DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE Idm-E 1019 DMEA NO. 4249

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(Withdrawn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

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

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

Left Side

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

Right Side

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

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

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

Left Side

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

Right Side

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

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

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

9775

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

RECEIVED FEB 27 1958

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

pertaining to Exploration Project Contract No. Idm-E1019, DMEA No. 4249, including Amendment No. 1, for the months of November, 1956 to May, 1957, inclusive, covering a project for the exploration of Uranium on property known as Sorrell Horse and Citation Claims located in Gila County, about 20 miles south of Young, Arizona.

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		$16,595.51
Exceptions: (Schedule attached)		
Prior to this review	$1,103.01	
Herewith	0.00	1,103.01
Total Accepted Cost		$15,492.50

The contract calls for a 75 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Eleven thousand, six hundred nineteen and 38/100ths 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	$11,619.38
Amount reimbursed	11,119.38
Balance due Operator	$ 500.00

Donald T. Finch

February 18, 1958

Donald T. Finch, Auditor

BIG SIX EXPLORATIONS, INC.

Contract No. Idm-E1019 Docket No. DMEA 4249

REASONS FOR REPORT OF REVIEW IN LIEU OF FINAL AUDIT

(a) 57.89%, or $8,968.50, of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs for work actually performed.

(b) 42.11%, or $6,524.00, of the costs incurred were supported by documentary proof of the costs claimed under the contract provisions for contribution by the Government on the basis of actual costs incurred.

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

BIG SIX EXPLORATIONS, INC.

Contract No. Idm-E1019 | Docket No. DMEA 4249

SCHEDULE OF DISALLOWANCES

The following disallowances were made by the DMEA Finance Officer, Region III, upon the recommendation of the Examining Engineer. The Executive Officer of the DMEA Field Team, Region III, and the Auditor concur with these disallowances.

Assays (Excess claim of 1 assay - No support)	$ 5.00	
Supervision (Not applicable to road building)	153.23	
Camp materials and supplies not applicable to road work	89.04	
Excessive depreciation on pickup truck	39.72	
Repairs to equipment not applicable to road work	118.14	
Payroll taxes (Adjustment for excess supervision disallowed above.)	3.05	
Workmen's compensation in excess of rates shown by State of Arizona	29.90	
Gas, oil, station wagon and camp supplies not applicable to road	111.95	
Telephone (Not applicable to road)	2.20	
Excess charge for accounting not applicable to road	66.67	
Net road costs in excess of allowable maximum of 2,800 feet of road construction @ $2.33 per foot. (3,000 feet constructed.)	484.11	
Total Disallowances		$1,103.01

BIG SIX EXPLORATIONS, INC.

Contract No. Idm-E1019 | Docket No. DMEA 4249

	Total to Date MF-104 May, 1957	Disallowed By Finance Officer	Accepted Costs
Fixed Unit Costs			
250 Ft. of drifting and crosscutting @ $31.00/ft.	$ 7,750.00		$ 7,750.00
4 Ft. of timbering @ $4.50/ft.	18.00		18.00
8 assays @ $5.00 each	40.00	$ 5.00	35.00
Percussion Drilling			
477 Ft. @ $1.50/ft.	715.50		715.50
150 Ft. @ $3.00/ft.	450.00		450.00
Total Fixed Unit Costs	$ 8,973.50	$ 5.00	$ 8,968.50
Actual Cost			
Roads (Operator elected to perform this work instead of by independent contract.)			
Labor	$ 1,175.82		$ 1,175.82
Supervision	850.00	$ 153.23	696.77
Explosives	169.58		169.58
Equipment Rental	4,212.50		4,212.50
Depreciation (Truck)	83.60	39.72	43.88
Drill steel, bits and small tools	94.10		94.10
Camp supplies	89.04	89.04	-
Repairs to Equipment	174.12	118.14	55.98
Payroll Taxes	40.52	3.05	37.47
Liability Insurance (Workmen's Compensation)	173.28	29.90	143.38
Gas and Oil (Compressor)	396.06	111.95	284.11
Telephone	2.20	2.20	-
Accounting	141.67	66.67	75.00
Gas for pickup truck	19.52		19.52
Net costs claimed in excess of allowable maximum of 2,800 Ft. of Road @ $2.33/ft.		484.11	484.11
Total Actual Costs	$ 7,622.01	$1,098.01	$ 6,524.00
Total All Costs	$16,595.51	$1,103.01	$15,492.50

Official Copy

DMEA
DEPARTMENT OF THE INTERIOR
MAY 28 1957
REGION III
DENVER, COLORADO

EXPLORATION PROJECT AGREEMENT

BIG SIX EXPLORATION, INC.

DOCKET NO. DMEA 4069

CONTRACT NO. I4n-21619

AMENDMENT NO. 1

It is agreed this 31st day of May, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Big Six Exploration, Inc. hereinafter called the "Operator," parties to that certain Exploration Project Contract No. I4n-21619, Docket No. DMEA 4069, dated October 16, 1956, hereinafter called the "Contract," that:

1. The date fixed in Article 3, on or before which work is to be completed, is extended from May 31, 1957 to November 30, 1957.

2. The maximum period for payment of royalty and lien for payment thereof, provided for in the contract, is increased to eleven years from the date of the contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Executed in triplicate the day and year first above written.

BIG SIX EXPLORATION, INC.

By Roger F. Ashton
Roger F. Ashton, President

UNITED STATES OF AMERICA

By E. M. Hardman
Acting Executive Officer,
DMEA Field Team, Region III

Docket Copy

RECEIVED
OCT 26 1956

MF-200
(Revised June 1954)

Docket No. DMEA 4249

Commodity Uranium

Contract No. Idm-E 1019

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 16th day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Big Six Explorations, Inc., a Texas corporation

(See Traver's memo October 24, 1956: Operator has requested that all correspondence be directed to the home office, at 220 North Jefferson, Odessa, Texas).

whose mailing address is Box 6 Young, Arizona 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 2 maps

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 Arizona, County of Gila, 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: None

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

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

of the land (lessor, seller, optionor, etc.), are attached, as follows: Consent to Lien of owners of leased claims is attached.

