Unit Cost basis consist of 13-1/2 hours of bulldozer time, incidental allowance on 1,352 feet of drilling, the purchase of 48 core boxes, and analysis of 12 samples for copper-lead-zinc content.

The sum of $500.00 was withheld from reimbursement to the Operator in processing its final accounting report, which was for the month of November, 1957.

Original signed by
W. H. KING

W. H. King

Enclosure

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman
Townsend
Corres. file
Chron.

RECEIVED

3-6 C 220
3/7 800
3/7 500

204 New Customhouse
Denver 2, Colorado

March 3, 1958

Mr. James Quigley, President
Western Resources, Inc.
c/o Fabian, Clendenin, Moffat & Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA 4653 (Copper-Lead-Zinc)
Contract No. I4m-E1081
Western Resources, Inc.
(Sunbeam Mine)
Juab County, Utah

Dear Mr. Quigley:

Reference is made to the TERMINATION AGREEMENT, forwarded to you by our letter of February 10, 1958, for signature by an official of Western Resources, Inc.

Return of the properly executed copies of the Agreement is a prerequisite to the initiation by this office of other procedures in conjunction with closing the account.

We are desirous of closing this account at an early date. Therefore, we will appreciate prompt attention to the matters of execution and return of all copies of the Termination Agreement.

Very truly yours,
Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWF:prl

cc: Chem. Op. Comm. (2)
Marshman (2)
DMEA/SLC
Corres. file
Townsend
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 13 1958

DATE	INITIALS	CODE
2/13	C	220
2/14	[illegible]	800
2/14	[illegible]	500

224 New Customhouse
Denver 2, Colorado

February 10, 1958

Mr. James Quigley, President
Western Resources, Inc.
c/o Fabien, Clendenin, Moffat & Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA 4653 (Copper-Lead-Zinc)
Contract No. Idm-E1081
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah

Dear Mr. Quigley:

Enclosed are the Government's, Audit, Finance Office, and Field Team copies of a proposed TERMINATION AGREEMENT, which has been prepared in reference to your letter of December 2, 1957 to terminate Contract No. Idm-E1081, effective December 2, 1957.

If the proposed Termination Agreement is satisfactory, all copies are to be signed by an official of Western Resources, Inc. authorized to sign such an instrument, the signer's title inserted, the corporate seal affixed, and all copies promptly returned to this office; upon receipt of which the "Operator's Copy" will be forwarded to you.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer
DMEA Field Team, Region III

JWT:prl

cc: Chmn. Op. Comm. (2)
Harshman
DMEA SLC (Howes)
Corres. file
Townsend
Chron.

RECEIVED FEB 13 1958

DATE	INITIALS	CODE

Original signed by
W. H. KING

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/28	Klugescheid	500
	Kirsome	100
1/31	[illegible]	180
	Chandler	130
1/31	Johnson	130
		110
	Wintenberg	100
2/2	[illegible]	220
		500

FEB 3 1958

Mr. W. H. King
Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc.
Sunbeam Mine
Juab County, Utah
Contract No. Idm-K1081

Dear Mr. King:

With reference to your memorandum of January 14, 1958, we are enclosing the original and four copies of a Termination Agreement signed by the Administrator. We are also enclosing two extra copies of the agreement for the use of the Field Team.

If it meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. Otherwise, all copies should be returned with your recommendations.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

WPKlugescheid:ms 1/28/58
Copies: Docket
Admr. R. File
Oper. Com.
Mr. Bishop, USBM
Mr. Killsgaard, USGS
Chron.

Enclosures: 7

8623

DMEA F
(12-56

OFFICIAL FILE COPY

Date	Surname	Code

January 28, 1958

Memorandum for the Files:

From: W. P. Klugescheid, Division of Base Metals

Subject: Justification for Termination Agreement for Docket No. DMEA-4653, Western Resources, Inc., Sunbeam Mine, Juab County, Utah, Contract No. Idm-E1081 (Copper-Lead-Zinc)

The Operator requested the termination by mutual agreement.

The contract was for six diamond drill holes with a total of, not to exceed, 3,600 feet of drilling at a cost of $33,268.00, of which the Government Participation was to have been $16,634.00.

Hole No. 1 reached a depth of 590 feet and passed completely through the vein structure, or was deflected in it. Samples were taken and assayed from 529'-581' of depth. Assay results were as follows:

Depth	Au.	Ag.	Cu.	Pb.	Zn.	
529-536	Tr.	0.20	0.10			
536-549	Tr.	0.30	0.15			
549-552	0.03	2.10	0.10			
552-558	Tr.	0.10	0.15			
558-561	Tr.	0.20	0.15			Core samples in vein.
561-577	Tr.	0.30	0.20			
577-581	0.01	0.10	0.10			
534-536	0.02	1.00	0.90			
536-546	0.01	0.10	0.25	0.10	Tr.	In
546-554	0.01	0.10	0.20	0.10	Tr.	vein
554-563	0.01	0.10	0.30	0.10	Tr.	

8623

Hole No. 2 reached a depth of 763 feet and also passed completely through the vein structure. Sample results were as follows:

Depth	[illegible]	Ag.	Cu.	
625-629	[illegible]	0.50		
629-632	0.01	0.20		
634-637	Tr.	Tr.		
637-643	0.01	0.20		
643-645	0.01	0.20		
645-647	0.01	0.20		Core Samples
695-700	0.01	0.20	0.20	
700-705	0.01	0.30	0.20	In
705-712	Tr.	0.20	0.30	vein
712-715	Tr.	0.20	0.20	
715-722	Tr.	0.20	0.15	
	Sludge			
706-710	0.01	0.40	0.50	
710-712	0.01	0.30	0.20	In vein
712-716	0.01	0.30	0.20	

A total of 1353 feet of drilling was completed in the two holes at a cost of $12,184.87 of which amount the Government participation is $6,092.43. All of these figures are subject to audit.

Both holes encountered very weak mineralization below the water table. As hole No. 2 was drilled in what is considered one of the more favorable locations with negative results, the Field Team considers that further drilling is not justified and recommends that the Operator's request for termination be acceded to. The Field Team also recommends that no certification of discovery or development be made.

Almost all if not all of the ore extracted in the past has been from the oxide zone. The new drill holes would tend to show that the deposit below the water level is of little value.

W. P. Klugescheid

W. P. Klugescheid

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 27 1958

DATE		CODE
1-27	C	220
1/27		800
	King	500

224 New Customhouse
Denver 2, Colorado
January 24, 1958

Mr. D. Howe Moffat, Secretary
Western Resources, Inc.
c/o Fabien, Clendenin, Moffat & Mabey
Continental Bank Building
Salt Lake City, 1, Utah

Re: Docket No. DMEA-4653
(Copper-Lead-Zinc)
Contract Idm-E1081
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah

Dear Mr. Moffat:

Form MF-104, Operator's Monthly Report and Voucher, for the month of November, 1957, has been received in this office and is being processed for payment.

An amount of $500.00 is withheld from reimbursement pending resolution of matters prerequisite to closing the account, which include:

1. Final action by the Government on your request for termination of the contract in its present status without requiring performance of the balance of work provided for.

2. Release to this office of an Audit Report or Report of Review of the reported project costs by the Contract Administration and Audit Division, DMEA.

Yours very truly,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JDC:hmh
cc: Chmn. Op. Comm. (2)
Harshman
DMEA/SLC
Townsend
Corres.file, Reg. III
Chron

DMF Form 7
(1-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/20	Klugescheid	SD

500

January 20, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Preparation of Termination Agreement for the Docket No. DMEA-4653, Western Resources, Inc., Sunbeam Mine, Contract No. Idm-E1081, Lead-Zinc-Copper.

Will you please prepare a Termination Agreement for the cited project. The effective date will be December 2, 1957.

W. R. Griswold

W. R. Griswold.

WPKlugescheid/er
Copy to: Docket
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 16 1958

DATE	INITIALS	CODE
1-16	C	220
1-17	Klug	130
		500

January 14, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region ~~III~~

Subject: Docket No. DMEA 4653 (Lead-Zinc-Copper), Contract No. Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Enclosed are the original and two copies of a joint memorandum, dated January 6, 1958, from M. H. Howes, Mining Engineer, Bureau of Mines, and Frank B. Moore, Geologist, Geological Survey, pertaining to termination of the subject contract in its present status; termination of the contract upon completion of hole 2 leaving four holes not drilled.

Three copies of the Operator's letter of December 2, 1957, requesting termination of the contract, were forwarded with copies of the memorandum from this office, Dated December 4, 1957, to the field examiners requesting their recommendations.

The field examiners recommend termination of the contract in its present status and that no Certification of Discovery or Development be issued, in which this office concurs and further recommends that a suitable termination agreement be prepared, effective November 28, 1957.

W H King
W. H. King

Enclosures

WO

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 12, UTAH

DEPARTMENT OF THE INTERIOR
DMEA
JAN 9 - 1958
REGION III
DENVER, COLORADO

JAN 8 1958
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

January 6, 1958

Memorandum

To: W. H. King, Executive Officer, DMEA Field Team, Region III
Through: E. N. Harshman

From: M. H. Howes
Frank B. Moore

Subject: Docket No. DMEA-4653 (Copper-lead-zinc), Contract Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

On December 2, 1957, Western Resources, Inc., submitted a request for termination of contract. Since diamond drill holes No. 1 and No. 2 encountered nothing more promising than weak mineralization, the operator considers further exploration not worthwhile.

Total depth of diamond drill hole No. 2 is 763 feet. The hole was drilled in monzonite porphyry for its entire length. The first 600 feet of hole is in relatively unaltered porphyry. Slightly altered porphyry was encountered at about 606 feet and thin altered zones at 619 feet. A 2-inch seam of quartz and pyrite was cut at 625 feet. From 625 to 695 feet the hole passed through rather heavily altered material containing disseminated pyrite and thin seams of pyrite. The Sunbeam vein was intercepted between 695 and 715 feet and is heavily mineralized with quartz and pyrite. No copper, lead or zinc minerals are visible in the core. Altered porphyry, below the vein, extends to 745 feet. From 745 feet to the bottom of the hole, 763 feet, the porphyry is essentially fresh.

Since both diamond drill holes encountered only weak mineralization in the Sunbeam vein below the water table, and because diamond drill hole No. 2 was presumably drilled at one of the more favorable locations with negative results, further drilling does not appear to be justified at this time.

It is therefore recommended that the operator's request for termination of contract be granted.

It is further recommended that no certification of discovery or development be made on property of Western Resources, Inc. (Sunbeam mine).

M. H. Howes
M. H. Howes

Frank B. Moore
Frank B. Moore

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

January 14, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4653 (Copper-Lead-Zinc), Contract No. Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Enclosed are the original and one copy of a final engineering and geologic report submitted by the Operator pertaining to work completed under the subject contract.

W. H. King

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 16 1958

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1/17	[illegible]	500

WO

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 12, UTAH

WHK

DMEA
DEPARTMENT OF THE INTERIOR
JAN 10 1958
REGION III
DENVER, COLORADO

January 9, 1958

Memorandum

To: W. H. King, Executive Officer, Field Team, Region III

From: M. H. Howes

Subject: Docket No. DMEA-4653 (Copper-lead-zinc), Contract Idm-E1081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Transmitted herewith are 5 copies of the subject operator's final engineering and geologic report.

M. H. Howes

M. H. Howes

Enclosure

cc: J. B. Clemmer

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DMEA
RECEIVED JAN 16 1958

DATE	INITIALS	CODE

WESTERN RESOURCES, INC.

December 11, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JAN 10 1958
REGION III
DENVER, COLORADO

Operator's Final Rpt.

Mr. E. H. Harshman
Acting Field Executive Officer
DMEA
224 New Customshouse
Denver 2, Colorado

Ref: (a) Docket DMEA 4653 (copper, lead, zinc) Contract Idm E1081 Western Resources, Inc. (Sunbeam Mine) Juab County, Utah

(b) Basic outline for operators final report on completed or terminated DMEA Projects.

Dear Mr. Harshman:

As outlined in previous correspondence the diamond drill results at the Sunbeam property have not revealed sufficient results to encourage additional expenditures for further drilling. On this basis the following data is being submitted as a final report for a terminated contract:

1. (a) Contract No.

DMEA 4653 Copper, lead, zinc
Contract Idm-E1081
Western Resources, Inc. (Sunbeam Mine)
Juab County, Utah

(b) Name of Operator

Mr. D. Howe Moffat, Secretary
Western Resources, Inc.
% Fabien, Clendenin, Moffat and Mabey
Continental Bank Building
Salt Lake City 1, Utah

(c) Name and Location of Property

Sunbeam Mine, Tintic Mining District
Juab County, Utah

2. (a) Outline of Work

This project was derived to explore for ores of lead, zinc and copper by diamond drilling six holes approximating 600 feet in depth and not to exceed 3600 feet of drilling. Work in addition to drilling and pertaining to the contract consisted of bulldozing drill sites, supervision of drilling and preparation of drill results, as specified in Exhibit "A" of the contract.

(b) Estimated Cost of Project

Total cost of project was estimated at $33,268.00, government participation at 50% amounting to $16,634.00.

3. (a) Outline of Work Completed

Completed work consisted of bulldozing two drill sites and drilling two diamond drill holes to an intersection with the Sunbeam vein. A total of 1353 feet of drill hole was completed and ore was logged, sampled and assayed, required reports and maps submitted.

(b) Cost of Project

Total cost of work amounts to $12,184.87 of which $6,068.93 is government costs on a 50% participation basis.

4. (a) Working Dates

Preparatory work consisting of excavating for drill sites was started July 19, 1957 and diamond drilling commenced July 26, 1957. Diamond Drill Hole No. 2 was completed November 26, 1957 and equipment was demobilized November 28, 1957.

(b) Description Completed Work and Results

The Sunbeam vein was intersected with two diamond drill holes which revealed only sparce mineralization and no ore of economical value. Consequently it was deemed advisable to discontinue additional drilling and request termination of the contract.

(c) Enclosures

Maps, including sections, and logs of drill holes are enclosed for incorporation with this final report.

Yours truly,

Western Resources, Inc.

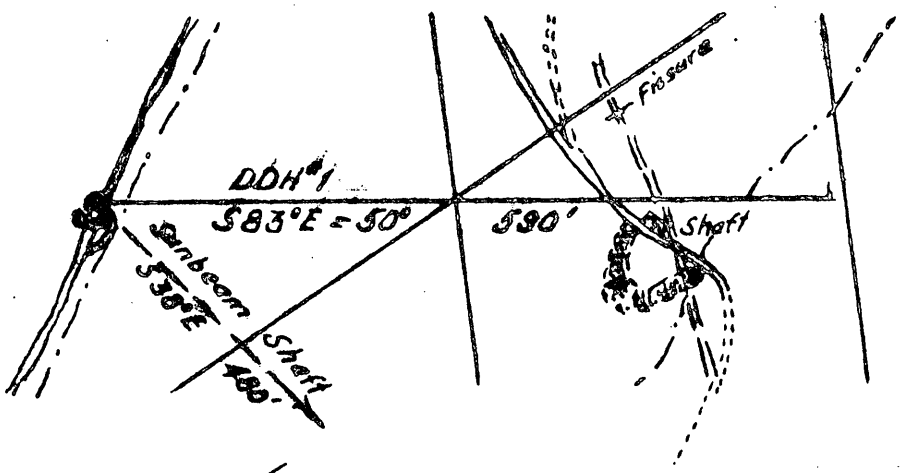
James Quigley

James Quigley, President

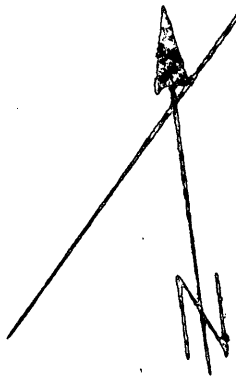
JQ/ce

WESTERN RESOURCES INC.

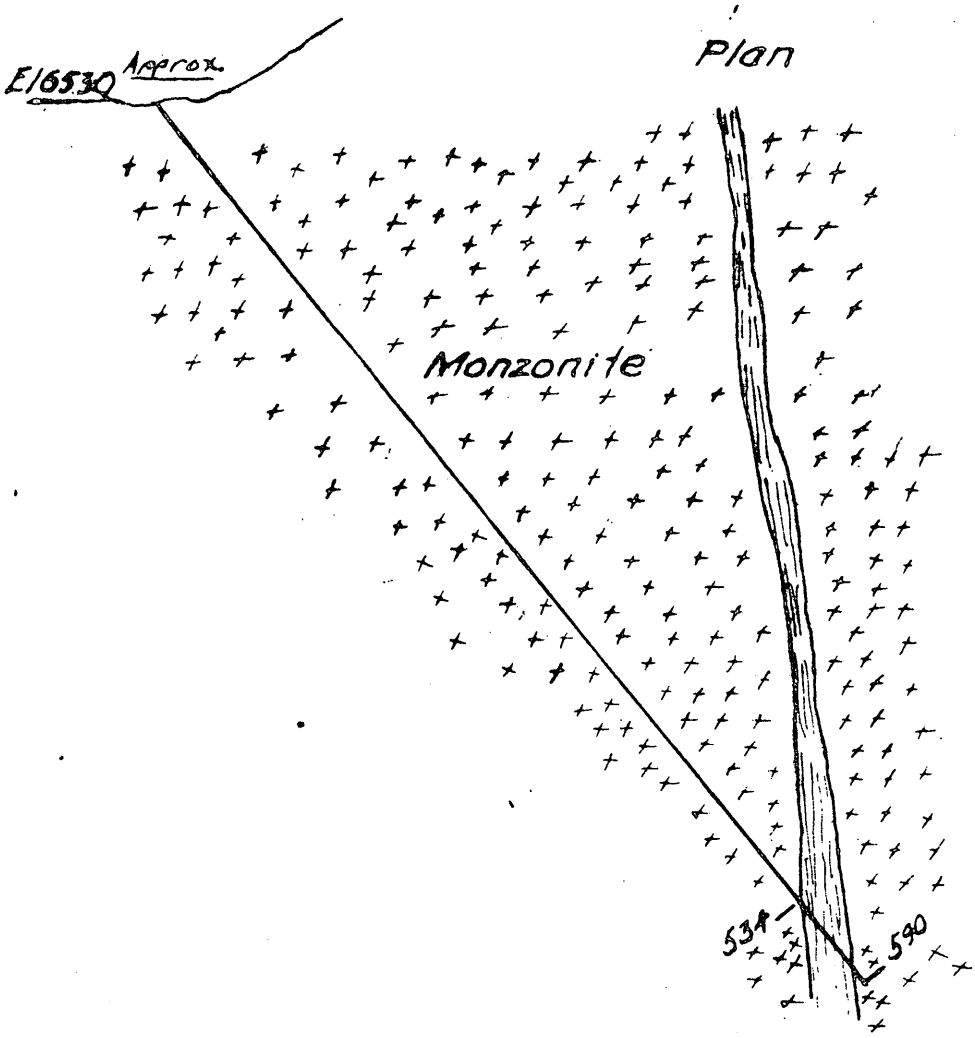
DDH #1 SUNBEAM TINTIC DISTRICT, UTAH SEPT. 1957



Triangle



Plan



Section S83°E

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 16 1958

DATE	INITIALS	CODE

SUNBEAM LOG DDH #1

Date Started: July 26, 1957 Depth Hole 590 ft.