(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 Uranium. The work to be performed is described in Exhibit "A." The Operator on or before December 1, 1956, shall commence the work, and on or before May 31, 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"~~, except as otherwise provided in Exhibit "A" with respect to stages of work. 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 $26,788.00. The Government shall contribute 75 percent of the allowable costs as they are incurred in a total sum not in excess of $20,091.00: *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.

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

(a) 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, except as otherwise provided in Exhibit 'A' with respect to stages of 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, except as to optional provision in Exhibit "A" concerning construction of access road.

(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 words "Article 8" are substituted for the words "Article 9."

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

Appd. Sol. Off.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitterling
Administrator, Defense Minerals
Exploration Administration

BIG SIX EXPLORATIONS, INC.
(Operator)

By Roger F. Ashford
President

10-22-56

I, Bill R. Carstarens, certify that I am the secretary of the corporation named as Operator herein; that Roger F. Ashford 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.

Bill R. Carstarens

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
BIG SIX EXPLORATIONS, INC.
DOCKET NO. DMEA-4249

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ANNEX I

The land referred to in Article 2 of the Contract consists of seven (7) contiguous unpatented lode mining claims, situated in the W½ of sec. 4, T. 6 N., R. 14 E., G. & S. R. M., Notices of Location of which are recorded in the Office of the County Recorder, Gila County, Arizona, as follows:

Claim	Docket	Page
Sorrell Horse No. 1	7	359
Sorrell Horse No. 2	7	360
Citation No. 1	22	378
Citation No. 2	22	379
Citation No. 3	22	380
Citation No. 4	22	381
Citation No. 5	51	344

The locations of the claims are shown on the attached map entitled "Figure 2 - Claim Map, Big Six Exploration Inc., Gila County, Ariz." and made a part of this Contract.

The Operator is the owner of Citation No. 5 claim, and is in possession and has the right to possession for the purposes of the Contract of Sorrell Horse Nos. 1 and 2 and Citations Nos. 1 through 4 claims for a period of ten years, renewable, pursuant to a mining lease dated November 1, 1955, executed by the owners, Alfred Haught, Homer Haught, C. A. Haught, Van Baker, Clifford Martin, and Harvey McKee, and Big Six Explorations Co., the lessee, which was assigned to the Operator.

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

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator Big Six Exploration, Inc.
Docket No. DMEA- 4249
Contract No. Idm-E 1019
Contract Date OCT 16 1956

CONSENT TO LIEN
and
SUBORDINATION AGREEMENT 1/

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To the United States of America:

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

Unpatented lode mining claims recorded in Office of Recorder, Gila County, Arizona as follows: Sorrell Horse Nos. 1 and 2, Docket 7 pages 359 and 360; Citation Nos. 1, 2, 3, and 4, Docket 22, pages 378, 379, 380, and 381.

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.)

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.

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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 11 day of August, 1956.

HOMER HAUGHT ~~Donald Hayes Haught~~	[Seal]	YOUNG ARIZ.	[Address]
ALFRED HAUGHT ~~Glenn Harris Haught~~ Alfred C Haught	[Seal]	YOUNG ARIZ.	[Address]
~~Van Baker~~ Alfred C Haught	[Seal]	His Attorney in fact YOUNG ARIZ	[Address]
CLIFFORD MARTIN ~~Virgil Baker~~ Alfred C Haught	[Seal]	His Attorney in fact YOUNG ARIZ.	[Address]
C.A. HAUGHT ~~Richard Baker~~ C. A. Haught	[Seal]	YOUNG ARIZ.	[Address]
~~Harvey McKee~~ Harvey McKee	[Seal]	YOUNG ARIZ	[Address]

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

_____

[Corporate Seal]

EXPLORATION PROJECT CONTRACT
BIG SIX EXPLORATIONS, INC.
DOCKET NO. DMEA-4249

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EXHIBIT A

Description of the Work

General Provisions

The object of this project is to explore the lower part of the upper member of the Dripping Spring quartzite, which underlies the property in a nearly horizontal blanket-like formation, by means of drifting, crosscutting, and percussion drilling.

The project shall be supervised at all times by a qualified mining engineer or geologist, who shall direct or perform the required surveying, mapping, sampling, drill-hole logging, and prepare the reports required pursuant to this Contract.

As the drifting and crosscutting progresses, representative samples shall be taken in mineralized areas. Areas of persistent mineralization shall be channel sampled. Areas of spotty mineralization shall be tested by chip sampling or by means of a composite sample of each round broken.

All drill cuttings shall be saved by methods and at drilling intervals, and checked for radioactivity, as approved by the Government. The percussion drill test holes shall be of sufficient size to permit probing with standard radiometric equipment. Any section of drill cuttings that indicates significant radioactivity shall be split into halves, and one-half shall be analyzed chemically for uranium and the other half shall be furnished to the Government. Drill cuttings from other sections of each hole shall be properly boxed, labeled, and stored for Government inspection and disposition.

All drill holes shall be logged geologically and probed for radioactivity, and four copies of each log furnished to the Government.

The Government shall not contribute to the costs of an incompleted drill hole.

All samples from the drifts and crosscuts selected for chemical analyses shall be split into halves, one-half used for assay purposes and the other half properly stored for Government inspection

and disposition. Not more than 50 samples shall be analyzed chemically for U_3O_8 for Stage I and not more than 50 samples shall be analyzed chemically for U_3O_8 for Stage II. The method of all sampling is subject to the approval of the Government.

Cross-sectional dimensions of the adit drift and crosscuts shall be not less than 5 feet by 7 feet in the clear of timber. The drift and crosscuts shall be timbered as necessary, with standard drift sets on 5-foot centers, or steel rock bolted in lieu of timbering where appropriate.

The location, direction, inclination, and extent of all work are subject to Government approval.

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

Stage I

Stage I consists of constructing an access road approximately as shown on the attached map entitled "Fig. -4 - Proposed Exploration, Big Six Exploration Inc. Gila County, Ariz.," suitable only for transporting equipment, labor, materials, and supplies to the adit site, and driving an adit (drift) approximately as shown in the area marked with a circled A, on the same map.

Areas penetrated by the adit that show favorable indications of mineralization shall be further explored by drilling either long or short percussion drill holes, as approved by the Government.

The Government will not contribute to the fixed costs of units of work that exceed the following:

2,800 linear feet of access road

250 feet of adit (drift)

35 linear feet of adit timbering, or any portion of the fixed costs of rock bolting in lieu thereof that exceeds $4.50 per foot of drift when averaged over a 5-foot section

500 feet of percussion drill test holes less than 50 feet in depth

150 feet of percussion drill holes with depths of 50 feet or over.

Stage II

Stage II consists of driving crosscuts from the adit in an eastward or westward direction to explore any significant mineralization found in the adit as the result of Stage I work. From these

openings either long or short percussion drill holes shall be drilled to further explore any significant mineralization encountered, as approved by the Government.

The Government will not contribute to the fixed costs of units of work that exceed the following:

300 feet of crosscut

35 linear feet of crosscut timbering, or any portion of the fixed costs of rock bolting in lieu thereof that exceeds $4.50 per foot of drift when averaged over a 5-foot section

500 feet of percussion drill test holes less than 50 feet in depth

150 feet of test holes 50 feet in depth or deeper.

Estimated Costs of the Project

Stage I

Actual Costs

Category (1) Independent Contracts

2,800 feet access road	@ $2.33/ft.	$6,524.00 x/

Categories (2) through (7) None

Fixed Unit Costs

250 feet of adit	@ $31.00/ft.	7,750.00
35 feet of timbering (or bolting)	@ $4.50/ft. @ $4.00/bolt	157.50
500 feet of percussion drill hole (depth less than 50 feet)	@ $1.50/ft.	750.00
150 feet of percussion drill hole (depth 50 feet or deeper)	@ $3.00/ft.	450.00
50 chemical analyses	@ $5.00/sample	250.00
Estimated Total Cost of Stage I		$15,881.50

Stage II

Actual Costs

None

Fixed Unit Costs

300 feet of crosscut	@ $31.00/ft.	$ 9,300.00	
35 feet of timbering (or bolting)	@ $4.50/ft. @ $4.00/bolt	157.50	
500 feet of test hole (less than 50 feet)	@ $1.50/ft.	750.00	
150 feet of test hole (depth 50 feet or deeper)	@ $3.00/ft.	450.00	
50 chemical analyses	@ $5.00/sample	250.00	
Estimated Total Cost of Stage II			$10,907.50
Estimated Total Cost of Project (rounded to)			$26,788.00
Government Participation @ 75%			$20,091.00

2/ The Operator may perform the work of constructing the access road in lieu of contracting it, in which case Categories (2) through (7) of Article 6(a) shall apply and all schedules of actual costs required thereunder are waived: Provided that the Government will not contribute to any portion of the actual costs that exceeds $2.33/ft. averaged as provided in Article 13(f).