Date Finished: September 26, 1957

0 - 120.5	Plugged Bit.
120.5 - 147	Monzonite.
147 - 148	Small quartz fissure - Quartz and pyrite.
148 - 154	Monzonite - Quartz and pyrite.
154 - 167	Monzonite.
167 - 188	Monzonite - Dark mineral (magnitite) Fine grained pyrite.
188 - 193	Monzonite at 190 - Small 1/8" quartz stringers Fine grained pyrite.
193 - 225	Monzonite - Quartz and pyrite in vug holes Increased alteration of monzonite.
225 - 259	Monzonite - At 225 small quartz veinlets Pyrite mineralization.
259 - 277	Monzonite - With decreasing amount of Biotite.
277 - 304	Monzonite increased alteration.
304 - 324	Monzonite - Disseminated fine grained pyrite.
324 - 405	Monzonite - Scattered pyrite.
405 - 482	Monzonite at 482 - Increased in amount of quartz.
482 - 526	Monzonite - Increased silification and pyrite.
526 - 534	Monzonite - Quartz and pyrite.
534 - 554	Fissure - Quartz monzonite, pyrite scattered chalco pyrite.

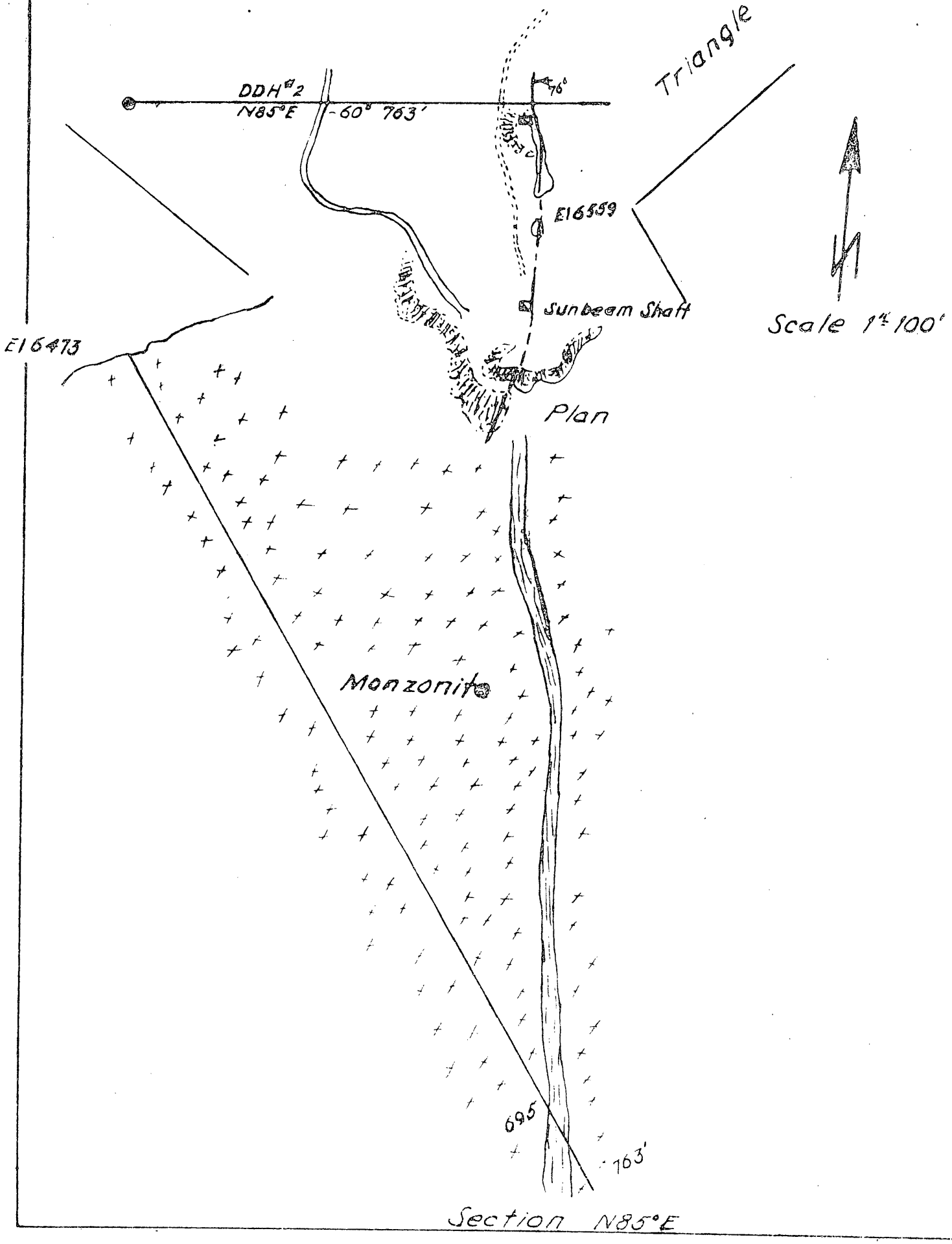
	Small stringers sphalerite and minor amount Pbs.
554 - 557	Fissure material altered monzonite - Minor amount mineralization at 557 1" fissure quartz and pyrite.
557 - 569	Fissure altered monzonite - Quartz stringers pyrite and Biotite.
569 - 581	Fissure - Altered monzonite - Some quartz and pyrite.
581 - 585	Altered broke quartz - Monzonite.
585 - 590	Monzonite - Fresh decrease in alteration.
End Hole	

Assays

Depth	Au	Ag	Cu	Pb	Zn
529 - 536	Tr	0.20	0.10		
536 - 549	Tr	0.30	0.15		
549 - 552	0.03	2.10	0.10		
552 - 558	Tr	0.10	0.15		
558 - 561	Tr	0.20	0.15		
561 - 577	Tr	0.30	0.20		
577 - 581	0.01	0.10	0.10		
Sludge					
534 - 536	0.02	1.00	0.90		
536 - 546	0.01	0.10	0.25	0.10	Tr
546 - 554	0.01	0.10	0.20	0.10	Tr
554 - 563	0.01	0.10	0.30	0.10	Tr

WESTERN RESOURCES INC.

DDH #2 SUNBEAM TINTIC DISTRICT, UTAH NOV. 1957



SUNBEAM LOG DDH #2

Date Started: September 28, 1957 Depth Hole 763 ft.

Date Finished: November 27, 1957

0 - 369	Plugged Bit.
369 - 373	Monzonite.
373 - 455	Plugged Bit.
455 - 501	Monzonite.
@ 501	Quartz fissure 1" - No mineralization.
501 - 599	Monzonite - Fine grained pyrite - Biotite.
@ 599	4" Quartz fissure - No mineralization.
599 - 695	Monzonite - Fine grained pyrite At 680 monzonite altered clay appearance.
695 - 705	Fissure - Quartz large crystals pyrite - No commercial mineralization.
705 - 716	Fissure - Quartz pyrite.
716 - 745	Monzonite - Altered fine grained pyrite.
745 - 763	Monzonite - Altered.

Assays (Core)

Footage	Au	Ag	Cu	Pb	Zn
625 - 629	0.01	0.50			
629 - 632	0.01	0.20			
634 - 637	Tr	Tr			
637 - 643	0.01	0.20			

Footage	Au	Ag	Cu	Pb	Zn
643 - 645	0.01	0.20			
645 - 647	0.01	0.20			
695 - 700	0.01	0.20	0.20		
700 - 705	0.01	0.30	0.20		
705 - 712	Tr	0.20	0.30		
712 - 715	Tr	0.20	0.20		
715 - 722	Tr	0.20	0.15		
706 - 710	0.01	Sludge 0.40	0.50		
710 - 712	0.01	0.30	0.20		
712 - 716	0.01	0.30	0.20		

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 6 1957

DATE	INITIALS	CODE
12/6	C	220
12/6	[illegible]	800
12/9	[illegible]	500
	[redacted]	

224 New Customhouse
Denver 2, Colorado

December 4, 1957

Memorandum

To: E. N. Harshman - w/enclosure
DMEA/SLC-Howes " "

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4653 (Copper-Lead-Zinc), Contract No. Idm-21081, Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Enclosed is a copy of the Operator's letter of December 2, 1957 with attached assay returns, which constitutes a request for termination of the contract upon completion of hole No. 2, leaving four holes not drilled.

Please submit a joint memorandum report of your recommendations relative to terminating the contract and containing recommendations relative to the issuing of a Certification of Discovery or Development as a result of the work performed.

Original signed by
W. H. KING

W. H. King

JWT:prl

cc: Chan. Op. Comm.-3) w/copy of
Harshman-lextra) Operator's
Corres. file) letter.
Townsend
Chron.

WESTERN RESOURCES, INC.

DMEA
DEPARTMENT OF THE INTERIOR
DEC 4 - 1957
REGION III
DENVER, COLORADO

December 2, 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse
Denver 2, Colorado

Re: Docket DMEA 4653 (Copper, Lead, Zinc)
Contract Idm-E1081
Western Resources, Inc.
(Sunbeam Mine)
Juab County, Utah

Dear Mr. Harshman:

In reference to your letter of November 15 regarding the date fixed for completion of our contract, we have decided to request termination of this contract rather than extension. Our hole No. 2 cut 22 feet of quartz from 694 to 716, heavy mineralized with pyrite, with no visable lead, zinc or copper. Copies of the assay certificates are enclosed. We believe that this intersection means that the Sunbeam vein is not worth further prospecting. Mr. Howes and Mr. Moore of the USGS will be out to inspect the cores this week and we are certain that they will concur with this opinion.

Very truly yours,

Western Resources, Inc.

James Quigley

James Quigley, President

JQ/ce

Encls: 2

DMEA
RECEIVED DEC 2 1957

12/2 C 220
12/9 CEW 800
~~12/13 KMG~~ 500

224 New Customhouse
Denver 2, Colorado

November 26, 1957

Mr. D. Howe Moffat, Secretary
Western Resources, Inc.
c/o Fabian, Clendenin, Moffat and Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket DMEA-4653 (Copper, Lead, Zinc)
Contract Idm-E1081
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah

Dear Mr. Moffat:

Form MF-104, Operator's Monthly Report and Voucher, for September 1957, is being processed for payment.

Exhibit "A" of the contract specifies that samples shall be assayed for zinc, lead, copper and silver. Of the 39 determinations reported, 10 were for gold which are not allowable for payment under the terms of the contract. Of the 29 remaining determinations, only the 12 allowable and applicable to the 3 sludge samples are acceptable. The balance of the samples have not been analyzed for lead and zinc; therefore, payment for determinations made thereto is disallowed. Reimbursement will be made when these samples have been analyzed for lead and zinc and the results made known to the Government.

You will be further advised of the disallowance by means of an Administrative Audit Difference Statement, which will be forwarded to you by the Finance Office, Region III. Please make the necessary adjustments of units and costs on the next reports submitted on Forms MF-104 and MF-104A. No units of work are to be reported until you have complied with the contract requirements regarding the work.

Very truly yours,

Original signed by
E. N. HARSHMAN

E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

MHM:jy
cc: Chm. Op. Comm. (2)
DMEA, SLC
Harshman (2)
Townsend
Corres. E1081
Chron.

11/21 C 220
11/25 800
11/25 500

224 New Customhouse
Denver 2, Colorado
November 15, 1957

Mr. D. Howe Moffat, Secretary
Western Resources, Inc.
c/o Fabien, Clendenin, Moffat and Mabey
Continental Bank Building
Salt Lake City, 1, Utah

Re: Docket DMEA 4653 (Copper, Lead, Zinc)
Contract Idm-E1081
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah

Dear Mr. Moffat:

The date fixed for completion of the work provided for under Contract Idm-E1081 is November 30, 1957. If, for reasons beyond your control, it will not be possible to complete the work by November 30, 1957, you should submit to this office for consideration by the Government, the original and five copies of a request for extension of the completion date for such specific additional time as you anticipate will be required.

Yours very truly,

Original signed by
E. N. HARSHMAN

E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
Harshman (2)
Townsend
Corres.file, Reg. III
Chron
DMEA/Slc

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RECEIVED NOV 18 1957

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224 New Customhouse
Denver 2, Colorado
November 15, 1957

Mr. D. Howe Moffat, Secretary
Western Resources, Inc.
c/o Fabien, Clendenin, Moffat and Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket DMEA 4653 (Copper, Lead, Zinc)
Contract Idm-E1081
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah

Dear Mr. Moffat:

Form MF-104, Operator's Monthly Report and Voucher, for September, 1957, has been received in this office. The report is not complete as it does not contain the necessary lithologic log, plan map, and section as required by the contract under Exhibit "A", Description of the Work.

Please submit the above required data to this office, as soon as possible in order that the September, 1957, Voucher may be processed for payment of the Government's percentage of the acceptable costs.

Yours very truly,

Original signed by
E. N. HARSHMAN
E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

JDC:hmh

cc: Chmn. Op. Comm. (2)
Harshman (2)
DMEA, SLC
Townsend
Corres. file, Reg. III
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

July 18, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE
7/22	P.K.	220
7/29	RB	215
~~7/29~~	~~Klug.~~	~~500~~

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4653 (Copper-Lead-Zinc), Contract No. Idm-E1081
Western Resources, Inc. (Sunbeam mine) Juab County, Utah

Enclosed are the Government's, Division, and Audit copies of Exploration Project Contract No. Idm-E1081, which were forwarded by your letter of April 25, 1957, for signature by the Operator after insertion under Article 3 of the appropriate starting and completion dates, and attachment of executed Consent to Lien forms. Also enclosed are three sets of data clarifying the Elmer Ray lode claim, Lot No. 66, as mentioned in the fourth paragraph of your letter of April 25.

In addition, we are enclosing three copies of a letter from this office, dated July 18, 1957, whereby we forwarded the "Operator's Copy" of the contract, blank report forms, and instructions relative to reporting on work performed and corresponding with this office pertaining to operations under the contract.

The contract, dated April 25, 1957, provides for work estimated to cost $33,268.00, toward which the Government will contribute 50%, or an amount not in excess of $16,634.00.

Copies of the contract have been distributed to the Finance Office, Region III, and to others concerned.

W H King
W. H. King

Encls.

224 New Customhouse
Denver 2, Colorado

July 18, 1957

CERTIFIED MAIL

Mr. D. Howe Moffat, Secretary
Fabian, Clendenin, Moffat and Mabey
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket DMEA-4653 (Copper-Lead-Zinc)
Contract No. Idm-M1081
Western Resources, Inc.
(Sunbeam mine) Juab County, Utah

Dear Mr. Moffat:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract No. Idm-M1081, Docket No. DMEA-4653.

Also enclosed are six copies of Form MF-104, "Operator's Monthly Report and Voucher," and six copies of Form MF-104A, "Operator's Unit Cost and Progress Report." At the end of the first calendar month after work is commenced, and monthly thereafter, you are required to submit the original and four copies of each form to the

Defense Minerals Exploration Administration
1600 East First South Street
Salt Lake City 1, Utah

The extra copy is for your records.

Forms MF-104 and MF-104A are to be combined into five sets of one of each form. Each set of the combined forms is to be accompanied by a map or sketch showing the location and extent of work performed and a signed narrative report which describes the work performed, conditions encountered, and results of the work. The monthly accounting report will not be processed for reimbursement unless it is accompanied by a signed narrative report and other required or pertinent data. Additional copies of Forms MF-104 and MF-104A will be forwarded to you each month on receipt of your report for the prior month.

For your information, and in reply to many questions that have been asked, after Forms MF-104 and MF-104A are received, an engineer will check progress on the project and review your accounts, after which the report forms will be forwarded to this office for administrative examination and vouchering. If the report is in order, a check will be issued by the Treasury

Department for the Government's portion of the approved costs. If you have any difficulty in completing these forms and the reports, please call on this office for assistance.

In the matter of your claim for reimbursement of drilling costs under the terms of the contract, reimbursement to you will be on the basis of a hole or holes completed to the objective, which has, or have been drilled in compliance with all provisions as outlined under the "Description of the Work" section of Exhibit "A" of the contract. Therefore, your monthly report should include only such holes which are completed to that extent, and the required drilling and sampling records pertaining to the completed hole or holes made a part of your claim for reimbursement.

The contract is prepared on form NF-200, and under its provisions and as outlined in Exhibit "A" of the contract, the allowable costs are a combination of actual costs with a maximum average unit cost established for work under Category (1) and fixed unit costs for performing the remaining items of work or services. Under the provisions of Exhibit "A", the work under Category (1) is to be performed by subcontract. The costs recorded under item (1) on Form NF-104 for such work must be supported each month by a signed or certified copy of the billing from the subcontractor. Amounts reported on the basis of the "Fixed Unit Costs" require no documentation, as they are otherwise verified.

In the event you desire to perform the work under Category (1) on company account instead of subcontracting it, as provided in the contract, it will be necessary that you request and obtain an appropriate amendment to the contract before reimbursement can be made to you for the Government's portion of the allowable incurred costs.

Your requests to this office for work approval, changes in the contract, or any other communication pertaining to operations under the contract, must be in writing, of which please supply the original and five copies, each copy complete with maps or other pertinent data. Each request for action by this office must pertain to one matter only. Such requests are <u>not</u> to be incorporated in your narrative report accompanying monthly progress report Forms NF-104 and NF-104A.

The locations of the holes to be drilled are indicated as approximate on the map, "Fig. 2," attached to the contract. In that regard, your attention is specifically directed to the first paragraph of Exhibit "A", captioned "Description of the Work," which stipulates therein that the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval. The DMEA representative in Salt Lake City has been instructed to visit the project in conjunction with the aforementioned required prior Government approval of the work.

No oral statement of any person shall be construed to modify or change the terms of the contract. Field representatives of the Government are not authorized to approve any changes in the work program or contract provisions. Such approval can only be given by the Washington Office, DMEA, or by the DMEA Field Team, Region III.

It is a regulation that reimbursement for the cost of work accomplished prior to the date of the contract will not be allowed. It is a requirement and imperative that you notify this office in writing the date work actually commences under the contract, with a copy of your letter to the Defense Minerals Exploration Administration, 1600 East First South St., Salt Lake City 1, Utah.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

Encls.

P.S. - Also enclosed are two blank copies of an exploration project contract, form MF-800, as requested in your letter of July 16, 1957.

JWT:bh
cc-Chairman, Op. Comm. (3)
Finance Office, Reg. III
Amendment File, Reg. III
Marshman (2)
DMEA/SLC
Townsend
Corres. File E-1081
Chron.

HAROLD P. FABIAN
BEVERLY S. CLENDENIN
D. HOWE MOFFAT
RENDELL N. MABEY
PETER W. BILLINGS
SANFORD M. STODDARD
ALBERT J. COLTON
O. WEBSTER ADAMS, JR.
K. JAY HOLDSWORTH
RICHARD H. MOFFAT

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

June 18, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JUN 20 1957
REGION III
DENVER, COLORADO

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

Re: Docket No. DMEA-4404 (Copper-Lead-Zinc)
Flare Mining Company
Sunbeam Mine
Juab County, Utah

Gentlemen:

We are enclosing herewith original and four copies of Consent To Lien and Subordination Agreement executed by New United Sunbeam Mining Company. Relative to the description in the lease wherein one of the claims is described as the West Elmer Ray Claim Lot 66, I have procured from J. W. Gallivan, Secretary of New United Sunbeam, letter of explanation, photo copies of which are enclosed. It seems clear that the name by this letter is amended to read "Elmer Ray Claim Lot 66", and not the West Elmer Claim.