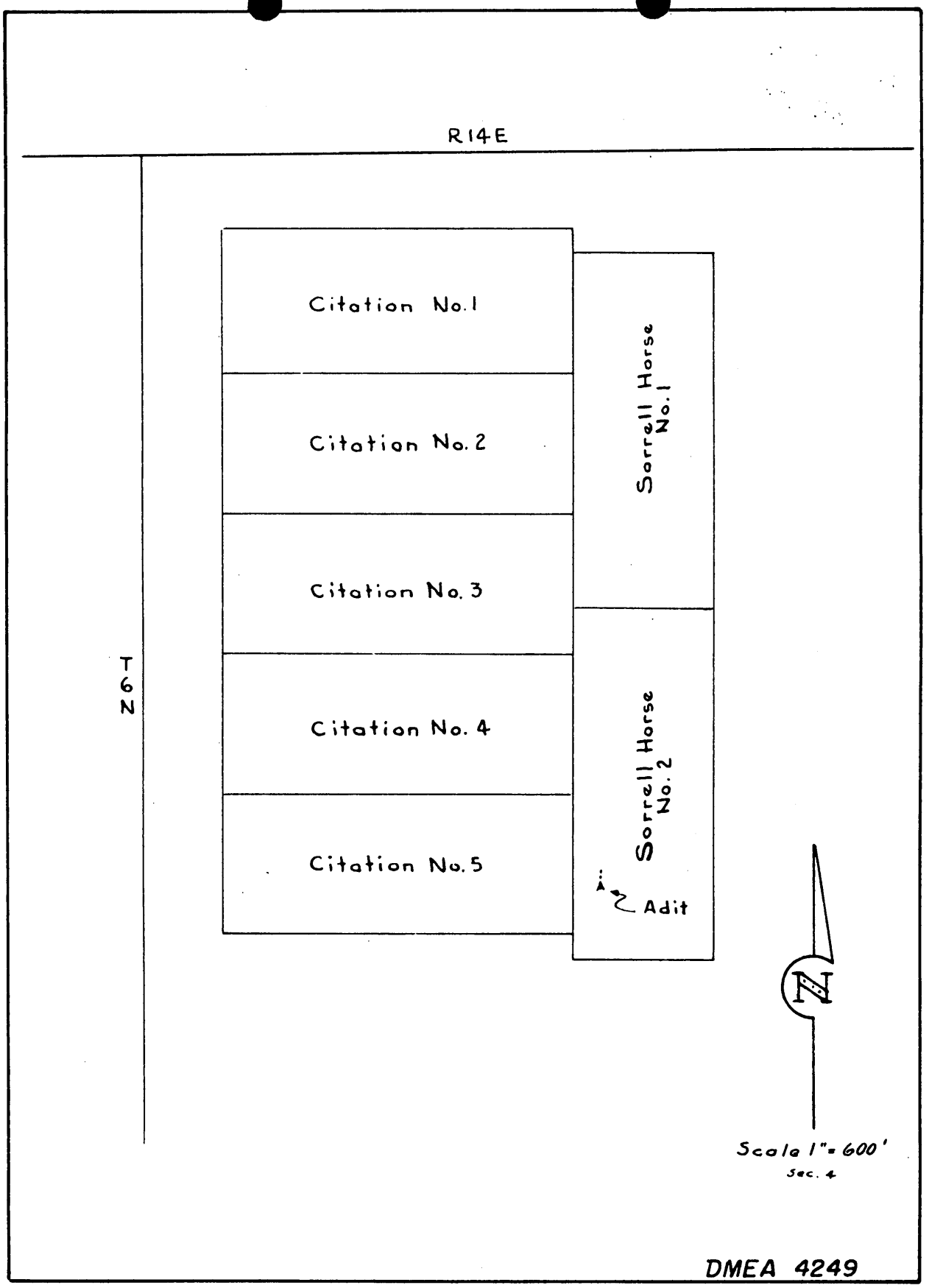

FIG.-2- CLAIM MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ.

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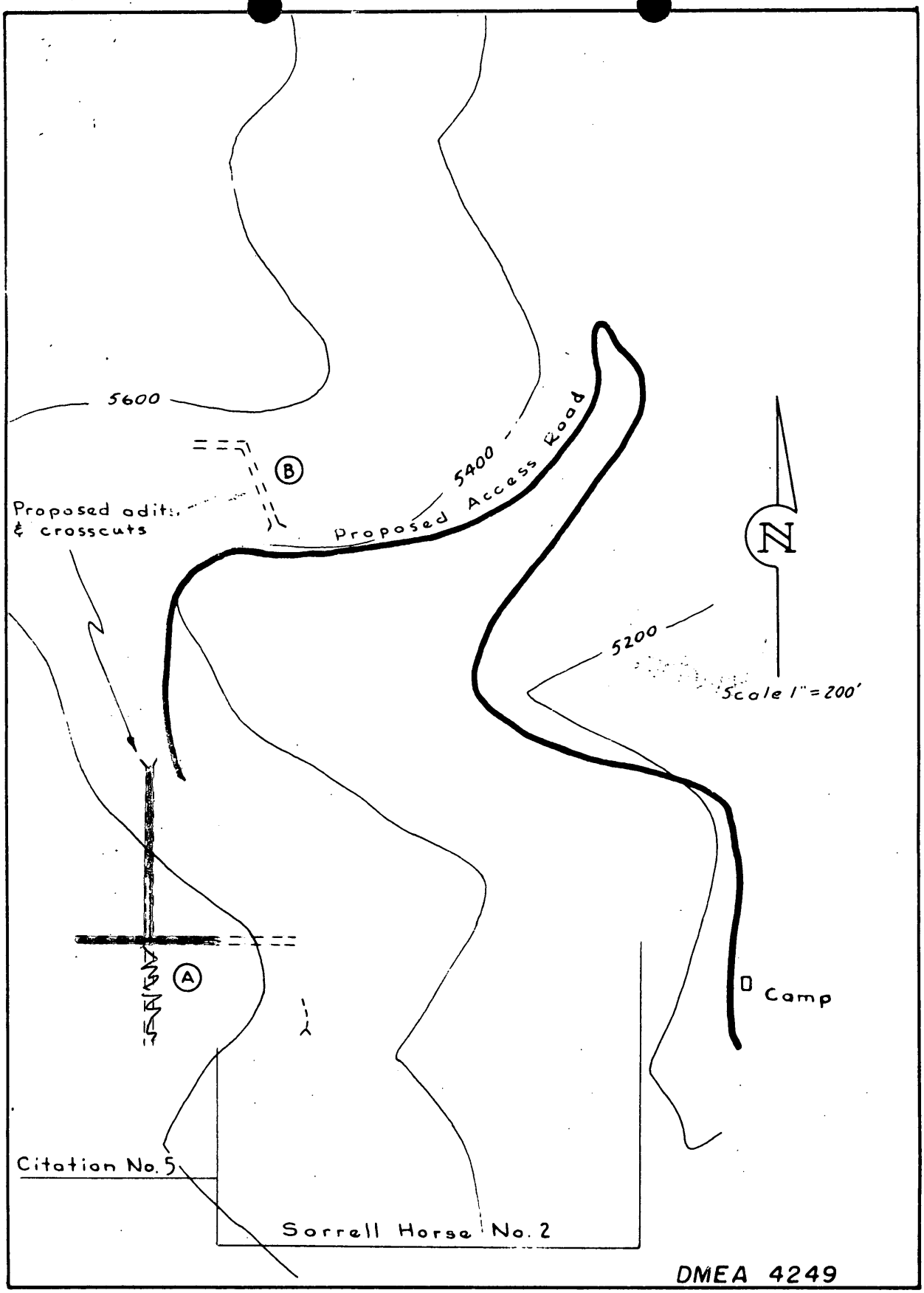

FIG. - 4 - PROPOSED EXPLORATION, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ.

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Docket Copy

MF-200A
(Rev. April 1956)

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

DMEA No.	*Commodity*	*Contract No. Idm–E*	*County*	*State*
4249	Uranium	1019	Gila	Arizona

It is agreed OCT 1 6 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Big Six Explorations, Inc., a Texas corporation

whose mailing address is Box 6
Young, Arizona
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before ....., and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 10 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $26,788.00. The Government will contribute 75 percent of the fixed unit cost of the work performed, not exceeding $20,091.00, in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: None

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached, as follows: Consent to Lien of owners of leased claims is attached.

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

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

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

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

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

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

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

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

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

ARTICLE 6. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

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

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

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

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

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

BIG SIX EXPLORATIONS, INC.
(Operator)

By .....
Administrator, Defense Minerals
Exploration Administration

By .....

Title .....

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

(2) or rock boots in the Thread

(3) or rock boots in the Thread.