If anything further is required please advise.

Very truly yours,

D. Howe Moffat

D. Howe Moffat

DHM:abc

enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 22 1957

DATE	INITIALS	CODE

OFFICIAL FILE COPY
DMEA
RECEIVED 1957

DATE	INITIALS	CODE

KEARNS-TRIBUNE CORPORATION
KEARNS BUILDING
SALT LAKE CITY, UTAH

June 18, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JUN 20 1957
REGION III
DENVER, COLORADO

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat & Mabey
Continental Bank Building
Salt Lake City 1, Utah

Dear Mr. Moffat:

By unanimous approval of the Board of Directors of New United Sunbeam Mining Company, that certain Agreement between New United Sunbeam and Flare Mining Company, dated July 1, 1956, is hereby amended by striking the word "West" from the descriptions of the Elmer Ray Lode mining claim "Lode 66."

According to our records, this Agreement has been assigned to Western Resources.

Sincerely yours,

NEW UNITED SUNBEAM MINING CO.

By M. Gillespie
Secretary

HAROLD P. FABIAN
BEVERLY S. CLENDENIN
D. HOWE MOFFAT
RENDELL N. MABEY
PETER W. BILLINGS
SANFORD M. STODDARD
ALBERT J. COLTON
O. WEBSTER ADAMS, JR
K. JAY HOLDSWORTH
RICHARD H. MOFFAT

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

July 17, 1957

DMEA
EPARTMENT OF THE INTERIOR
JUL 19 1957
REGION III
DENVER, COLORADO

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

7/25 P.K. 220
7/25 Eng 800
7/25 Kleg. 500

Attention: Mr. W. H. King
Executive Officer, DMEA
Field Team, Region III

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc. (Sunbeam mine)
Juab County, Utah
Proposed Exploration Project Contract Idm-E1081
(Prepared on the basis of application submitted by Flare Mining Co., Docket No. DMEA-4404)

Dear Mr. King:

Please be advised that Western Resources, Inc. has commenced work in preparation of the drill sight, pursuant to the above loan.

Very truly yours,

D. Howe Moffat

DHM:abc

7-19-57 Copies distributed to: Chm. op. comm. (2)
Haralimon (2)
Dmea, SLC
Townsend
Corres.

HAROLD P. FABIAN
BEVERLY S. CLENDENIN
D. HOWE MOFFAT
RENDELL N. MABEY
PETER W. BILLINGS
SANFORD M. STODDARD
ALBERT J. COLTON
O. WEBSTER ADAMS, JR.
K. JAY HOLDSWORTH
RICHARD H. MOFFAT

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

HMC
Files

7/17 P.K. 220
7/17 King - 500

July 12, 1957

DMEA
DEPARTMENT OF THE INTERIOR
JUL 15 1957
REGION III
DENVER, COLORADO

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention W. H. King

Re: Docket DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc. (Sunbeam mine)
Juab County, Utah
Proposed Exploration Project Contract
Idm-E1081
(Prepared on the basis of application submitted by Flare Mining Co., Docket DMEA-4404)

Dear Mr. King:

I received your favor of July 21, enclosing proposed exploration project contract in connection with the above matter. I sent the same to Jim Quigley at Eureka on the 25th by certified mail. Mr. Quigley was sick with the flu and has recently been able to get around. I saw him today for the first time and he tells me that he has not seen the proposed exploration project contract. I gave him the name of the employee who signed for the same and I have every reason to believe that Mr. Quigley will locate the contracts in which event they will be returned to me on Monday and I will promptly forward same to you.

Very truly yours,

D. Howe Moffat

D. Howe Moffat

DHM:hr

7/15/57
Copies distributed to:
Chmn. of Comm. (3)
Horchman (2)
DMEA/SLC
Townsend

224 New Customhouse
Denver 2, Colorado

July 10, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE
7/15		220
7/15	King	500

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat and Mabey
Attorneys and Counselors at Law
Continental Bank Building
Salt Lake City, Utah

Re: Docket DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc. (Sunbeam mine)
Juab County, Utah
Proposed Exploration Project Contract
Idm-E1081
(Prepared on the basis of application
submitted by Flare Mining Co.,
Docket DMEA-4404)

Dear Mr. Moffat:

By certified mail, dated June 21, 1957, we forwarded to you the Government's, Division, Audit, Finance Office, and Field Team copies of Proposed Exploration Project Contract Idm-E1081 for signature by an official of Western Resources, Inc. authorized to sign such an instrument and prompt return of all copies to this office.

As the executed copies of the contract have not been returned, your attention is directed to the provision under Article 3 of the contract form that work must be started on or before July 15, 1957.

Under the circumstances, we will appreciate advice from you by return mail as to your plans relative to performing the work provided for in the contract.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

JWT:jy
cc: Chm. Op. Comm. (2)
Harshman (2)
DMEA, SLC
Townsend
Docket
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 24 1957

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224 New Customhouse
Denver 2, Colorado

CERTIFIEDLD MAIL

June 21, 1957

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat and Mabey
Attorneys and Counselors at Law
Continental Bank Building
Salt Lake City, Utah

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc.
(Sunbeam mine)
Juab County, Utah
Proposed Exploration Project Contract Idm-E1081
(Prepared on the basis of application submitted by Flare Mining Co., Docket No. DMEA-4404)

Dear Mr. Moffat:

Enclosed are the Government's, Division, Audit, Finance Office, and Field Team copies of Proposed Exploration Project Contract No. Idm-E1081, which has been prepared pursuant to an application for Government assistance in exploration work under the Defense Minerals Exploration Administration program.

If the contract is satisfactory, all copies are to be signed by an official of Western Resources, Inc., authorized to sign such an instrument, the signer's title inserted, the signature attested to by the Secretary of the corporation, the corporate seal affixed, and all copies promptly returned to this office.

In the event the contract is not satisfactory, all copies are to be returned promptly to this office, together with your comments on or objections to the contract.

Your attention is especially directed to three provisions in the contract:

1. The Government will not contribute to the costs of any of the work that is provided for in the contract which is performed prior to the date of the contract.

2. The contract requires completion of the exploration work by the date fixed therefor. Approval must be obtained from this office for any suspension of work which may result in failure to complete the work by the date specified.

3. Royalty is due the Government on all production from the land described in the contract, beginning on the date of the contract.

If the contract is satisfactory, and upon return of all copies properly signed, the "Operator's Copy" of the contract will be forwarded to you, together with blank report forms and instructions relative to reporting on work performed under the contract. Also, instructions will be given as to the procedure to be followed in corresponding with this office in matters concerning operations under the contract.

Very truly yours,

Original signed by
W. H. KING

W. H. King
Executive Officer, DMEA
Field Team, Region III

Enclosures
JWT:jy
cc: Chm. Op. Comm. (2)
Harshman (2)
DMEA/SLC
Townsend
Docket 4653
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 2 1957

DATE		CODE
5/2	C	220
5/2	Klug	500

224 New Customhouse
Denver 2, Colorado

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat & Mabey
Attorneys and Counselors at Law
Continental Bank Building
Salt Lake City 1, Utah

Re: Docket No. DMEA 4653
(Copper-Lead-Zinc), Western Resources, Inc.
(Sunbeam mine), Juab County, Utah -
Proposed Exploration Project Contract
No. Idm-E1081 (Prepared on the basis of
Application by Flare Mining Company,
Docket No. DMEA 4404)

Dear Mr. Moffat:

We have at hand proposed Exploration Project Contract No. Idm-E1081, final processing of which is contingent on receipt of executed Consent to Lien and Subordination Agreement pertaining to the ground to be subordinated under the Contract.

In conjunction with the matter, enclosed are the original and six copies of Form MF-205, "Consent to Lien and Subordination Agreement," which are to be signed by an official of New United Sunbeam Mining Company authorized to sign such an instrument, the signer's title inserted, the New United Sunbeam Mining Company's address affixed, the signer's signature attested to by the Secretary of the Company, and, if such is in existence, the corporate seal affixed. After being properly executed, the original and five copies of the Form are to be promptly returned to this office.

It is requested that a matter pertaining to the property involved be clarified at the time the executed copies of the Consent to Lien are returned. The partial map of the claims of the Tintic District, as well as the map prepared for Flare Mining Company by Centennial Development Company, both show the Elmer Ray claim as being Lot No. 66. However, the Lease Agreement, dated July 1, 1956, between New United Sunbeam Mining Company and Flare Mining Company, lists the West Elmer Ray lode as Lot No. 66 and the Lease does not list the Elmer Ray lode.

If the West Elmer Ray lode Lot No. 66 as listed in the Lease Agreement was intended to be the Elmer Ray lode Lot No. 66, then the Lease Agreement should be amended to correct the error and four copies of the Amendment forwarded to this office.

It is necessary that a date be inserted in the Contract, on or before which you will commence work. Therefore, when the executed Consent to Lien and Subordination Agreement forms are returned to this office, please advise the necessary lapse of time after you receive the Contract before you will be able to start work.

Very truly yours,

Original signed by
E. N. HARSHMAN

E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III

Enclosures

JWT:prl

cc: Chairman, Op. Comm. (2)
Harshman (2)
Wilson
Townsend
Docket
Chron.

DMEA Form 7
(12-56)

500

OFFICIAL FILE COPY

Date	Surname	Code
4/23	Hugeschard	500
4/23	Ashton	500
4-24	Chambers	800
4/24	Selbridge	130
"	Johnson	110
"	Rutherford	100
4/25	C	220
		500

APR 25 1957

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-4653 (Copper-Lead-Zinc)
Western Resources, Inc.
Sunbeam Mine
Juab County, Utah

Dear Mr. Harshman:

Enclosed are the original and five copies of a proposed long-form contract for the cited project, signed by the Administrator, Defense Minerals Exploration Administration. It consists of the form, Annex I (2 pages), Exhibit "A" (3 pages), one map, and the Consent to Lien and Subordination Agreement. We are also enclosing two extra copies of Annex I, Exhibit "A", and the map for the use of the Field Team.

It will be necessary to insert in the contract, in the spaces provided therefor under Article 3, the date when the Operator shall begin the contract work and also the date of completion of the work.

You will note that the Consent to Lien is so worded that it also serves as an acceptance of the assignment. No other acceptance of the assignment by the owners has ever been received, and there is a clause in the supplementary agreement with the Flare Mining Company, dated July 12, 1956, which requires the consent of the owners to any assignment.

The partial map of the claims of the Tintic District, as well as the map prepared for Flare Mining Company by the Centennial Development Company, both show the Elmer Ray claim as being Lot No. 66. The lease lists the West Elmer Ray lode as Lot No. 66, which would appear to be an error. The Legal Division thinks that this should be clarified and, if necessary, the lease should be amended.

8623

The costs, as presented by Mr. Howes, adhered to the Sprague & Henwood bid in all details except those pertaining to drilling with coring bits. The costs in the contract conform to those of the Sprague & Henwood bid.

You should first present the Consent to Lien and Subordination Agreement for signature. After it has been properly executed, and if the proposed contract meets with your approval, kindly present it to the Applicant for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the contract is not satisfactory, and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures

APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

WPKlugescheid/bjl (4/23/57)

Copy to: Docket
Admr. R. File
Op. Committee
Mr. Bishop
Mr. Kiilsgaard
Chron.

P.S.

Suggest completion date be set at 8 months from date of contract.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

APR 16 1957

Memorandum

To: The Administrator, DMEA
Attention: Chief, Base Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4653, Western Resources, Inc. (Lead-Zinc-Copper)

As requested in Mr. Griswold's memorandum dated April 3, we have prepared the attached contract.

It should be noted that the rights to use the surface of the Empire claims extends for only one year from November 1956.

It should also be noted that the Silver Moon claim is not included in the contract, notwithstanding the earlier references thereto in the docket.

Of course, the Consent to Lien and Subordination Agreement of lessor is required, and we have prepared the attached form for your use, as requested in Mr. Griswold's memorandum. This consent is necessary for the additional reason that the supplemental royalty-stock agreement between Flare and Sunbeam requires consent of Sunbeam to assignment of the lease.

The United Sunbeam lease refers to "The West Elmer Ray," Lot No. 66, but the map and Field Team Report refer to "Elmer Ray" as Lot No. 66. This should beclarified, and if necessary the lease should be amended.

Robert P. Dwyer

Robert P. Dwyer

Attachment

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

April 3, 1957.

Memorandum for the Files

From : W. P. Klugescheid, Base Metals Division

Subject: Changes in Costs in proposed contract from those submitted by the Field Team. Docket No. 4653, Western Resources, Inc., Sunbeam Mine, Juab County, Utah (Copper-Lead-Zinc)

The Field Team adherred to the costs given in the bid by Sprague & Henwood in all details except those given for drilling with core bits. There was no explanation for the departure from these so we have used the figures from the bid.

This is a small project and the costs for sample bucking, truck repairs were eliminated. The accounting cost was cut to $125.00 per month.

The gold values were very low in almost all of the assays submitted in the application so we have not required gold assays during the project.

W. P. Klugescheid

W. P. Klugescheid

In FLARE MINING COMPANY, DOCKET NO. DMEA-4404 we have:

The lease agreement between New UnitedmSunbeam Mining Company and Flare Mining Company. The lease is for one year and is renewable until seven years have elapsed. Signed by Flare 7/2/56, and by Sunbeam 7/12/56.

A supplementary agreement between the same parties as above dated 7/12/56. This states that an assignment of the lease cannot be made without the written consent of the lessors.

The Field Examination Report approving the Flare proposal, dated January 14, 1957.

Bids by Diamond Drill contractors--Boyles Brothers and by Sprague & Henwood.

An agreement between Empire Mines Company and Western Resources Inc., permitting drilling from the Home Rule, Garnet, and Guardian claims into the Sunbeam vein. Dated November 1, 1956.

A teletype from the field asking what to do about Western Resources Inc. It states that Western Resources Inc., wishes to adopt the original Flare project.

A teletype to the field giving instructions concerning the above.

A withdrawal of the Flare application, dated Febraary 12, 1957.

In WESTERN RESOURCES INC., DOCKET NO. DMEA-4653 we have:

Western Resources Inc., applica tion which differed from the original Flare Aplication. This was finally abandoned.

A copy of the withdrawal of the Flare application-DMEA-4404, dated February 12, 1957.

A copy of the lease agreement between Flare and Sunbeam.

There is no copy of the supplementary agreement between Flare and Sunbeam which contains the clause requiring written permission to transfer the lease from the lessors.

A copy of the assignment of lease from Flare to Western Resources Inc.

A copy of a procedure for permitting work on the Silver Moon claim. (What about the legality of this). Rubin said as good as any.

A copy of the teletype instructing the field about what procedure is necessary for Western Resources Inc.

NOTE.

Copy of Agreement between EMPIRE MINES COMPANY and WESTERN RESOURCES, INC., concerning the HOME RULE, GARNET, and the GUARDIAN CLAIMS for permission to drill into the Sunbeam Vein from them will be found as APPENDIX II of the Field Team Examination Report.

DMEA Form 7
(12-56)

500

OFFICIAL FILE COPY

Date	Surname	Code
4/3	Klugescheid	500
	Williams	

April 3, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Preparation of Contract for Western Resources, Inc., Sunbeam Mine, Docket No. DMEA-4653 (Lead-Zinc-Copper), Juab County, Utah

Will you please prepare a contract for the cited application. A draft of the contract, Exhibit "A", and Annex I are attached to this memorandum. The necessary number of maps are also attached.

Will you please prepare the Consents to Lien and Subordination Agreements to be submitted to the New United Sunbeam Mining Company. As the lease from the Empire Mines Company is only for the purpose of acquiring some points of attack for the drilling and no mining will be permitted from these claims, no Consents to Lien could be obtained.

There is a clause in the lease agreement with New United Sunbeam Mining Company that may make the obtaining of a Consent to Lien etc., difficult to obtain.

W. R. Griswold

WPKlugescheid/er
Copy to: Docket
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/29	Klugescheid	500
3/29	[illegible]	500
3/29	Selfridge	130
"	[illegible]	110
"	[illegible]	10[illegible]
4/1	C	220

500
Bishop
Kiilsgaard

MAR 29 1957

WPKlugescheid/er Rm 4444, Ext. 2690

DMEA - Base Metals Division

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

T E L E T Y P E

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Date:

To: Mr. E. W. Harshman, Acting Executive Officer, DMEA Field Team, Region III, Denver, Colorado

Reourtt February 28, Docket DMEA-4404, Flare Mining Co., Sunbeam Mine. To date we have not received letter requested from Western Resources, Inc., stating that they wish to substitute the Flare project for the one in their own application. What is the status of this project. Legal Division assures us that document suggested by New United Sunbeam Mining Company for a leasehold on Silver Moon claim would be satisfactory. Would have to be in name of Western Resources, Inc. New Docket No. is DMEA-4653.

George C. Selfridge
Chairman, Operating Committee (GB)

Written 3/29/57
WPKlugescheid/er
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.
Confirmation Copy.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE
4/1	C	220
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March 27, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4404 (Copper-Lead-Zinc), Flare Mining Company (Sunbeam mine), Juab County, Utah - Docket No. DMEA 4653 (Copper-Lead-Zinc), Western Resources, Inc. (Sunbeam mine), Juab County, Utah

Reference is made to matter discussed in a letter from this office to Mr. D. Howe Moffatt, dated March 7, 1957.

Through oversight, copies of the instrument, or rather a letter dated March 5, 1957, referred to in the first paragraph of our letter to Mr. Moffatt, were not forwarded to you at that time with copies of our letter. Therefore, we are enclosing the original and two copies of Mr. Moffatt's letter of March 5 and two copies of an Assignment, dated October 17, 1956, wherein Flare Mining Company assigns and transfers to Western Resources, Inc. all right, title, and interest in a certain Agreement dated July 1, 1956.

In Mr. Moffatt's letter of March 5, it is requested that the application Docket No. DMEA 4653 be withdrawn and that the application Docket No. DMEA 4404 by Flare Mining Company now be processed on behalf of Western Resources, Inc.

Under the circumstances, it appears that the Administrator's letter to Mr. Moffatt, dated March 11, 1957, advising that Docket No. DMEA 4404 is being placed in an inactive file, should be rescinded.

Copies of the instrument indicating consent of lessors to the assignment of the lease from Flare Mining Company to Western Resources, Inc., mentioned in your teletype of February 28, 1957, were requested in our letter to Mr. Moffatt dated March 7, 1957.

E. N. Harshman

E. N. Harshman

W.O.

T

HAROLD P. FABIAN
BEVERLY S. CLENDENIN
D. HOWE MOFFAT
RENDELL N. MABEY
PETER W. BILLINGS
SANFORD M. STODDARD
ALBERT J. COLTON
O. WEBSTER ADAMS, JR.
K. JAY HOLDSWORTH
RICHARD H. MOFFAT

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

March 5, 1957

DMEA
DEPARTMENT OF THE INTERIOR
MAR 7 1957
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

Attention: W. M. Traver, Executive Officer, DMEA
Field Team, Region III

Re: Docket Number 4404 and
Docket Number 4653

Gentlemen:

Please be advised that application assigned Docket Number 4404 heretofore filed by Flare Mining Company, a partnership, for a loan to defray exploration expenses on so-called Sunbeam Mining claims in Eureka, Utah, and application which has been assigned Docket Number 4653, were filed to accomplish the same objective. After the filing of Docket Number 4404 Flare Mining Company assigned all of its right, title and interest in and to the mining claims to Western Resources, Inc., a Utah corporation, and Western Resources, Inc., pursuant to advices from you, filed a further application which was assigned Docket Number 4653.

We are agreeable to the withdrawal of application Docket Number 4653 and the processing of Docket Number 4404 on behalf of Western Resources, Inc.

We hand you herewith photo copies of lessor's consent to the assignment of the mining claims, which we trust you find in order.

Sincerely yours,

WESTERN RESOURCES, INC.

By D. Howe Moffat
Secretary

FLARE MINING COMPANY

By D. Howe Moffat
Authorized Agent

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
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Docket

March 8, 1957

Memorandum

To: Chief, Operations Control and Statistics Division

From: Chief, Base Metals Division

Subject: Withdrawal of Application, Docket No. DMEA-4404, Flare Mining Company, Sunbeam Mine, Juab County, Utah, Copper-Lead-Zinc.

Will you please withdraw the cited application from the active files. This project has now been taken over by Western Resources Inc., and the active file in the future will be Docket No. DMEA-4653.

W. R. Griswold

W. R. Griswold

WPKlugescheid/er
Copy to: Docket (2)
Admr R File
Chron.

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224 New Customhouse
Denver 2, Colorado

March 7, 1957

3/12	C	220
3/12	WPR	500

Mr. D. Howe Moffat
Fabian, Clendenin, Moffat & Mabey,
Attorneys and Counselors at Law
Continental Bank Building
Salt Lake City 1, Utah

Docket

Re: Docket No. IMEA-4404
Flare Mining Company

Docket No. IMEA-4653
Western Resources, Inc.

Dear Mr. Moffat:

Receipt is acknowledged of the instrument dated March 5, 1957, signed by you as Secretary of Western Resources, Inc., and also as the Authorized Agent of Flare Mining Company, pertaining to the processing of application, Docket No. IMEA-4404.

You also enclosed four photo copies of an instrument executed by Flare Mining Company, assigning to Western Resources, Inc. all right, title and interest in a certain agreement dated the 1st day of July, 1956, between New United Sunbeam Mining Company and Flare Mining Company.

Attached to, and made a part of the brochure IMEA Docket 4404, and pertaining to the aforementioned agreement between New United Sunbeam Mining Company and Flare Mining Company, is an instrument dated July 12, 1956, executed by New United Sunbeam Mining Company, Kearns-Tribune Corporation and Flare Mining Company wherein it is expressly stipulated that "said agreement may not be assigned or the lease therein assigned or sublet without the written consent of the undersigned," which being New United Sunbeam Mining Company.

Under the circumstances and in conjunction with material forwarded under date of March 5, 1957, please forward four signed copies or four photo copies of the original signed instrument, whereby New United Sunbeam Mining Company agrees to the assignment of the agreement between themselves and Flare Mining Company dated July 1, 1956, to Western Resources, Inc.

Very truly yours,

Original signed by
J. W. TOWNSEND

J. W. Townsend
Alternate Acting Executive Officer,
DMEA Field Team, Region III.

JWT:bh
cc-Chairman, Op. Comm. (2)
Harshman
Wilson
Docket DMEA-4404) w/copy Instrument
Docket DMEA-4653) dated 3/5/57
Chron.

FEB 28 1957

WPKlugescheid/er Rm. 4444, Ext. 2690

TELETYPE

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

XXX DMA - Base Metals Division

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated working fund to Office of Secy.)

Date:

To: Mr. S. M. Harshman, Acting Executive Officer, DMEA Field Team, Region III, Denver, Colorado

Re Docket DMEA-4404, Flare Mining Co., Sunbeam Mine. Docket DMEA-4653 is new number assigned to Western Resources, Inc. No new application necessary. Instruct Western Resources, Inc., to write us a letter stating they wish to have the Flare project, Docket DMEA-4404, substituted for the one in their application. Letter in quadruplicate, two copies for your office and two for us. Written consent of lessors required for assignment of lease.

George C. Selfridge

Chairman, Operating Committee

WPKlugescheid/er (2/27/57)
Rewritten 2/28/57
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Killsgaard, USGS
Chron.
Confirmation Copy

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

February 28, 1957

Western Resources, Inc.
Eureka, Utah

Subject: DMEA-4653

Gentlemen:

Your application for exploration assistance, dated United submitted to our office at Denver, Colorado has been assigned Docket Number DMEA-4653 and referred to the Base Metals 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 III
Code 500

6416

FABIAN, CLENDENIN, MOFFAT & MABEY
ATTORNEYS AND COUNSELORS AT LAW
CONTINENTAL BANK BUILDING
SALT LAKE CITY 1, UTAH

ALBERT J. COLTON
O. WEBSTER ADAMS, JR.
R. JAY HOLDSWORTH
RICHARD H. MOFFAT

February 12, 1957

DMEA
THE INTERIOR
5 1957
REGION III
DENVER, COLORADO

United States Department of the Interior
Defense Minerals Exploration Administration
224 New Customhouse
Denver 2, Colorado

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DATE	INITIALS	CODE

Attention: W. M. Traver, Executive Officer, DMEA
Field Team, Region III

Re: Docket DMEA 4404 (copper-lead-zinc)
Sunbeam Mine, Juab County, Utah

Dear Sir:

Pursuant to the instructions of your letter of January 17, 1957, we are enclosing herewith:

1. Two copies of Agreement dated July 1, 1956 between New Sunbeam Mining Company and Flare Mining Company, and two copies of Assignment dated October 17, 1956 covering the transfer of New Sunbeam Mining lease with Flare Mining Company to Western Resources, Inc.

2. New application from Western Resources, Inc., in quadruplicatetogether with maps.

3. Western Resources, Inc. is a Utah corporation organized October 17, 1956. The officers are James Quigley, President, Sanford M. Stoddard, Vice President, and D. Howe Moffat, Secretary-Secretary.

4. No new liens have been created by the transfer of the property.

If there is anything further you require in connection with this matter please advise.

Yours very truly,

D. Howe Moffat

DHM:abc

FIELD EXAMINATION REPORT AND

RECOMMENDATIONS FOR

FLARE MINING COMPANY APPLICATION

(Maps in Envelope at back on other side)

ON SITE EXAMINATION

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

224 New Customhouse
Denver 2, Colorado

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January 18, 1957

Memorandum

To: Secretary to the Operating Committee

From: DMEA Field Team, Region III

Subject: Report of Examination Docket DMEA 4404 (copper-lead-zinc) Flare Mining Company (Sunbeam Mine) Juab County, Utah.

Enclosed are the original and three copies of an engineering and geologic report of examination covering the subject property.

The examiners recommend a drilling program to consist of six holes at a total estimated cost of $31,451.00, Government participation $15,725.50.

We concur in this recommendation, provided that the Flare Mining Company withdraws their application and Western Resources, Inc. submits a new application, and complies with our letter of January 17, 1957 to D. Howe Moffat, Agent for Flare Mining Company and Western Resources, Inc. Copies of this letter were forwarded your office.

This office had no knowledge of the Assignment of Lease from Flare Mining Company to Western Resources, Inc., until we received the Report of Examination. The field advises that they were not notified of the assignment until the Report of Examination was near completion.

DMEA Field Team, Region III

Original signed by
W. M. TRAVER

By W. M. Traver
Executive Officer

Enclosures
HMC:ytl
Harshman (2) (w/cc of
Wilson (Report
Mining Div. (
Docket 4404)
Chron.

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1600 EAST FIRST SOUTH STREET
SALT LAKE CITY 12, UTAH

DMEA
DEPARTMENT OF THE INTERIOR
JAN 17 1957
REGION III
DENVER, COLORADO

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DATE	INITIALS	CODE

January 14, 1957

TRANSMITTED
JAN 18 1957

Memorandum

To: W. M. Trever, Executive Officer, DMEA Field Team, Region III

From: Stephen E. Wilson

Subject: [redacted] (Copper-lead-zinc), Flare Mining Co. (Sunbeam mine), Juab County, Utah

Enclosed are the original and eight copies of an engineering report covering examination of the Sunbeam mine in the Tintic district, Juab County, Utah. The property was examined by M. N. Nowes with F. B. Moore of the Geological Survey. Also included is a copy of the brochure.

The applicant has proposed a diamond drilling program to intersect the Sunbeam vein approximately 500 feet below the surface. Six holes totaling 3,600 feet of core and noncore drilling, and estimated to cost $34,602.50, are included in the applicant's proposals.

The Sunbeam vein occurs in an intrusive body composed of monzonite and monzonite porphyry. The vein trends northeast and may be followed on the surface for 3,000 feet. No sedimentary rocks are present in the immediate area. Shattering and fissuring of the host rock and change in strike of the vein are believed to be favorable conditions for mineral deposition. Ores have been mined from the Sunbeam vein to the water level and slightly below. The proposed project is planned for the purpose of cutting the vein 75 feet or more below the water.

The Silver Moon claim, Survey 2953, actually is not included in the original lease agreement between New United Sunbeam Mining Co. and Flare Mining Co. The claim is controlled by New United Sunbeam Mining Co., and this company has indicated that, under certain conditions, an agreement will be made with Flare Mining Co. to allow Flare to explore the property. The examining engineer's report includes the Silver Moon claim with other claims designated in the original lease between New United Sunbeam Mining Co. and Flare Mining Co. Although the acreage in the Silver Moon claim is small, the claim covers approximately 300 feet along the strike of the Sunbeam vein. It appears that the claim should be encumbered if a contract is prepared to permit exploration of the Sunbeam vein.

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

The examining engineer estimates that the cost of 3,500 feet of core and noncore drilling will total $31,451. The possibility that commercial ore will extend some distance below the water level is believed to be favorable. The examining engineer recommends that a loan be granted to perform exploration as outlined in the engineering report. I concur with this recommendation.

Stephen R. Wilson

Stephen R. Wilson

Enclosure

cc: W. K. King
J. B. Clemmer

FOR UNITED STATES GOVERNMENT USE ONLY

TRANSMITTED

JAN 18 1957

FLARE MINING CO.
NEW UNITED SUNBEAM MINING CO. PROPERTY
JUAB COUNTY, UTAH
DMEA-4404
Copper-Lead-Zinc

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DATE	INITIALS	CODE

Engineering Report

By M. H. Howes
Mining Engineer
Bureau of Mines

January 14, 1957

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

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FLARE MINING CO.
NEW UNITED SUNBEAM MINING CO. PROPERTY
JUAB COUNTY, UTAH

CONTENTS

	Page
Engineering report	
Summary	2
Introduction	3
Location, topography, and physical features	3
History and production	4
Ownership and extent	5
Description of the deposits	6
Minable ore reserves	7
Present status	7
Project proposals	8
Alternate project proposals	8
Estimated cost of project proposals	9
Proposed financing	11
Conclusions and recommendations	11

APPENDIX

I Assignment of Flare Mining Co. interests to Western Resources, Inc.
II Lease Agreement between Empire Mines Co. and Western Resources, Inc.
III Drilling bid by Sprague and Henwood, Inc.
IV Drilling bid by Boyles Bros. Drilling Co.

ILLUSTRATIONS

Fig. 1 Location map, Flare Mining Co., Juab County, Utah
Fig. 2 Claim map

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SUMMARY

Flare Mining Co., on July 27, 1956, made application for DMEA assistance designed to explore for copper-lead-zinc ores by core drilling below the water table in the Sunbeam vein on property leased from New United Sunbeam Mining Co., Tintic mining district, Juab County, Utah. This property consists of eight patented lode mining claims. Flare Mining Co. assigned all of its rights and interests in the property to Western Resources, Inc., on October 17, 1956. The collar locations of three of the proposed drill holes lie beyond the west boundary of the Sunbeam property. In order to legally obtain permission to drill into the Sunbeam claims, Western Resources, Inc. acquired a lease on three additional claims covering the collar locations.

The Sunbeam vein occurs in a stock composed principally of monzonite and monzonite porphyry. It varies in thickness from a fraction of an inch to more than 10 feet, has an average strike of N. 25° E., and generally dips steeply to the west or is vertical. Production of copper-lead-zinc-gold-silver ores has been made in the oxide zone, above the water level, throughout the vein's length of approximately 3,000 feet.

The applicant proposes six core drill holes near the north end of the property to explore the vein below the water level, because of favorable geologic conditions prevailing in this area. Old, filled stopes underneath a vein filling of loose, vuggy quartz show past production. Shattering and fissuring along the vein at this place,

and sulfide minerals observed on the Sunbeam shaft dump, indicate the downward extension of ore in the vein.

Estimated cost of the proposed project is $31,451. Government participation at 50 percent will be $15,725.50.

Recommendation is made that the project proposals be approved.

INTRODUCTION

An application, dated July 27, 1956, has been submitted by Flare Mining Co. for Government aid in an exploratory project under docket No. 4404. The mining claims involved are located in the Tintic mining district, Juab County, Utah. The proposed program consists of 3,600 feet of diamond drilling in six inclined holes, at a total estimated cost of $34,602.50, for the purpose of exploring the Sunbeam vein for copper-lead-zinc ores below the water table.

A field examination of the property was made September 11, 1956, by Frank B. Moore, Geological Survey, and M. M. Howes, Bureau of Mines, for the purpose of determining the feasibility of the proposed exploration and for appraisal of the estimated costs and engineering aspects of the job. The field examiners were accompanied to the property by James Quigley, representative of the applicant.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The property is held under lease from the New United Sunbeam Mining Co. and is situated approximately 3 airline miles south of Eureka, Utah, in Sec. 31, T. 10 S., R. 2 W., and Sec. 6, T. 11 S., R. 2 W., S.L.B. and M.,

in the Tintic mining district, Juab County, Utah. The claims lie along a low, north-south ridge to the south of Mammoth peak in the East Tintic mountains, at altitudes ranging from 6,150 to 6,680 feet. The property may be reached by traveling approximately 3 miles southwesterly on U. S. Highway 6 from Eureka, Utah, to its junction with road to Silver City, thence approximately 2 miles southeasterly on Silver City road and along old L. A. and S. L. Railroad grade to the mine.

The climate is semiarid. Summers are warm and winters are cold, with moderately heavy snowfall. Access to the mine ordinarily is maintained by infrequent snow removal from the roads.

HISTORY AND PRODUCTION

The Sunbeam lode is reported to be the first mining claim located in the Tintic mining district (location date as shown on patent plat is January 10, 1870). This claim, overlying a portion of the Sunbeam vein, produced oxidized copper-lead-silver ores having a value in excess of $500,000 as reported in USGS Nineteenth Annual Report, 1897-98. The group of claims comprising the present property covers approximately 3,000 feet of the Sunbeam vein. The applicant states that from 1903 to 1939 production from the property was 7,371 tons of ores containing 287,294 pounds of lead, 261,406 pounds of copper, 92,077 ounces of silver, and 191 ounces of gold. The average grade of the ores is 1.95 percent lead, 1.77 percent copper, and 12.491 ounces silver and 0.026 ounce gold per ton.

OWNERSHIP AND EXTENT

Flare Mining Co., 801 Continental Bank Building, Salt Lake City, Utah, is a partnership composed of:

General partners

Arnold and James M. Feuerstein, 1220 North Palm, Anaheim, Calif.

Limited partners

Eli, Edith, and Isador Reinhard, 1220 North Palm, Anaheim, Calif.

On October 17, 1956, Flare Mining Co. assigned all of its rights and interests in the property of the New United Sunbeam Mining Co. to Western Resources, Inc., 801 Continental Bank Building, Salt Lake City, Utah. Western Resources, Inc. is a Utah corporation.(Appendix I).

James Quigley, President, Eureka, Utah

D. Howe Moffat, Secretary, 801 Continental Bank Building, Salt Lake City, Utah

At the time of application for DMEA assistance, Flare Mining Co. held an option, dated July 1, 1956, on a group of patented lode mining claims owned by New United Sunbeam Mining Co., 1017 Kearns Building, Salt Lake City, Utah. The option includes a clause that at any time within 120 days, a lease on the claims could be acquired for 1 year from the date of exercise of the option, and for additional periods of 1 year until 7 years shall have lapsed. The option to hold the following patented lode mining claims was exercised October 26, 1956:

Name	Survey or Lot No.
Sunbeam and First Southern Extension Sunbeam Consolidated	Lot 61
First Southern Extension Sunbeam	Lot 64
Elmer Ray	Lot 66
Sunbeam	Lot 165
Silver Moon	Sur. 2853
West Sunbeam	Sur. 2820
Iron Spar	Sur. 4015
Triangle	Sur. 4090

DESCRIPTION OF THE DEPOSITS

Rocks exposed in the vicinity of the property are composed principally of monzonite and monzonite porphyry. No sedimentary rocks were observed in the immediate area. Mineralization occurs within the zone of the Sunbeam vein, which has been traced almost continuously for 3,000 feet on the claims, and to exposed depths of 490 and 650 feet. The vein has an average strike of N. 25° E., with dips generally steep to the west or vertical. South of the Sunbeam shaft the vein strikes northeasterly. At the shaft the vein swings to the north, continuing for approximately 200 feet, and then turns northeasterly through the north end of the property. It varies in thickness from a fraction of an inch to more than 10 feet. The vein has been productive throughout its length. In the past, mining activities were almost entirely confined to the oxide zone, between the surface and the water level. The Sunbeam shaft was driven to a probable depth of 490 feet,

encountering water at 425 feet. Apparently the water level is somewhat deeper at the south end of the property than at the north end. Sulfides of iron, copper, and lead were observed on the Sunbeam shaft dump. The position of the minerals in the dump indicates that they were found in the lower part of the shaft below the water level.

At the north end of the property, where the Sunbeam vein turns from a northerly to a northeasterly strike, a large mass of loose, vuggy quartz fills the vein. Old, filled stopes underneath the quartz mass indicate past production from this area.

Shattering and fissuring of the rock, where the vein changes strike, appear to be favorable conditions for mineral deposition. The applicant has chosen the north end of the property, where this condition prevails, for location of proposed drill holes.

MINABLE ORE RESERVES

Known minable ore reserves on the property are negligible.

PRESENT STATUS

The Sunbeam property is accessible by a fair dirt road. Workings on the vein include four major shafts and many small shafts, pits, and open stopes. Most of the workings are not accessible; few are partially accessible.

The old Sunbeam shaft was rehabilitated for a few sets below the collar. This work was stopped pending results of the proposed drilling project.

PROJECT PROPOSALS

The applicant proposes to explore the Sunbeam vein zone below the water level, both to the north and to the south of the Sunbeam shaft. The proposal includes drilling six diamond drill holes, as shown on figure 2, from points in the bottom of the gulch west of the vein. The holes as planned are inclined 65°, with an average length of 600 feet, to cut the vein zone at a depth of approximately 500 feet. Holes No. 1, 3, and 5 are collared to the west of the New United Sunbeam Mining Co. property. The company was required to obtain a lease on three patented lode mining claims, lying west of Sunbeam, Lot No. 165, in order to legally obtain permission to place drill rigs on the property and drill into the Sunbeam claims. The three claims are as follows: Home Rule, Garnet, and Guardian, U. S. Survey No. 3852 (Appendix II).

ALTERNATE PROJECT PROPOSALS

The three northernmost holes are planned to explore the north-striking portion of the vein where the easterly dips vary from 70° to 65° at the surface. In case the vein continues to dip easterly in its downward course, it is suggested that the first of the northerly holes, and, if necessary, the subsequent two northerly holes, be flattened from 65° to 50° to cut the vein at the estimated 500-foot depth. No other change in the original project proposals is recommended.