(A) Put under independent contract on long form - with footnote giving right for operator to construct on actual cost basis with [illegible]

Needs minimum description & specs.

"Construct approx 2800 ft access road suitable for transport equipment, labor, materials & supplies to site etc.

[Insert 1]

on 5 ft centers, or

a standard drift set. Steel rock bolts may be used in lieu of timbering at ~~$4.00 per foot~~, but the cost shall not exceed a maximum of $1.50 per foot of drift averaged over 5 ft sections.

Drift affirmative.

Mr. Mittendorf
Mr. Selfridge's comments on contract - Big Six)

(Two members signed the letter and if it is to go out Hazel can sign Mr. S's name)

There is a paragraph in the Annex starting "The locations of claims are shown ..... and made a part of this Contract." Mr. Selfridge said the and should come out.

In the Annex the names that are given of the lessors are o.k. although there were questions regarding them.

In Exhibit A in the description of the timber where it says "a stull headboard" Mr. Knouse meant that that was a post with a headboard on it and lagging on the side of the post. We have not put anything like that in contracts and he doesn't know whether it belongs or not.

The discussion of drift between "girt" and "spreader" is left out and Mr. Knouse thought it wouldn't make any difference.

[redacted]

Mr. Kiilsgaard signed the letter only because we have been most of the summer getting additional informatiou out of the applicant and the Field Team. He wasn't too happy about it and personally would like to see it killed. Mr. Knouse believes that they won't find anything and the only reason we drew up the contract is that Mr. Johnson suggested it might be well to give them a little work.

The Field Team and Nelson and Harshman didn't think too much about it either - didn't think it a very good project. So he thought you could either kill it or have the corrections made.

He has quite a few things to discuss in the staff meeting and thought you might want to postpone it until Tuesday.

Mr. Selfridge phone number is OT 4-7125 (He will be there except for maybe a few minutes out to the drug store)

Elah

Bolts

We usually don't set them up as a fraction of their regular set. They allow about $3.50 ($5 would be a better figure) per bolt and they limit the number of bolts in a 5-foot section of drift so that the bolting doesn't cost any more than a set of timber.

Line item for timbering — $ per ft
(standard drift sets)

Line item for roof bolts — $ per bolt
limit # so won't cost more than set

[illegible]

[illegible] 3.50

[illegible]

[illegible]

[illegible]

timber

and disposition. Not more than 50 samples shall be analyzed chemically for U_3O_8 for Stage I and not more than 50 samples shall be analyzed chemically for U_3O_8 for Stage II. The method of all sampling is subject to the approval of the Government.

Cross-sectional dimensions of the adit drift and crosscuts shall be not less than 5 feet by 7 feet in the clear of timber. The drift and crosscuts shall be timbered as necessary, with ~~not less than 8-inch by 8-inch drift sets on 5-foot centers, and 2-inch by 12-inch side and back lagging; or they shall be roof- or wall-bolted~~ as necessary, with steel bolts spaced not closer than 3 feet apart. The cost of timbering and roof and wall bolting shall be calculated as follows: A set of timber consisting of two posts, a cap, and lagging shall be considered equivalent to 5 linear feet of timbering; a stull headboard and lagging shall be considered equivalent to 2.0 linear feet of timbering; and each roof or wall bolt shall be considered equivalent to 0.5 linear foot of timbering.

The location, direction, inclination, and extent of all work are subject to Government approval.

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

Stage I

Stage I consists of constructing an access road approximately as shown on the attached map entitled "Fig. -4 - Proposed Exploration, Big Six Exploration Inc. Gila County, Ariz.," and driving an adit (drift) approximately as shown in the area marked with a circled A, on the same map.

Areas penetrated by the adit that show favorable indications of mineralization shall be further explored by drilling either long or short percussion drill holes, as approved by the Government.

The Government will not contribute to the costs of units of work that exceed the following:

2,800 linear feet of access road
250 feet of adit (drift)
35 linear feet of adit timbering, or
500 feet of percussion drill test holes less than 50 feet in depth
150 feet of percussion drill holes with depths of 50 feet or over.

Stage II

Stage II consists of driving crosscuts from the adit in an eastward or westward direction to explore any significant mineralization found in the adit as the result of Stage I work. From these

openings either long or short percussion drill holes shall be drilled to further explore any significant mineralization encountered, as approved by the Government.

The Government will not contribute to the fixed costs of units of work that exceed the following:

(any portion of the fixed costs of rock bolting in lieu thereof that exceed $4.50 per foot when averaged over a 5 foot section.)

300 feet of crosscut
35 linear feet of crosscut timbering
500 feet of percussion drill test holes less than 50 feet in depth
150 feet of test holes 50 feet in depth or deeper.

Actual Costs
Category (1) & (2) through (7) - none

Estimated Costs of the Project

Fixed Unit Costs

Stage I

2,800 feet access road	@ $2.33/ft.	$6,524.00 [x] (A)	
250 feet of adit	@ $31.00/ft.	7,750.00	
35 feet of timbering (or equivalent bolting)	@ $4.50/ft.	157.50	
500 feet of percussion drill hole (depth less than 50 feet)	@ $1.50/ft.	750.00	
150 feet of percussion drill hole (depth 50 feet or deeper)	@ $3.00/ft.	450.00	
50 chemical analyses	@ $5.00/sample	250.00	
Estimated Total Cost - Stage I			$15,881.50

Actual Costs
None
Fixed Unit Costs

Stage II

300 feet of crosscut	@ $31.00/ft.	$9,300.00	
35 feet of timbering (or equivalent bolting)	@ $4.50/ft.	157.50	
500 feet of test hole (less than 50 feet)	@ $1.50/ft.	750.00	
150 feet of test hole (depth 50 feet or deeper)	@ $3.00/ft.	450.00	
50 chemical analyses	@ $5.00/sample	250.00	
Estimated Total Cost - Stage II			10,907.50
Estimated Total Cost of Project (rounded to)			$26,788.00
Government Participation @ 75%			$20,091.00

[x] the operator may perform the work of constructing the access road in lieu of contracting it, in which case all schedules of costs under Article 6(a) are waived; however that the Govt. will not contribute to any portion of the actual costs that exceed $2.33/ft

DRAFT
FMMurphy/ai, gla
~~8-10-56~~ 9/12/56

DOCKET

MF-200A
(Rev. April 1956)

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

DMEA No.	*Commodity*	*Contract No. Idm-E*	*County*	*State*
4249	Uranium	9 1019	Gila	Arizona

It is agreed OCT 16 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Roger F. Ashford, Charles Chick Fair, Bill R. Casstevens, David L. Greenless, Wilson E. Connell, and R. J. Allison d/b/a Big Six Explorations, Inc.

whose mailing address is Box 6
Young, Arizona
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before ....., and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 10 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $ 26,788.00. The Government will contribute ..... percent of the fixed unit cost of the work performed, not exceeding $ 20,091.00 in accordance with the provisions of Articles 4 and 5.

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

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: None

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached, as follows: See Annex I

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

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

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

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

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

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

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

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

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

ARTICLE 6. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

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

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

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

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

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

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

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

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

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

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

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

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Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

.....
(Operator)

By .....

By .....

.....

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

.....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

FLKnouse

DRAFT
/ai/gla
9-12-56

EXPLORATION PROJECT CONTRACT
BIG SIX EXPLORATIONS, INC.
DOCKET NO. DMEA-4249

ANNEX I

The land referred to in Article 2 of the Contract consists of seven (7) contiguous unpatented lode mining claims, situated in the W½ of sec. 4, T. 6 N., R. 14 E., G. & S. R. M., Notices of Location of which are recorded in the Office of the County Recorder, Gila County, Arizona, as follows:

Claim	Docket	Page
Sorrell Horse No. 1	7	359
Sorrell Horse No. 2	7	360
Citation No. 1	22	378
Citation No. 2	22	379
Citation No. 3	22	380
Citation No. 4	22	381
Citation No. 5	51	344

The locations of the claims are shown on the attached map entitled "Figure 2 - Claim Map, Big Six Exploration Inc., Gila County, Ariz." and made a part of this contract.

1. The Operator is in possession and has the right of possession to Citation No. 5 claim by location during 1955; and to Sorrell Horse Nos. 1 and 2 and Citation Nos. 1 through 4 claims pursuant to an agreement dated November 1, 1955, wherein Alfred Haught,

Homer Haught, C. A. Haught, Van Baker, Clifford Martin, and Harvey McKee are the Owner-Lessors and Roger F. Ashford, Charles Chick Fair, Bill R. Casstevens, David L. Greenless, Wilson E. Connell, and R. J. Allison, d/b/a Big Six Explorations, Inc., are the Lessees.

The Consent to Lien of each individual granting rights in the Sorrell Horse and Citation claims is attached to the Contract.

DRAFT
FLKnouse/glm
9-12-56

EXPLORATION PROJECT CONTRACT
BIG SIX EXPLORATIONS, INC.
DOCKET NO. DMEA-4249

EXHIBIT "A"

Description of the Work

General Provisions

The object of this project is to explore the lower part of the upper member of the Dripping Spring quartzite, which underlies the property in a nearly horizontal blanket-like formation, by means of drifting, crosscutting, and percussion drilling.

The project shall be supervised at all time by a qualified mining engineer or geologist, who shall direct or perform the required surveying, mapping, sampling, drill-hole logging, and prepare the reports required pursuant to this contract.

Representative samples shall be taken in mineralized areas as the drifting and crosscutting progresses. Areas of persistent mineralization shall be channel sampled. Areas of spotty mineralization shall be tested by chip sampling or by means of a composite sample of each round broken. All drill cuttings shall be saved by methods and at drilling intervals, and checked for radioactivity, as specified by the Government. The percussion drill test holes shall be of sufficient size to enable them to be probed with standard radiometric equipment. The section of the drill cuttings that indicate significant radioactivity shall be split into halves, and one-half shall be analyzed chemically for uranium and one-half furnished to the Government. The remaining drill cuttings from the other sections of each hole shall be properly boxed, labeled, and stored pending Government inspection and disposition.

All drill holes shall be logged geologically and probed for radioactivity, and four copies of each log furnished to the Government. No payment shall be made for an uncompleted drill hole.

The method of all sampling is subject to the approval of the Government. All samples to be analyzed chemically shall be split into halves, the Operator using one-half for assay purposes and storing the other half, properly identified, for Government use. Not more than 50 samples shall be analyzed chemical for U_3O_8 for Stage I and not more than 50 samples shall be analyzed chemically for U_3O_8 for Stage II.

Cross-sectional dimensions of the adit drift and crosscuts shall be not less than 5 feet by 7 feet in the clear of timber and shall be adequately timbered, roof or wall bolted, as necessary, with not less than 8-inch by 8-inch drift sets on 5-foot centers, and 2-inch by 12-inch side and back lagging or roof or wall bolted with steel bolts spaced not closer than 3 feet apart. The cost shall be calculated as follows: A set of timber consists of two posts, a cap, and lagging shall be considered equivalent to 5 linear feet of timbering; a stull headboard and lagging 2.0 linear feet of timbering; and one roof or wall bolt 0.5 linear feet of timbering.

The location, extent, and direction of the work shall be subject to Government approval.

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

Stage I

Stage I shall consist of constructing an access road at the approximate location shown on the attached map entitled "Fig. - 3 - Geologic Map, Big Six Exploration Inc. Gila County, Arizona," and

driving an adit at the approximate locations and in the directions shown in the area marked with a circled A, on the map entitled "Fig. - 4 - Proposed Exploration, Big Six Exploration, Inc. Gila County, Ariz.," attached hereto and made a part hereof.

Areas, penetrated by the adit, that show favorable indications of mineralization shall be further explored by drilling either long or short percussion drill holes, whichever is most suitable.