The proposed program shall include the following general provisions:

1. The minimum size of drill core will be AX.

2. Drill core will be split, one-half retained by the operator for study or analysis, and one-half properly stored for the use of the Government.

3. Approximately 450 feet of noncore drilling and 150 feet of core drilling (through the zone of the Sunbeam vein) will be performed in each of the 6 proposed holes.

4. A maximum of 120 samples (average of 20 per hole) will be allowed for analysis. Certified copies of assays will be submitted with monthly statements.

5. Holes will be geologically logged and copies of the logs will be submitted with the monthly statements.

ESTIMATED COST OF PROJECT PROPOSALS

Bids for the proposed drilling were submitted to the applicant by two drilling contractors, Sprague and Henwood, Inc., and Boyles Bros. Drilling Co. (Appendix III and IV). A third drilling contractor declined to bid.

The following estimated costs have been checked and appear to be reasonable:

1. Contracts

Drilling (6 holes at 600 feet average depth - 3,600 feet)

Estimated cost of 600-foot hole

450 feet, noncore, at $6.00 per foot --	$2,700.00
150 feet, core, at $7.50 per foot -----	1,125.00
100 feet reaming and installing casing at $4.50 per foot ----------	450.00
6 hours cementing at $15.00 per hour --	90.00
24 feet casing lost at $2.25 per foot -	54.00
Proportion mobilization cost ----------	100.00
Total cost for 600 feet of drilling --------	$4,519.00

Total 6 holes at $4,519.00 each	$27,114.00
Bulldozing (drill site preparation) 48 hours at $15.00 per hour	720.00
Total contracts	$27,834.00

2. Labor and Supervision

Supervising and engineering, 4 months at $550.00 per month	$ 2,200.00
Sample bucking and core splitting, 1 man, 5 days at $20.00 per day	100.00
Total	$ 2,300.00

3. Operating Materials and Supplies

Core boxes, 900 feet core space at $.10 per foot	$ 90.00
Miscellaneous (sample sacks, gasoline, oil, etc.)	125.00
Total	$ 215.00

4. Operating Equipment

Rental, 1 pickup truck, 4 months at $100 per month	$ 400.00

5. Initial Rehabilitation and Repairs

None

6. New Buildings, Improvements, etc.

None

7. Miscellaneous

Repairs to truck (minor)	$ 100.00
1/Assaying (including freight), 120 samples at $3.35 each	402.00
Accounting, 4 months at $50.00 per month	200.00
Total	$ 702.00

1/ Assaying will include analyses for copper, lead, zinc, gold, and silver, as required, at an average estimated cost of $3.25 per sample. Transportation of samples is estimated to cost 10 cents each.

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Cost Summary

1.	Contracts	$27,834.00
2.	Labor and Supervision	2,300.00
3.	Operating Materials and Supplies	215.00
4.	Operating Equipment	400.00
7.	Miscellaneous	702.00
	Total cost of project	$31,451.00
	Government participation at 50 percent	$15,725.50

PROPOSED FINANCING

The applicant is prepared to invest $15,725.50 in the proposed exploratory project, which is 50 percent of the total estimated cost of $31,451.00, in accordance with the regulations on Government participation, as stated in Section 7, DMEA Order 1.

CONCLUSIONS AND RECOMMENDATIONS

The probability that commercial ore will extend below the water level in the project area is considered good. Sulfide minerals appearing on the Sunbeam shaft dump must have been excavated below the water level from the lower shaft workings. Some of the best ore mined on the property came from stopes above the water level in the vicinity of the Sunbeam shaft. Other veins within the monzonite have yielded ore below the water level. The discovery of a sufficient quantity of ore to repay the Government's share of the cost of the project is believed possible. Recommendation is therefore made that the alternate proposals, as described above, be approved.

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APPENDIX I

ASSIGNMENT

For and in consideration of the sum of Ten Dollars (10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, FLARE MINING COMPANY, a co-partnership, does hereby sell, assign and transfer to WESTERN RESOURCES, INC., a Utah corporation, all of its right, title and interest in and to said agreement dated the 1st day of July, 1956, between NEW UNITED SUNBEAM COMPANY, a Utah corporation, and FLARE MINING COMPANY, a co-partnership, giving and granting unto said WESTERN RESOURCES, INC., all of the rights, privileges and benefits which accrued to FLARE MINING COMPANY by, under and pursuant to said agreement hereinbefore referred to.

Dated this 17th day of October, 1956.

FLARE MINING COMPANY

By /S/ Arnold Feuerstein
Arnold Feuerstein, Partner

STATE OF CALIFORNIA)
: SS
COUNTY OF LOS ANGELES)

On this 17th day of October, 1956, personally appeared before me ARNOLD FEUERSTEIN, the signer of the within and foregoing instrument, who duly acknowledged to me that he executed the same.

/S/ Helen Callahan
Notary Public
Residing at: 8804 True Ave.
Rivera, Calif.

My commission expires:
August 2, 1957

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APPENDIX II

AGREEMENT

THIS AGREEMENT, made and entered into this 1st day of November, 1956, by and between EMPIRE MINES COMPANY, a corporation with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "LESSOR," and WESTERN RESOURCES, INC., a Utah corporation with its principal place of business at Salt Lake City, Utah, hereinafter referred to as "LESSEE,"

WITNESSETH:

WHEREAS, the LESSEE is the owner of and entitled to all of the benefits of a certain Lease Agreement, bearing date the 1st day of July, 1956 between New United Sunbeam Mining Company and Flare Mining Company, (the interest of said Flare Mining Company having heretofore been assigned to Western Resources, Inc., the LESSEE herein), under and pursuant to said Lease Agreement the following described patented lode mining claims situated in the Eureka Mining District, State of Utah, are leased and let to said LESSEE, to-wit:

Juab Lawrence Lode and Mining Claim (also known as Sunbeam and First Southern Extension Sunbeam Lode Consolidated), Lot 61.

First Southern Extension Lode and mining claim, Lot #64.

The Kinsey, Beaman, Stubbs and Triangle Lodes and mining claims, Lot No. 4090.

The Woodmansee Lode, (also known as Sunbeam Lode), Lot No. 165.

The West Sunbeam Lode and Mining Claim, Lot No. 3820.

The Iron Spar Lode and Mining Claim, Lot No. 4015.

The West Elmer Ray Lode and Mining Claim, Lot No. 68.

and,

WHEREAS, the LESSEE, as successor to Flare Mining Company, has applied to DMEA for a loan under and pursuant to which it proposes to drill certain exploratory holes for the purpose of exploration of the Sunbeam lode at depths generally of 500 feet or more below the surface, and

WHEREAS, said Sunbeam lode, as it projects below the surface of the earth, dips under certain patented mining claims owned by the LESSOR, to-wit:

Home Rule	Patent No. 3853
Garnet	Patent No. 3852
Guardian	Patent No. 3852

and in order to economically drill the Sunbeam lode it is necessary that the drill rigs be located upon the mining claims last hereinbefore described, and that the surface and subsoils of said claims be penetrated by said drills.

NOW, THEREFORE, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, the LESSOR does hereby let and lease to the LESSEE the right to place drilling rigs and to drill on the surface of the following described mining claims:

Home Rule	Patent No. 3853
Garnet	Patent No. 3852
Guardian	Patent No. 3852

for a term of one (1) year, commencing November 1, 1956 for the purpose of drilling holes to the Sunbeam lode and for no other

purpose whatsoever, and that the rights granted hereby shall include the right to construct roads upon the surface of said mining claims for the purpose of moving machinery useful in drilling said holes on and off said property, for the purpose of establishing drill sites thereon and maintaining drilling machinery and for the purpose of drilling holes to the Sunbeam lode and for no other purposes whatsoever.

Said LESSEE further warrants to operate as an independent contractor and agrees to indemnify and hold harmless the LESSOR from any claims, actions at law or in equity arising out of or on account of LESSEE'S operations on said mining claims.

The LESSEE, for and in consideration of the grants hereby given, covenants and agrees:

1. To keep said mining claims free and clear of all liens, claims or demands of any nature whatsoever which might arise by reason of the conduct of said LESSEE upon or about said mining claims. The above described mining claims of LESSOR are not to be included as a part of the property in the SBEA loan and LESSOR does not consent to any lien or claim by reason of a SBEA loan or any other loan on said property.

2. To make available to and to report to said LESSOR any mineral discovery made upon the demised premises as a result of the drill holes to be drilled by said LESSEE and said LESSOR shall have the right to all geological data, drill hole logs, maps and other information as a result of drilling upon said premises.

3. It is understood and agreed between the parties hereto that this is a lease on the surface of the above described premises for the purpose of drilling and no rights to mine the demised premises are granted to LESSEE.

4. Upon the expiration of this lease to surrender said property to said LESSOR in the same condition in which it now is, aside from the road work, drill sites and drill holes hereinbefore referred to.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their officers hereunto duly authorized.

ATTEST:

EMPIRE MINES COMPANY

/S/ Ben Warburton
Its Secretary-Treasurer

By /S/ Richard Knight
Its Vice President

ATTEST:

WESTERN RESOURCES, INC.

/S/ D. Howe Moffat
Its Secretary

/S/ James Quigley
Its President

ORIGINAL FLARE MINING COMPANY

APPLICATION.

APPENDIX III

SPRAGUE & HENWOOD, INC.
Contractors for
DIAMOND DRILLING

P.O. Box 645
Grand Junction, Colo.

June 18, 1956

Centennial Development Co.
Eureka
Utah

Attn: Mr. James Quigley

Gentlemen:

In accordance with our conversations we herewith submit our proposal for exploratory drilling at the Sunbeam Mine near Silver City, Utah.

PROPOSAL:

Non-Core Drilling

Item 1.	(a)	From 0 to 500 ft.	$6.00 per ft.
	(b)	From 500 to 750 ft.	8.00 per ft.

Core Drilling

Item 2.	(a)	From 0 to 500 ft.	8.50 per ft.
	(b)	From 500 to 750 ft.	10.50 per ft.
	(c)	From 750 to 1000 ft.	13.00 per ft.

Reaming and Setting Casing

Item 3 . . . . . 4.50 per ft.

Cementing and drilling out cement

Item 4 . . . . . 15.00 per hr.

Casing

Item 5. Any casing lost in holes will be charged to the customer at the following prices:

NX	$ 3.00 per ft.
BX	2.25 per ft.
AX	1.75 per ft.

Transportation of crew and equipment

Item 6. Lump sum $800.00

This proposal is subject to the following conditions:

1. Any cement used will be charged to the customer at cost.

2. This proposal covers drilling in igneous formations and does NOT include any drilling in limestone formations. Any drilling required in limestone formation would be subject to a negotiated agreement made to cover drilling in limestone formation.

3. In the event that quartz veins or stringers are encountered in non-core portion of the hole, then the price schedule of Item 2 for core drilling will apply for drilling through quartz.

4. All drill hole locations and access roads to drill sites will be constructed and maintained to accommodate Sprague & Henwood, Inc. truck mounted drills and water trucks. Any bulldozer work required for preparation of sites and roads will be furnished by the customer at no cost to Sprague & Henwood, Inc.

5. Cores will be delivered at drill hole locations, and storage and preservation of cores will be the responsibility of the customer.

6. The minimum size core is to be AX (1-1/8") unless otherwise agreed to by the customer. Holes are to be started NX size and reduced to BX size and AX size as required by drilling conditions as determined by the contractor. The contractor also reserves the right to determine when reaming or cementing is required.

We thank you for the opportunity of submitting this proposal and hope to be favored with your order.

Very truly yours,

SPRAGUE & HENWOOD, INC.

/S/ R. R. Carver
R. R. Carver
Western Manager

RRC:jmt

cc: Scranton
File

APPENDIX IV

BOYLES BROS.
DRILLING COMPANY
1321 South Main Street
Salt Lake City 15, Utah

July 10, 1956

Mr. James Quigley
Centennial Development Company
Eureka, Utah

Dear Mr. Quigley:

We submit the following alternate proposals for drilling six holes approximately 600 feet deep on your Sunbeam Mine property near Silver City, Utah.

Proposal No. 1

1. Drilling rates, per foot.

	AX	BX	NX	Plug bits
0 - 400	$5.60	$6.30	$7.40	$6.00
400 - 700	6.90	7.60	9.00	7.00

2. Reaming.
   AX casing. $3.00 per foot.
   BX casing. 3.30 per foot.
   NX casing. 3.80 per foot.

3. Cementing, $10.60 per hour plus cost of cement and cement substitutes, including mud.

4. Lost casing to be paid for at list price f.o.b. the job.

5. Access roads and drill stations to be furnished at no cost to us.

6. Installing and pulling casing, $9.60 per hour.

7. Water to be hauled on the following basis; truck rentals of $225.00 per month plus 12¢ per mile, plus driver's wages including payroll taxes.

8. If quartzite or quartz is encountered, there would be a charge for actual cost of bits over and above the normal diamond cost, which for accounting purposes would be set at $1.15 per foot.

Proposal No. 2

1. Drilling rate will be $83.00 per shift plus $2.90 per foot for holes up to 700 feet deep. Shift rate to apply for all shifts worked, whether drilling, moving, or setting up. Equipment breakdowns of over one hour will not be charged for.

2. Reaming. Shift rate plus $2.00 per foot for all sizes.

3. Cementing. Shift rate plus cost of cement or cement substitutes including mud.

4. Access roads and drill stations at no cost to us.

5. Lost casing to be paid for at list price f.o.b. the job.

6. If quartzite or quartz is encountered, there would be a charge for actual cost of bits over and above the normal diamond cost, which for accounting purposes would be set at $1.15 per foot.

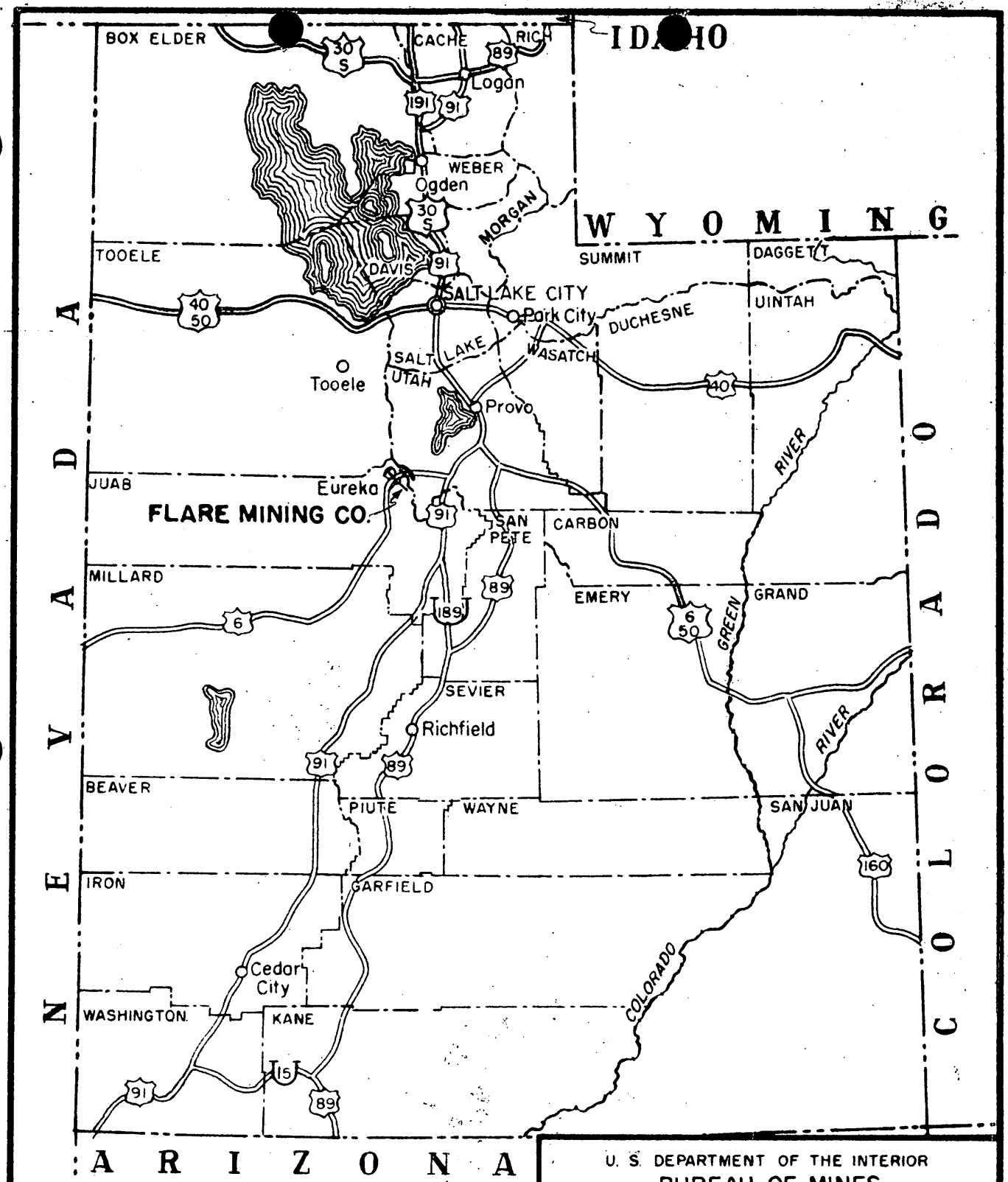
Should the foregoing rates be satisfactory, we would appreciate knowing as soon as possible, so that we may schedule the job for early starting.

Yours very truly,

/S/ P. A. Park

P. A. Park
Assistant Manager
Drilling Division

PAP:lm



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 1 DMEA Docket No. 4404

Location Map

FLARE MINING CO.

NEW UNITED SUNBEAM MNG. CO. PROPERTY

JUAB COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: JAN. 10, 1957
TRACED: JAN., 1957; A.P.T.S.	1500-1183-G
CHECKED:	

RECEIVED
JAN 22 1957
D.M.E.A.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

DMEA
DEPARTMENT OF THE INTERIOR
OCT 2 1956
REGION III
DENVER COLORADO

September 28, 1956

TRANSMITTED
JAN 18 1957

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 4404 (Copper-lead-zinc), Flare Mining Company (Sunbeam mine), Juab County, Utah

Enclosed are the original and eight copies of a geologic report by Frank B. Moore, U. S. Geological Survey, in which he recommends a program of exploration on the subject property.

The applicant requests assistance to explore for base-metal sulfide ore beneath the old workings in the Sunbeam mine by drilling six holes to intersect the vein at a depth of about 500 feet below the surface.

Moore concludes, and I concur, that the exploration requested by the applicant is justified.