Not in excess of 2800 linear feet of access road shall be constructed, nor more than 250 feet of adit shall be driven, nor more than 35 linear feet of adit shall be timbered; nor more than 500 feet of percussion drill test holes less than 50 feet in depth and 150 feet of percussion drill holes with depths of 50 feet or over shall be drilled.

Stage II

Stage II shall consist of driving crosscuts from the adit in an eastward or westward direction to explore any significant mineralization found in the adit during Stage I. From these openings test holes similar to those in Stage I shall be drilled to further explore any significant mineralization encountered.

Not in excess of 300 feet of crosscut shall be driven nor more than 35 linear feet of the openings shall be timbered; nor more than 500 feet of percussion drill test holes less than 50 feet in depth and 150 feet of test holes more than 50 feet in depth shall be drilled.

Estimated Costs of the Project

Fixed Unit Costs

Stage I

2800 feet access road @ $2.33	$6,524.00	
250 feet of adit @ $31.00/ft.	7,750.00	
35 feet of timbering in adit @ $4.50/ft.	157.50	
500 feet of test hole (depth less than 50 feet) @ $1.50/ft.	750.00	
150 feet of test hole (depth in excess of 50 feet) @ $3.00/ft.	450.00	
50 samples chemically analyzed for U_3O_8 content @ $5.00/sample	250.00	
Total Estimated Cost of Stage I		$15,881.50

Stage II

300 feet of crosscut @ $31.00/ft.	$9,300.00	
35 feet of timbering @ $4.50/ft.	157.50	
500 feet of test hole (~~to~~ depth less ~~than of~~ 50 feet) @ $1.50/ft.	750.00	
150 feet of test hole (depth in excess of 50 feet ~~in depth~~) @ $3.00/ft.	450.00	
50 samples chemically analyzed for U_3O_8 content @ $5.00/sample	250.00	
Total Estimated Cost of Stage II		$10,907.50

S U M M A R Y

Total Estimated Cost of Stage I	$15,881.50
Total Estimated Cost of Stage II	10,907.50
Total Estimated Cost of Project (rounded to)	$26,788.00
Government participation at 75%	$20,091.00

Big Six Exploration's Inc.
Box #6
Young, Ariz.

5-25-56

RECEIVED
MAY 25 1956

Dear Sir,

This is the Power of Attorney You Requested on D.M.E.A. Application # H2H9

Thank You
R.J. Allison
Big Six Exploration's Inc.
Box #6
Young, Ariz.

DRY AIR COOLED GARAGE COCKTAIL LOUNGE COFFEE SHOP

Power of Attorney

Clifford L. Martin

Van Baker

Power of Attorney

GENERAL

KNOW ALL MEN BY THESE PRESENTS: That Clifford L. Martin

of Payson, Arizona

has made, constituted and appointed, and by these presents do hereby make, constitute and appoint Alford C. Haught of Young, Arizona

his true and lawful attorney for him and in his name, place and stead, and for his use and benefit, pertaining to mining claims in Cherry Creek District.

to ask, demand, sue for, recover, collect and receive all such sums of money, debts, dues, accounts, legacies, bequests, interests, dividends, annuities, and demands whatsoever, as are now or shall hereafter become due, owing, payable or belonging to him; and have, use and take all lawful ways or means in name, or otherwise, for the recovery thereof, by legal process, and to compromise and agree for the same, and grant acquittance or other sufficient discharges for the same for and in name, to make, seal and deliver; to bargain, contract, agree for, purchase, receive and take lands, tenements, hereditaments, and accept the seizing and possessing of all lands, and all deeds and other assurances in the law thereof; and to lease, let, demise, bargain, sell, remise, release, convey, mortgage and hypothecate lands, tenements, hereditaments, upon such terms and conditions and under such covenants as he shall think fit. Also to bargain and agree for, buy, sell, mortgage, hypothecate, and in any and every way and manner deal in and with goods, wares and merchandise, choses in action, and other property in possession or in action; and to make, do and transact all and every kind of business of what nature and kind soever; and, also, for him and in his name, and as his act and deed, to sign, seal, execute, deliver, and acknowledge such deeds, covenants, indentures, agreements, mortgages, hypothecations, bottomries, charter parties, bills of lading, bills, bonds, notes, receipts, evidences of debt, releases and satisfaction of mortgage, judgment and other debts, and such other instruments in writing, of whatever kind and nature, as may be necessary or proper in the premises.

GIVING AND GRANTING unto the said Attorney full power and authority to do and perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do if personally present. Clifford L. Martin hereby ratifying and confirming all that the said Attorney Alford C. Haught shall lawfully do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand, the 7th day of August, one thousand nine hundred and Sixty Five.

Form No. 32 Power of Attorney General V.P. Legal Blank Phoenix, Arizona

Power of Attorney

SPECIAL

KNOW ALL MEN BY THESE PRESENTS: That

VAN BAKER, of Gila County

s made, constituted and appointed, and by these presents does hereby make, constitute and appoint

ALFRED C. HAUGHT, of Young, Arizona.

his true and lawful Attorney for and in his name, place and stead, to sell, transfer, convey, lease, [illegible] and in any manner deal with the following described unpatented mining claims situated in the Sierra Ancha Mining District of Gila County, State of Arizona. The Docket and Page on which their location notices are recorded in the Office of the County Recorder in Gila County, together with the names of said claims set forth in the Exhibit "A" hereto and made a part hereof.