E. N. Harshman

E. N. Harshman

Enclosures (9)

ENHarshman:arh

EXTRA COPY DMEA RECEIVED JAN 22 1957		
DATE	INITIALS	CODE

Reviewed by
DMEA CLEARING CENTER
1-25-57
(CEO)

FOR UNITED STATES GOVERNMENT USE ONLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

TRANSMITTED
JAN 18 1957

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 4404

Flare Mining Company

Sunbeam mine

Juab County, Utah

EXTRA COPY
DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE

Copper-lead-zinc

Geologic Examination Report

by

Frank B. Moore

September 27, 1956

Reviewed by
DMEA OPERATING COMMITTEE
1-25-57
(date)

CONTENTS

	Page
Introduction and summary	1
Location and property	2
Geology	2
Proposed exploration	5
Conclusions and recommendations	5

ILLUSTRATIONS

Figure	Follows page
1. Index map of Utah, showing location of Sunbeam mine, Tintic Mining district, Juab County, Utah	2
2. Map of surface workings showing trace of Sunbeam vein, Tintic Mining district, Juab County, Utah	6

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DMEA 4404

FLARE MINING COMPANY
SUNBEAM MINE
JUAB COUNTY, UTAH

INTRODUCTION AND SUMMARY

The Flare Mining Company, 801 Continental Bank Building, Salt Lake City, Utah, applied on August 2, 1956, for aid to explore for copper, lead, and zinc in the Sunbeam mine, Tintic mining district, Juab County, Utah. The application was released by the Executive Officer for examination on August 15, 1956. The applicant proposes to drill six holes averaging 600 feet deep to cut the Sunbeam vein below the water table or at points about 500 feet below the outcrop. Total cost of the project is estimated at $34,602.50, Government participation 50 percent or $17,301.25.

The property was examined on September 11, 1956, by F. B. Moore, U. S. Geological Survey, and M. H. Howes, U. S. Bureau of Mines. The examining team was accompanied by James Quigley, consultant for the applicant. Hal T. Morris, U. S. Geological Survey, who is mapping in the Tintic district, was consulted regarding the geology of the Sunbeam area and the feasibility of the proposed drilling program. He concurs with the recommendations of the examining team.

The examining team believes that there is a good probability of finding significant amounts of copper-lead-zinc ore in the Sunbeam vein and, therefore, recommends that the application for exploration assistance be approved.

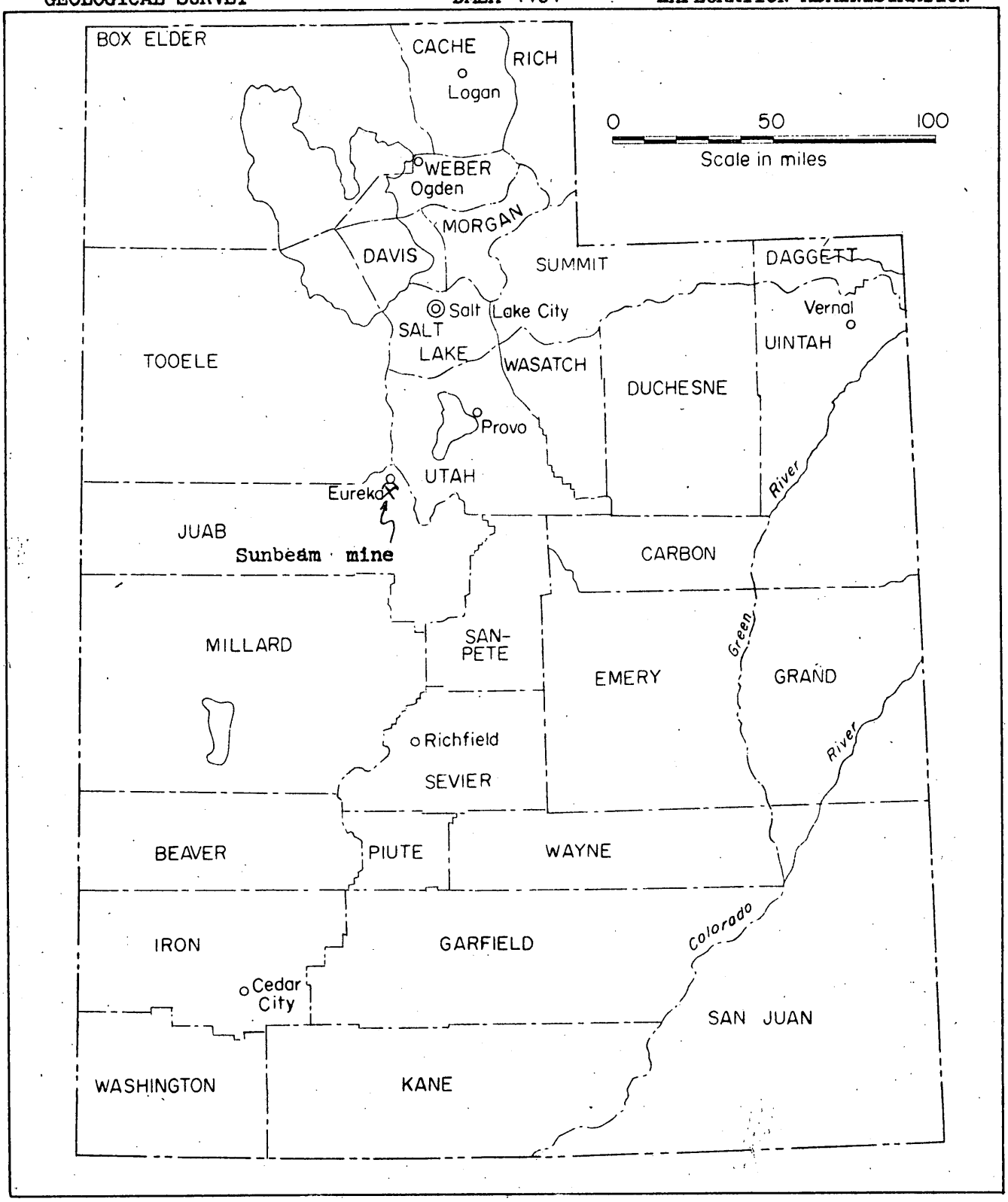

FIGURE 1—INDEX MAP OF UTAH **SHOWING LOCATION OF SUNBEAM MINE, TINTIC MINING DISTRICT, JUAB COUNTY, UTAH.**

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DATE | INITIALS | CODE

LOCATION AND PROPERTY

The area to be explored is in sec. 31, T. 11 S., R. 3 W., Tintic mining district, Juab County, Utah. It is 1 mile east of Silver City and 3 miles south of Eureka (fig. 1).

The property consists of eight patented lode claims held under lease by the Flare Mining Company. The Sunbeam vein has been explored by numerous shafts, prospects, and adits, but the applicant proposes to explore by drilling only the area near and north of the Sunbeam shaft (fig. 2). The three southernmost holes will be collared on company-owned claims not shown on figure 2; the three northernmost holes will be collared outside the company claims but written permission to drill will be granted by the owners of this ground.

GEOLOGY

The geology of the Tintic mining district has been described by G. W. Tower, Jr., and G. O. Smith (Geology and mining industry of the Tintic district, Utah: U. S. Geol. Survey Nineteenth Ann. Rept., pt. 3, p. 601-767, 1898), and by Waldemar Lindgren and G. F. Loughlin (Geology and ore deposits of the Tintic mining district, Utah: U. S. Geol. Survey Prof. Paper 107, 1919).

Two types of rocks occur in the Tintic district - Paleozoic sedimentary rocks and Tertiary igneous rocks. The sedimentary rocks are quartzite, over 6,000 feet thick, overlain by 6,500 to 7,000 feet

of limestone, including a small amount of shale. The igneous rocks are in part intrusive rhyolite, porphyry, and monzonite and in part effusive rhyolites and latites or andesites.

The sedimentary rocks have been folded into a series of northerly-trending anticlines and synclines. Faults, mostly northeast or east in strike, cut the sedimentary rocks and younger north-northeast striking faults cut the intrusive igneous rocks as well as the older sedimentary rocks. These faults have been one of the major factors in the localization of the Tintic ore deposits.

The ore deposits are of two types - replacement deposits in the limestones and fissure-filled deposits in the igneous rocks. The replacement deposits have accounted for most of the production from the Tintic district; however, several of the vein deposits, including the Sunbeam mine, have had notable production. The ores have been valued, in order of decreasing importance, for silver, lead, gold, copper, and zinc.

The Sunbeam claim is the earliest recorded location in the Tintic district. The vein has been worked through numerous shafts for a length of nearly 4,000 feet and to a depth of 700 feet in the El Ray shaft. Production records and mine maps for the various workings are not available. Tower (U. S. Geol. Survey Nineteenth Annual Report, 1897-98, p. 762) states that oxidized ores having a value of over $500,000 were produced from the Sunbeam claim alone. In 1902, a heavy flow of water in the bottom of the Sunbeam shaft (490 feet deep) forced

suspension of the deeper mining operations. From 1902 to 1915, numerous small lots of ore were shipped from above the water level at 425 feet. These ores contained as much as 26 percent lead, 18 percent copper, and 8 percent zinc. The workings have been inaccessible for many years.

The Sunbeam vein is in Tertiary intrusive rocks; the northern portion around the Sunbeam shaft is in monzonite. The vein strikes generally N. 30° E. except for a short segment near the Sunbeam shaft which strikes nearly due north. Dips are variable but steep. The vein generally appears to dip to the west at about 85° but in the north-striking segment surface dips are 70 to 85° to the east.

Surface exposures of the vein show a strong, persistent shear 1 foot to 8 feet wide. Quartz and barite are the chief gangue minerals; essentially no sulfide minerals are visible. Samples of vein material found on the dumps contained galena, sphalerite, gray copper, pyrite, and chalcopyrite.

The direction of movement along the Sunbeam vein is not known. However, in several northeast-trending faults 1-1/2 miles to the north, the northwest side moved southwest with respect to the southeast side. Such a movement, if applicable to the Sunbeam vein, would tend to open the north-striking segment of the vein near the Sunbeam shaft. Morris states that if similar fissures in the area can be used as criteria, such a movement in the Sunbeam vein is likely.

PROPOSED EXPLORATION

The applicant proposes to drill six holes averaging 600 feet deep to cut the vein below the water table or at a depth of about 500 feet on the vein. The holes would start in a gully along the west side of the property and are located for the purpose of exploring the vein at and near the change in strike (fig. 2). Total cost of the drilling program is estimated at ~~$34,602.50~~ 31,451.00; cost to the Government at 50 percent is ~~$17,301.25~~ 15,725.50.

It will be noted that the holes were to be drilled in an easterly direction at an angle of about 65° and that three of the holes were to be drilled in the north-striking portion of the vein. However, the vein in this portion dips 70 to 75° east at the surface. This point was discussed with Mr. Quigley who agrees that the first hole and, if necessary, the subsequent two holes in the north-striking portion of the vein should be flattened to about 50° in order to cut the structure at the 500-foot depth. Such flattening will make no change in the cost of the project.

CONCLUSIONS AND RECOMMENDATIONS

Although little direct information is available, due to inaccessibility of the workings and lack of records, the project appears to have a better than average chance for success. Reasons for this belief are as follows:

(1) The vein structure is strong and can be traced on the surface for nearly 4,000 feet. This indicates that it will probably extend to depths considerably below the proposed exploration depths.

(2) The failure of the early operators to explore the vein at depth was to a large extent because of inability to handle the water problem. This story apparently is true and not just a nice way of saying the ore had run out. Modern equipment should eliminate this problem.

(3) The applicant hopes to find considerable tonnages of medium-grade milling ore. He does not necessarily expect high-grade ore below the oxidized zone and therefore probably is willing and able to handle the lower class of ore.

(4) If the Sunbeam vein follows the pattern of similar veins in the area with the west side moving south with respect to the east side, the proposed drilling should explore an especially favorable part of the vein.

For the reasons given above, it is recommended that the application be approved.

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

EXTRA COPY DMEA RECEIVED		
DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

January 17, 1957

Pending

Mr. B. Howe Moffat, Agent
Flare Mining Company
801 Continental Bank Building
Salt Lake City, Utah

New 4653

Re: Docket DMEA 4404 (copper-lead-zinc) Sunbeam Mine, Juab County, Utah

Dear Mr. Moffat:

We are advised that, subsequent to the date of the captioned application, the Flare Mining Company assigned all of its rights and interests in the property to Western Resources, Inc. If it is the mutual desire of Flare Mining Company and Western Resources, Inc. for Western Resources, Inc. to be the Applicant for DMEA aid, the following will be required to be submitted to this office:

1. Two copies of the deed or agreement covering transfer, and a formal letter from Flare Mining Company withdrawing the application.

2. A new application (in quadruplicate) from the new owners, tying in the new application to the old docket number by reference, for the purpose of assigning a new docket number. Five copies of Form MF-103 are enclosed for this purpose.

3. All information on the organization of Western Resources, Inc.

4. If any new liens were created, due to the transfer of the property, additional Subordination Agreements will be required.

When we receive the above information, we will continue to process the application.

Yours very truly,

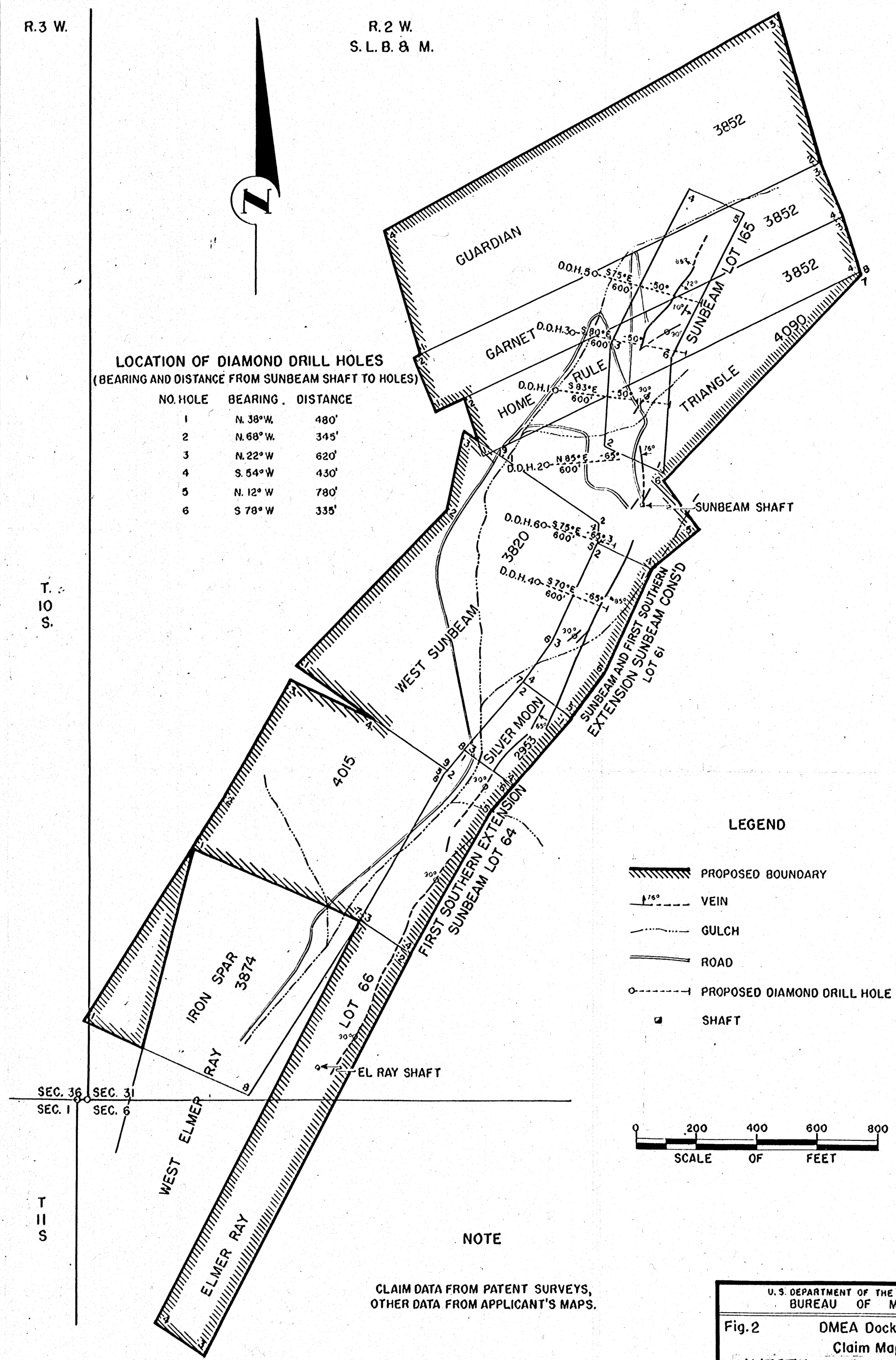
Original signed by
W. M. TRAVER

W. M. Traver
Executive Officer, EMHA
Field Team, Region III

Enclosures

HMC:ytl
cc
Sec. Op. Comm. (2)
Wilson
Harshman
Docket 4404
Chron.

3/4-



LOCATION OF DIAMOND DRILL HOLES
(BEARING AND DISTANCE FROM SUNBEAM SHAFT TO HOLES)

NO. HOLE	BEARING	DISTANCE
1	N. 38° W.	480'
2	N. 68° W.	345'
3	N. 22° W	620'
4	S. 54° W	430'
5	N. 12° W	780'
6	S 78° W	335'

NOTE

CLAIM DATA FROM PATENT SURVEYS, OTHER DATA FROM APPLICANT'S MAPS.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 4653,
Claim Map

WESTERN RESOURCES, INC.
(NEW UNITED SUNBEAM MINING CO. PROPERTY)
JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: JAN. 14, 1957
TRACED: JAN., 1957, BY: A.R.T.S.	1500-1184-D
CHECKED:	

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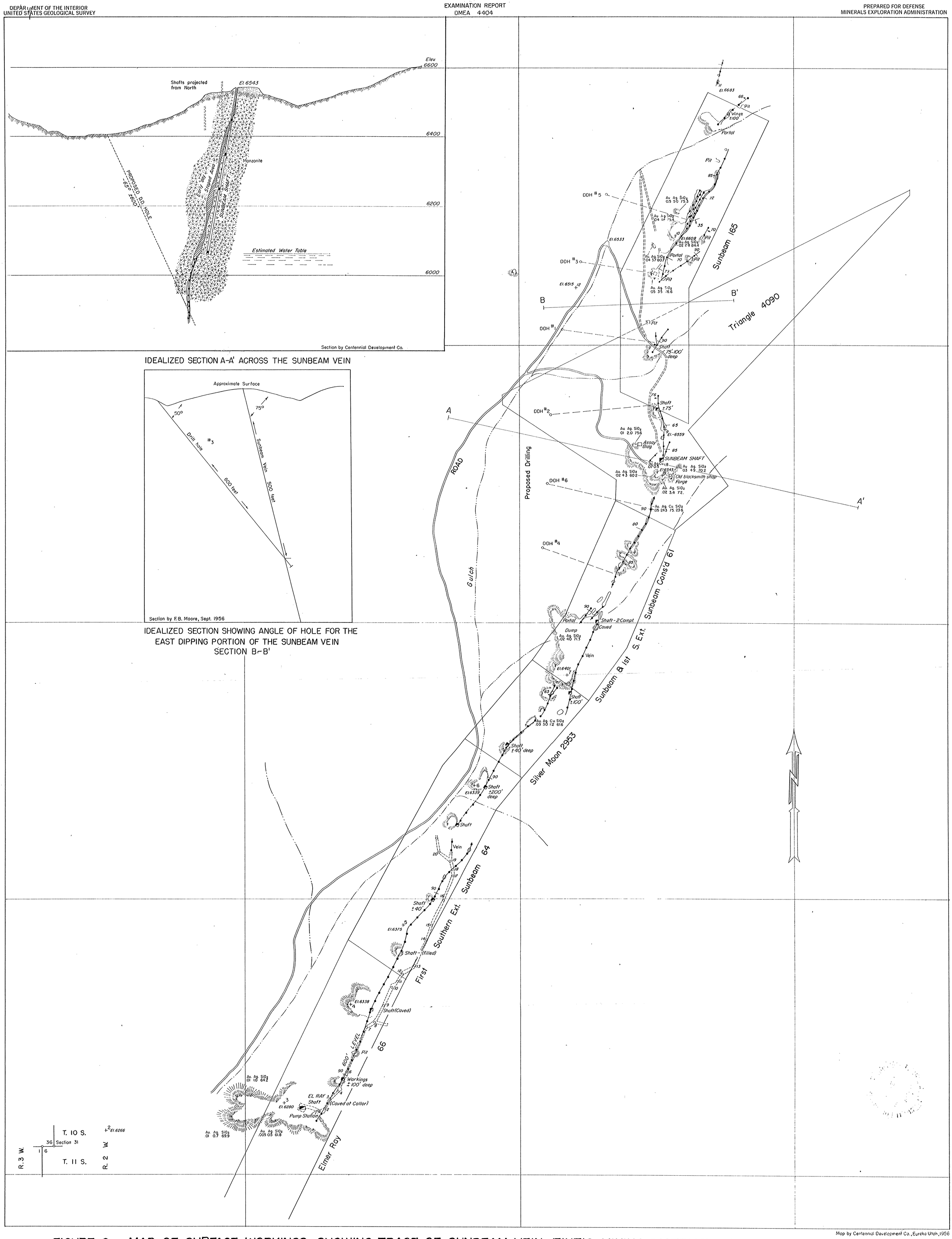
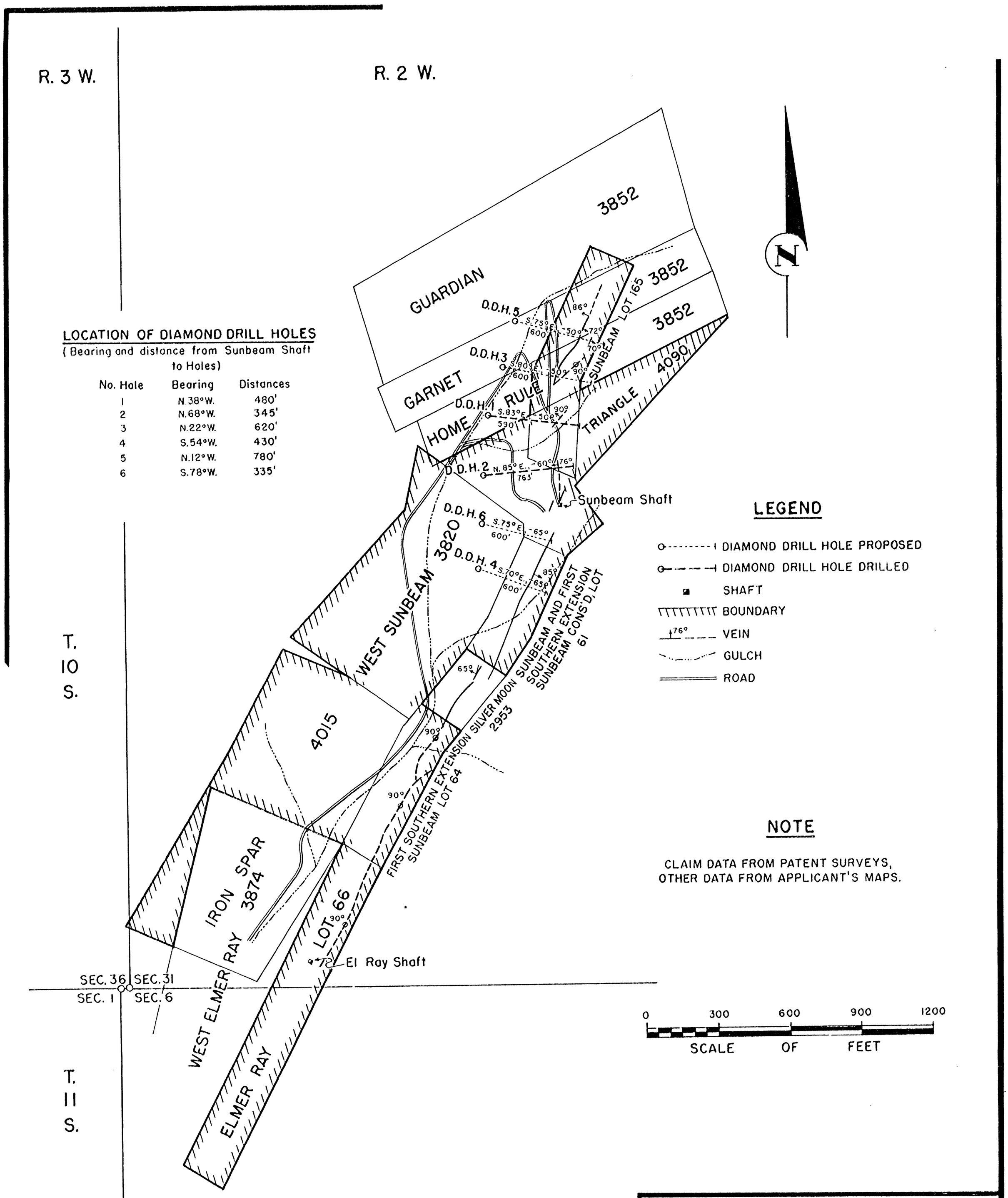


FIGURE 2—. MAP OF SURFACE WORKINGS SHOWING TRACE OF SUNBEAM VEIN, TINTIC MINING DISTRICT, JUAB COUNTY, UTAH.



U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 4653

Claim Map

WESTERN RESOURCES, INC.

(NEW UNITED SUNBEAM MINING CO. PROPERTY)

JUAB COUNTY, UTAH

ENGINEER: M. H. HOWES	DATE: MAR. 17, 1958
TRACED: MAR., 1958; BY: A.P.T.S.	1500-1222-E
CHECKED:	

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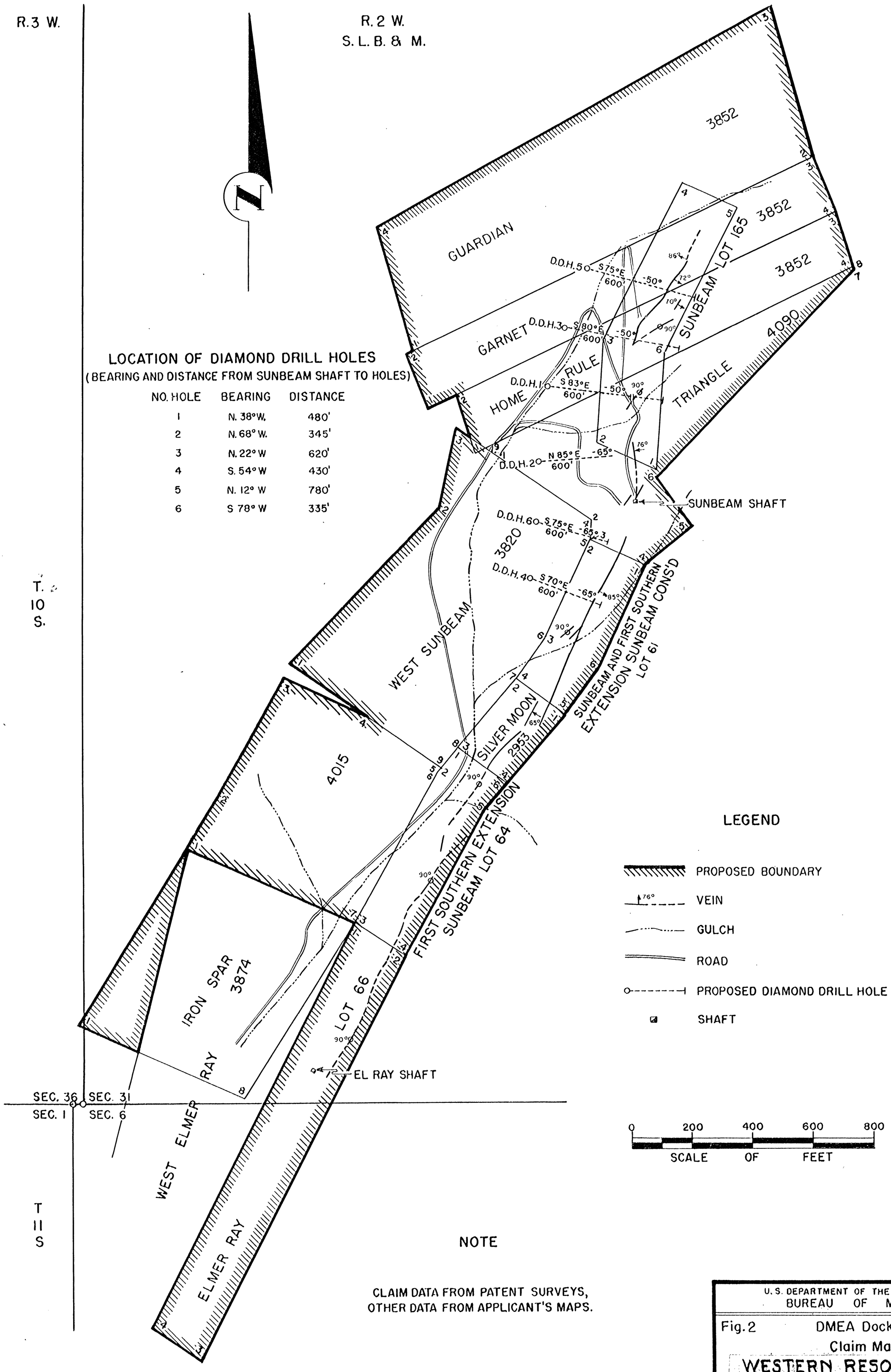

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 4653,
Claim Map

WESTERN RESOURCES, INC.
(NEW UNITED SUNBEAM MINING CO. PROPERTY)
JUAB COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: JAN. 14, 1957
TRACED: JAN., 1957; BY: A.P.T.S.	1500-1184-D
CHECKED:	

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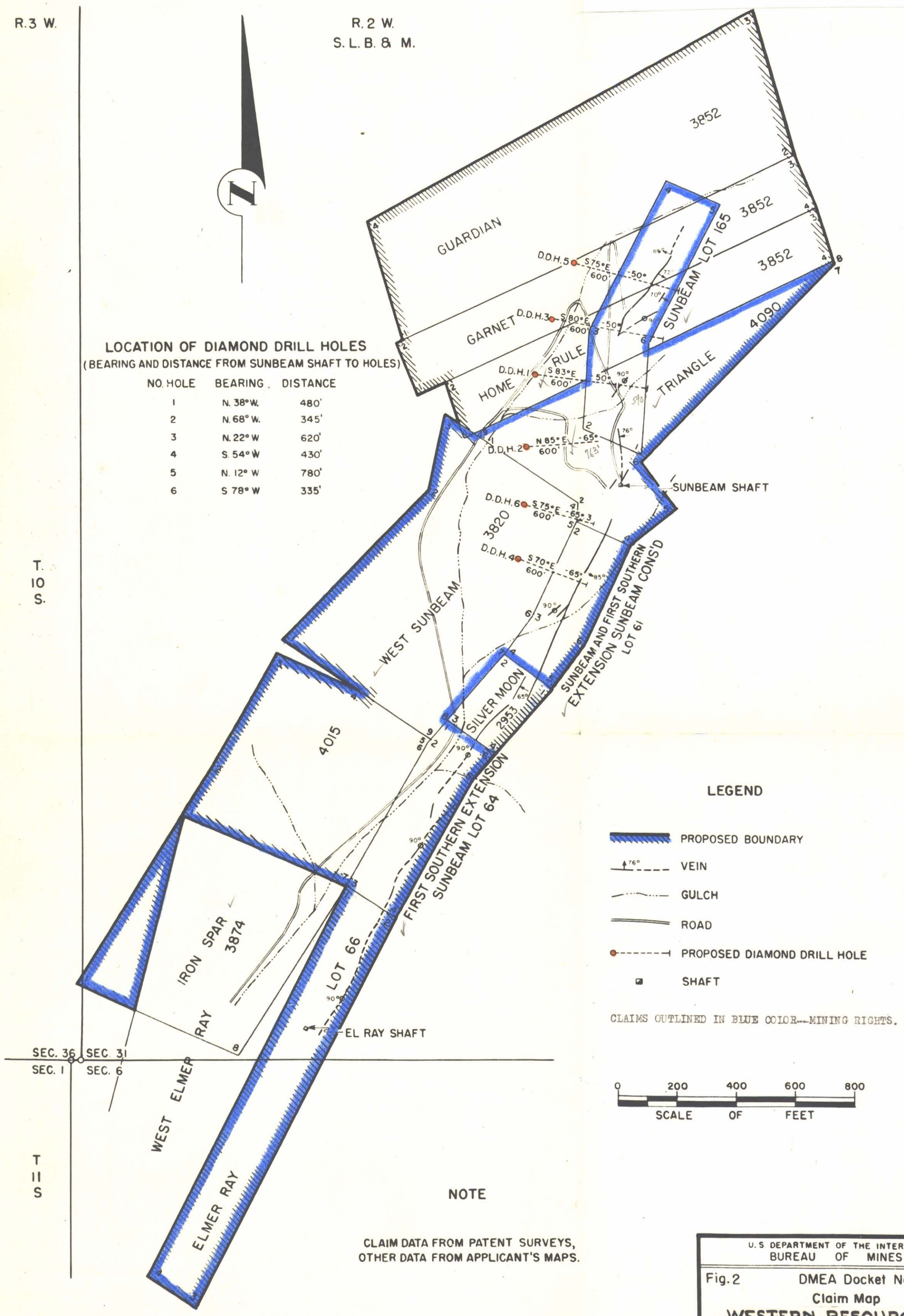

U.S DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Fig. 2 DMEA Docket No. 4653.

Claim Map

WESTERN RESOURCES, INC.

(NEW UNITED SUNBEAM MINING CO. PROPERTY)

JUAB COUNTY, UTAH

ENGINEER: *M. H. HOWES*	DATE: JAN. 14, 1957
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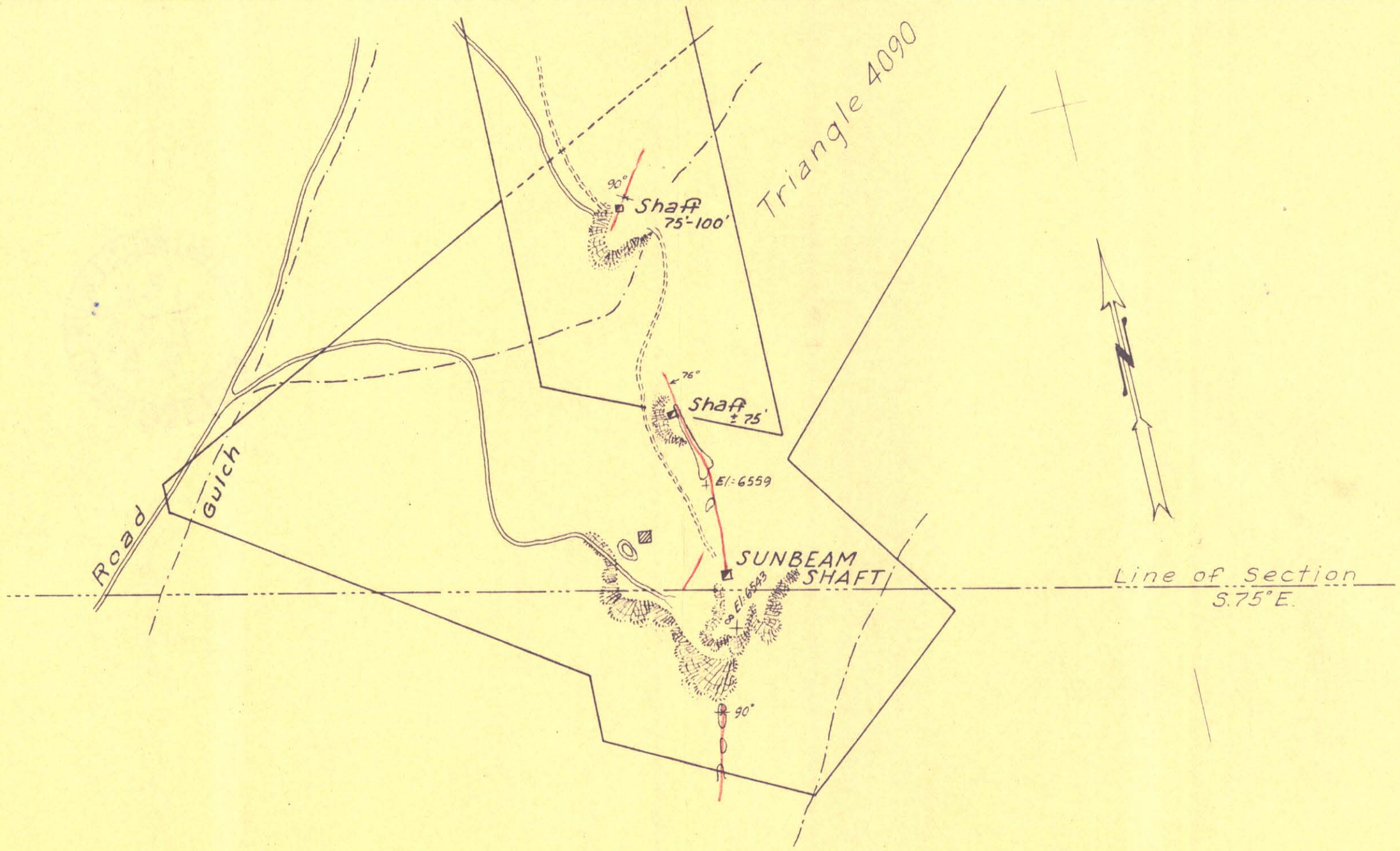
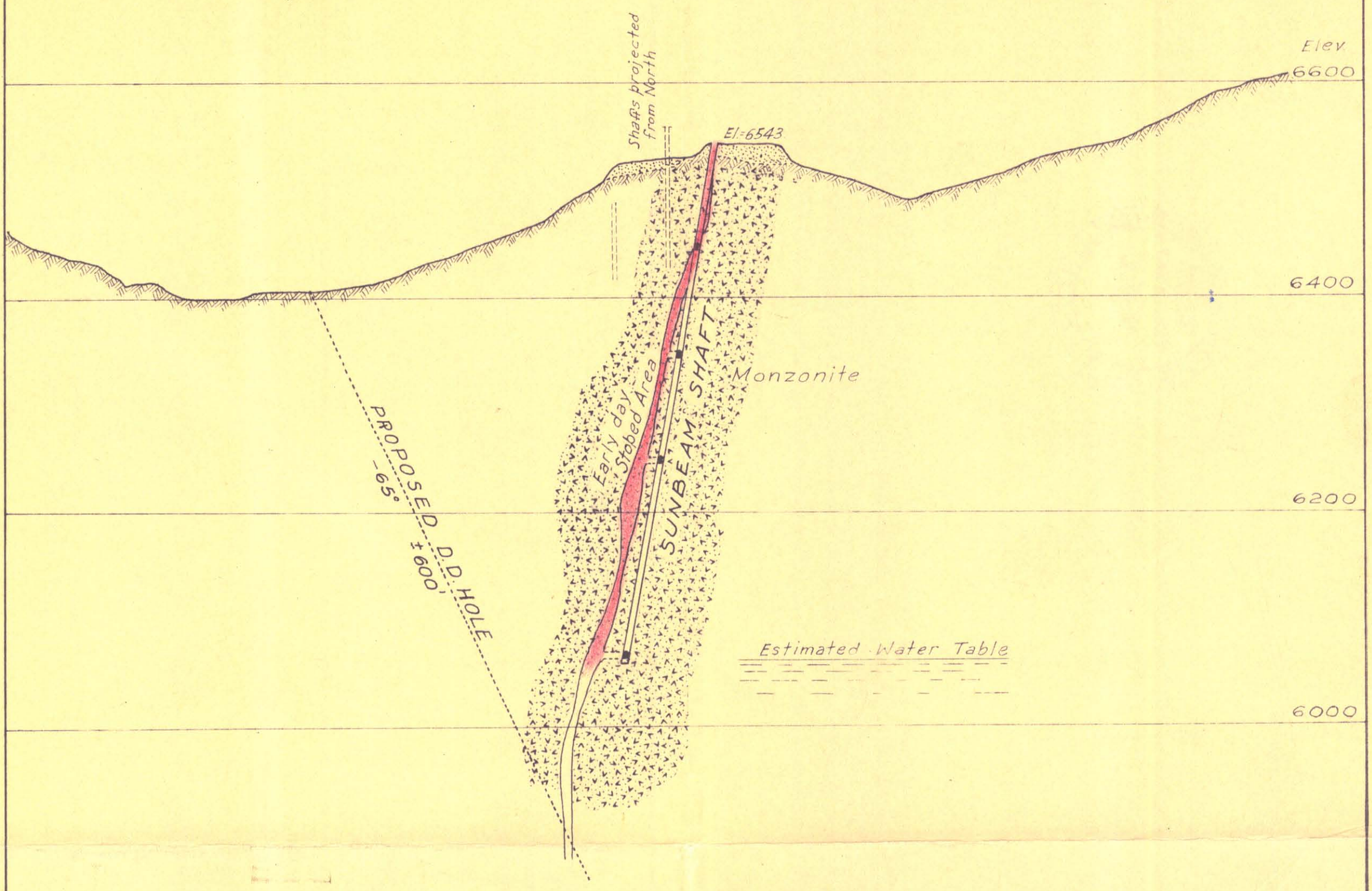
CHECKED:	

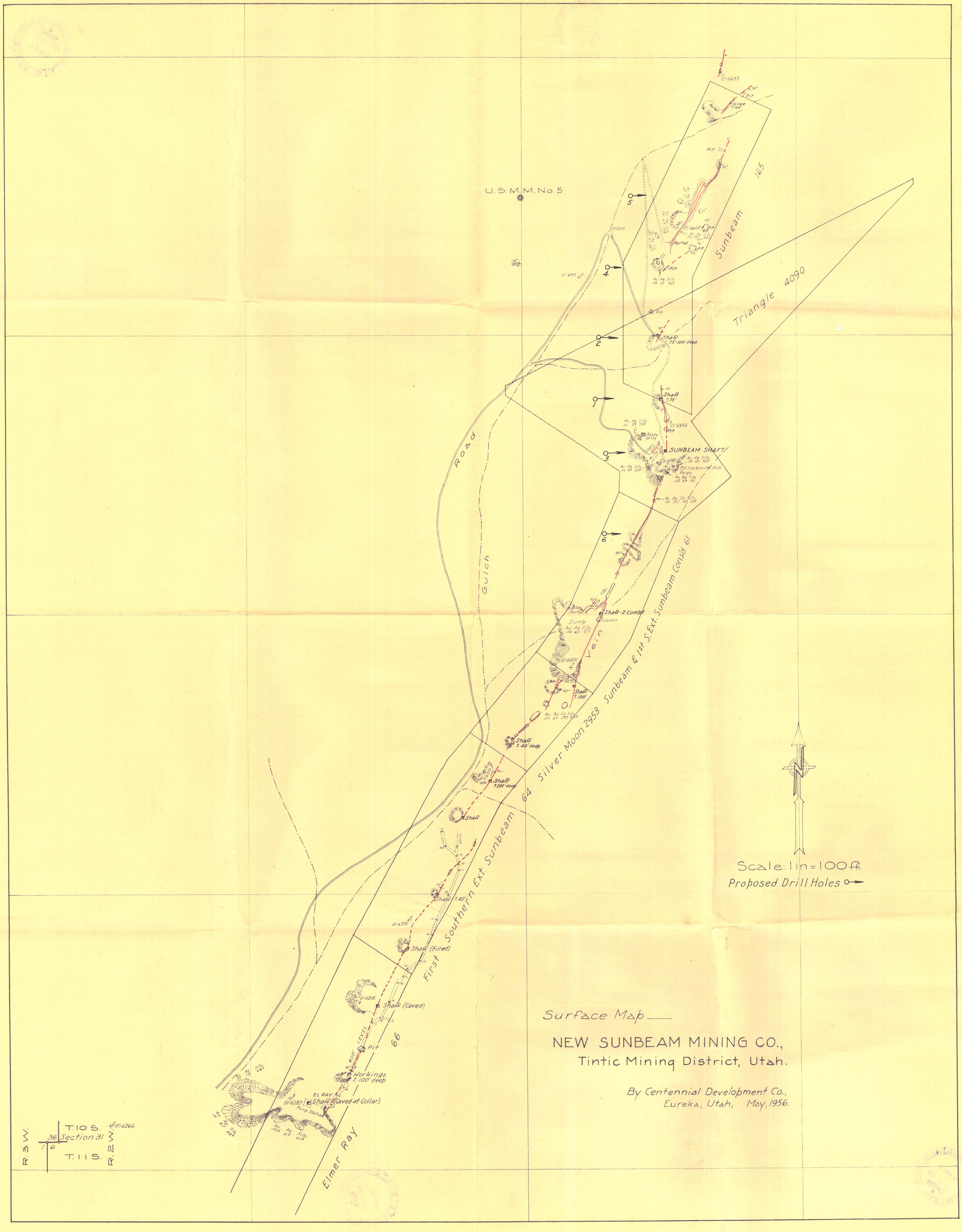


PLAN
Scale: 1"=100'



SECTION
Along Sunbeam Fissure.
—— S.75°E. → Looking Northward.
Scale: 1"=100"

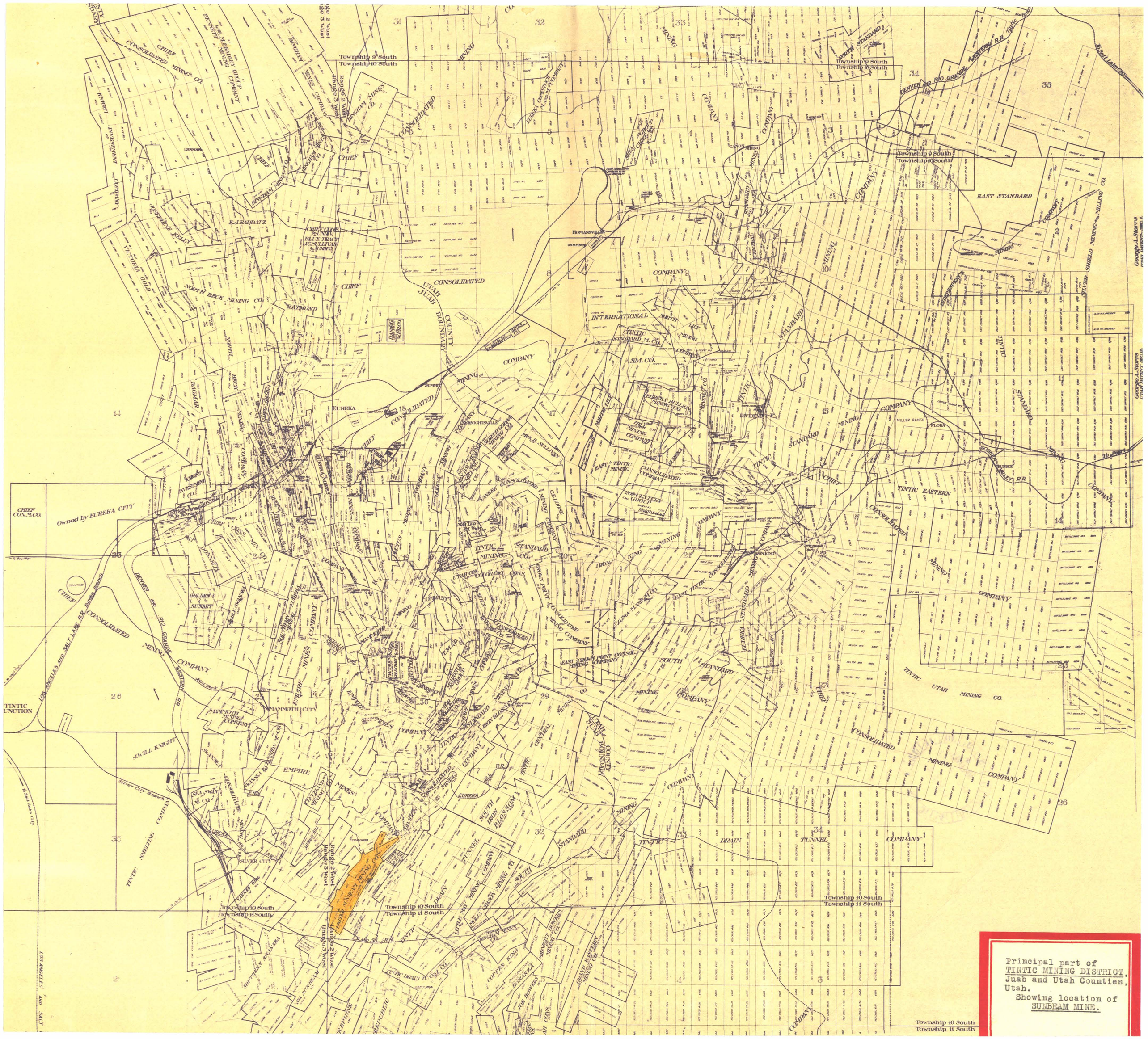
Centennial Development Co.,
Eureka, Utah. May, 1956.

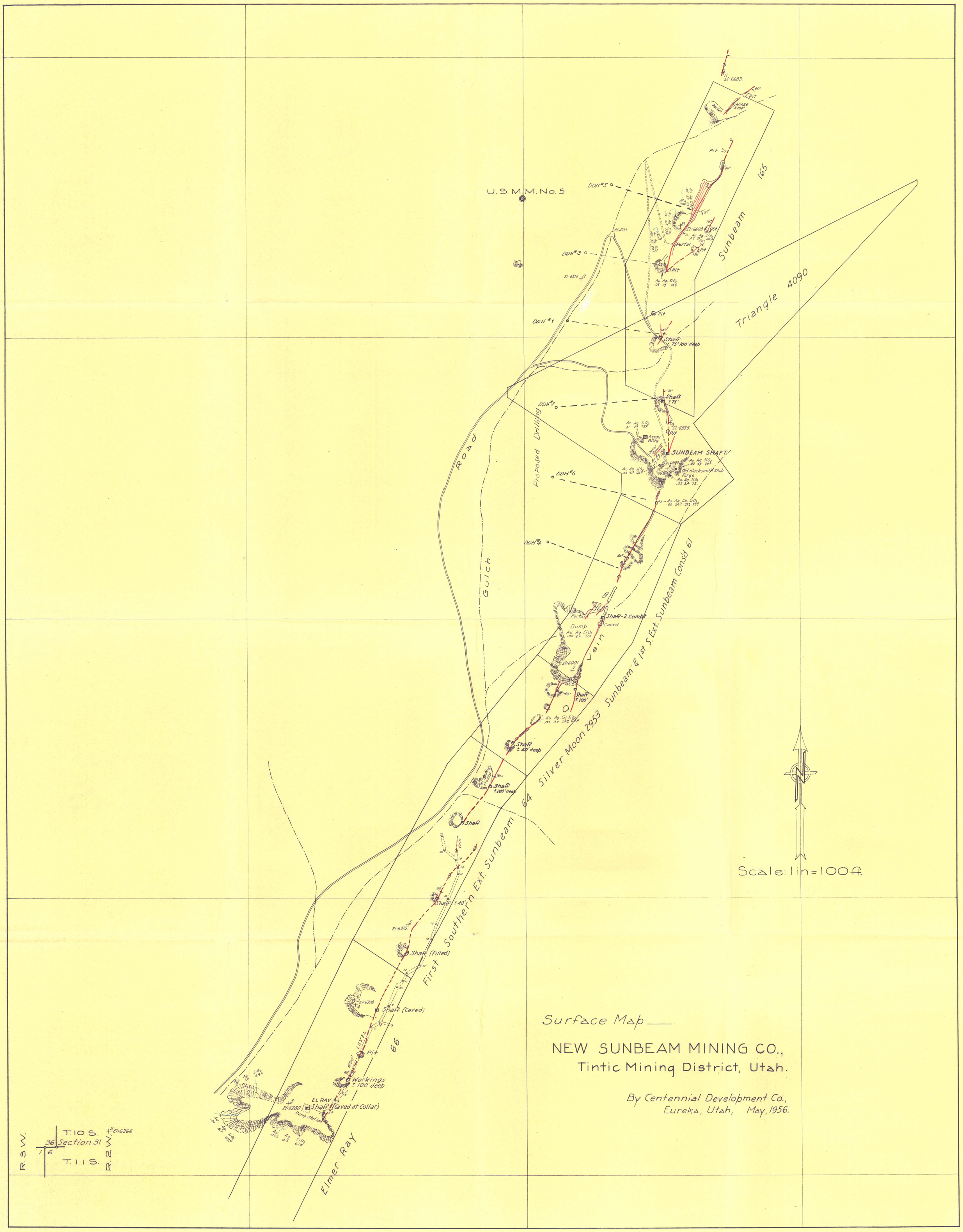


Surface Map

NEW SUNBEAM MINING CO.,
Tintic Mining District, Utah.

By Centennial Development Co.,
Eureka, Utah, May, 1956.


Principal part of
TINTIC MINING DISTRICT,
Juab and Utah Counties,
Utah.
Showing location of
SUNBEAM MINE.
Township 9 South
Township 10 South
Township 10 South
Township 11 South
Range 2 West
Range 3 West
CHIEF CON. M. CO.
Owned by EUREKA CITY
CHIEF CONSOLIDATED MINING COMPANY
CHIEF CONSOLIDATED MINING COMPANY WESTERN
DENVER AND RIO GRANDE WESTERN R.R.
LOS ANGELES AND SALT LAKE R.R.
EAST STANDARD
TINTIC STANDARD M. CO.
INTERNATIONAL
HOMANSVILLE
EUREKA
MAMMOTH CITY
SILVER CITY
TINTIC JUNCTION
TINTIC SMELTING COMPANY
TINTIC EASTERN
TINTIC UTAH MINING CO.
CONSOLIDATED MINING COMPANY
SOUTH STANDARD MINING COMPANY
EMPIRE MINES COMPANY
DRAIN TUNNEL COMPANY
SUNBEAM MINING CO.
SUNBEAM



Surface Map

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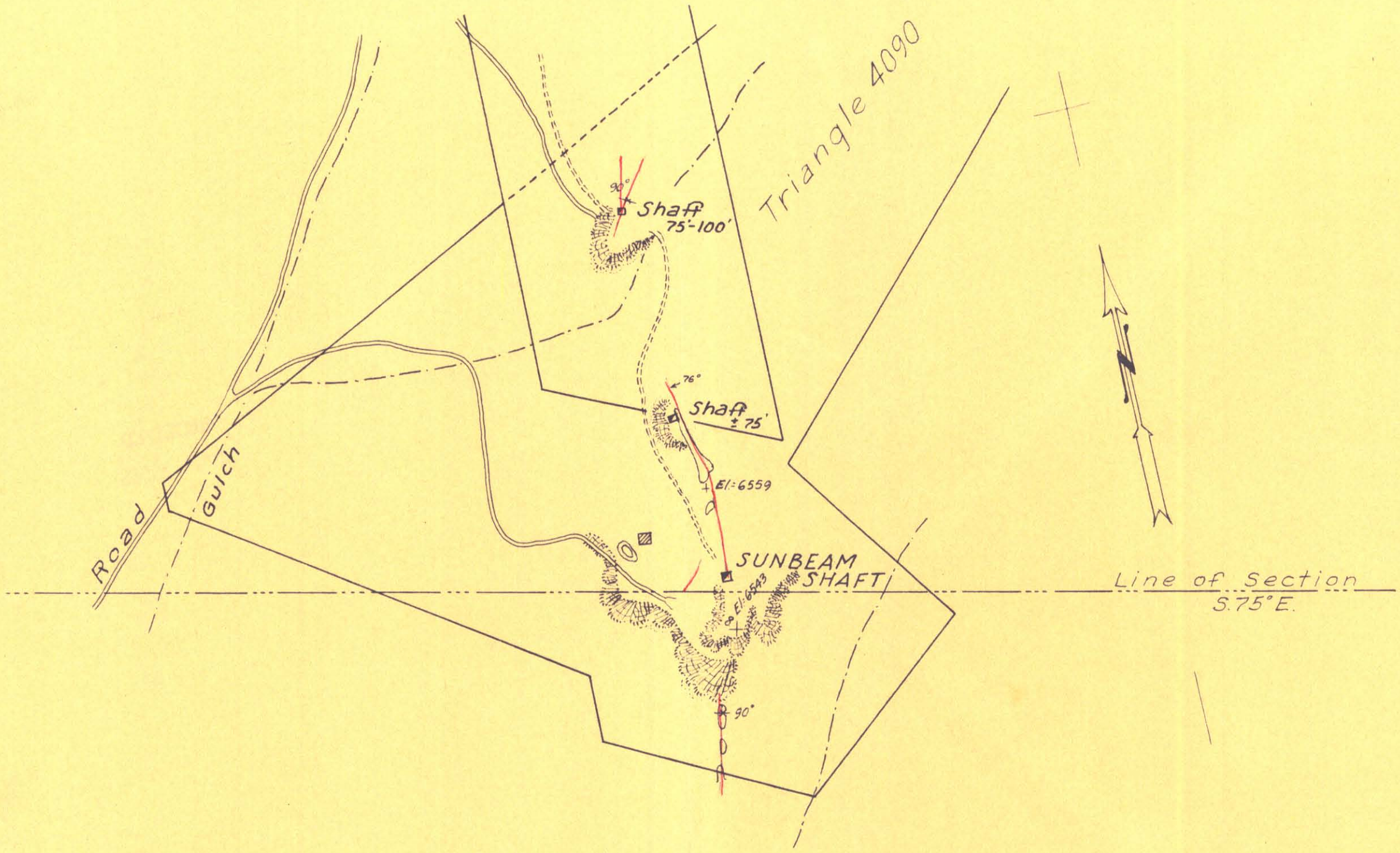
Tintic Mining District, Utah.

By Centennial Development Co.,
Eureka, Utah, May, 1956.



PLAN
Scale: 1"=100'

SECTION
Along Sunbeam Fissure.
—— S.75°E. → Looking Northward.
Scale: 1"=100"

Centennial Development Co.,
Eureka, Utah. May, 1956.