GIVING AND GRANTING unto his said Attorney the full power and authority to do and perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do if personally present, hereby ratifying and confirming all that his said Attorney ALFRED C. HAUGHT shall lawfully do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand this 1 X day of [illegible], 1955

POWER OF ATTORNEY SPECIAL Price 5c (Ask for Quantity Price) 100-12
Mercantile Phoenix, Arizona

NAME OF CLAIM	DOCKET	PAGE
Bonnie #1	5	260
Bonnie #2	5	261
Bonnie #3	5	262
Bonnie #4	5	263
Navajo #1	—	—
Navajo #2	—	—
Navajo #3	—	—
Navajo #4	—	—
Navajo #5	—	—
Navajo #6	—	—
Sorrell Horse #1	—	—
Sorrell Horse #2	—	—
Chappo #1	—	—
Chappo #2	—	—
Chappo #3	—	—
Chappo #4	—	—
Chappo #5	—	—
Chappo #6	—	—
Horseshoe #1	—	—
Horseshoe #2	—	—
Horseshoe #3	—	—
Horseshoe #4		

RECEIVED
MAY 25 1956

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS:

That ROGER F. ASHFORD, CHARLES CHICK FAIR, BILL R. CASSTEVENS, DAVID L. GREENLEES and WILSON E. CONNELL, all of Odessa, Texas, and R. J. ALLISON of Young, Gila County, Arizona, doing business under the firm name and style of Big Six Exploration Co., for and in consideration of the sum of Five Dollars ($5.00) and other good and valuable consideration, receipt whereof is hereby acknowledged, do hereby assign, transfer and set over unto BIG SIX EXPLORATIONS, INC., a Texas corporation, qualified to do business in Gila County, Arizona, that certain Mining Lease dated as of the 1st day of November, 1955, from Alfred Haught and Susie Mae Haught, also known as Susie Haught, husband and wife, Homer Haught and Bettye Haught, husband and wife, C. A. Haught, also known as Toby Haught, Joe Haught, Donald Wayne Haught, Glenn Morris Haught, also known as Glenn Haught, Van Baker, Virgil Baker, Richard Baker, Harvey McKee, Clifford Martin, Jack Martin, Mrs. Arthur Maurel, D. K. Murphy, Nickie Murphy, and Frank Chapman, all of Gila County, Arizona, to the said Roger F. Ashford, Charles Chick Fair, Bill R. Casstevens, David L. Greenlees, Wilson E. Connell, and R. J. Allison, covering those certain unpatented lode mining claims situated in the Sierra Ancha Mining District, Gila County, State of Arizona, of which the names, together with the numbers of Dockets and pages of Dockets of Official Records wherein their location notices are recorded in the office of the County Recorder of said Gila County, Arizona, are as follows, to wit:

NAME	DOCKET	PAGE
Sorrell Horse #1	7	359
Sorrell Horse #2	7	360
Citation #1	22	378
Citation #2	22	379
Citation #3	22	380
Citation #4	22	381

NAME	DOCKET	PAGE
Horse Shoe #1	10	291
Horse Shoe #2	10	292
Horse Shoe #3	10	293
Horse Shoe #4	10	436
Crying Jew #1	20	62
Crying Jew #2	20	63
Betty Jo #1	16	256
Betty Jo #2	16	257
Betty Jo #3	16	258
Betty Jo #4	16	259
Chappo #1	18	105
Chappo #2	18	106
Chappo #3	18	107
Chappo #4	18	108
Chappo #5	18	109
Chappo #6	18	203

TO HAVE AND TO HOLD the same unto said BIG SIX EXPLORATIONS, INC., its successors and assigns, from the date hereof for and during all the rest, residue and remainder of the term of said Mining Lease, subject to the conditions and provisions contained therein.

IN WITNESS WHEREOF, we have executed these presents this 30th day of November, 1955.

Roger F. Ashford

Charles Chick Fair

Bill R. Casstevens

David L. Greenlees

Wilson E. Connell

R. J. Allison

Forming part of Assignment,
Roger F. Ashford, et al, to
Big Six Explorations, Inc.

STATE OF TEXAS,
County of [illegible] } SS.

On this, the [illegible] day of [illegible], 1955, before me, [illegible], the undersigned officer, personally appeared ROGER F. ASHFORD, CHARLES CHICK FAIR, BILL R. CASSTEVENS, DAVID L. GREENLEES and WILSON E. CONNELL, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

[illegible]
Notary Public

My commission expires: [illegible]

STATE OF ARIZONA,
County of Gila. } SS.

On this, the 8th day of December, 1955, before me, Floral B. Geiser, the undersigned officer, personally appeared R. J. ALLISON, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Floral B. Geiser
Notary Public

My commission expires: June 9, 1958

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of MORRIS & MALOTT
Date Dec. 8th, 1955 Time 11:10 A.M., Docket 45 Official Records Page 242
Records of Gila County, Arizona.
WITNESS my hand and official seal the day and year first above written.
JOSEPH KINSMAN, County Recorder.
By Joseph Kinsman Deputy.

219608

210608

STATE OF ARIZONA }ss
COUNTY OF GILA }

I, Joseph Kinsman, County Recorder in and for said Gila County, do hereby certify that the within instrument of writing was filed at the request of

HARRIS & MALOTT

on the 8th day of December A. D., 1955 at 10 minutes past 11 o'clock A. M., and duly recorded in Book Docket 45 at Page 242, Records of Gila County, Arizona.

Joseph Kinsman
County Recorder

By _____ Deputy.

INDEXED

COMPARED

PAGED PHOTO-COPIED

Young Ariz. D.M.E.A. 4249 8/20/56
Aug. 17th

RECEIVED
AUG 20 1956

Dear Sir.

Enclosed is owners consent to lein for Sorrell Horse 1 + 2 Horse Shoe 1-2-3-4. When you mailed owners consent to lein to me, you asked for all the signatures on our lease of 21 claims on the same contract, but we are only applying for a D.M.E.A. loan on six of those claims. I am also sending 6 photo. copies of original claim papers and 2 more copies of power of attorney for Clifford Martin + Van Baker. I hope this will be what you need.

II

In the Event a Contract to Explore these Claims is granted All Six Members of Big Six Exploration's Inc. will Sign For Themselves.

Yours Truly
L. J. Collison
Box - 6
Young, Ariz.

LOCATION NOTICE
LODE MINING CLAIM

This mining claim, the name of which is the [illegible] mining claim, was located by the undersigned [illegible] on the 20 day of [illegible] 19[illegible]

This claim is [illegible] feet long and [illegible] feet wide, and the point of discovery is [illegible] feet from the [illegible] end and [illegible] feet from the [illegible] end of this claim.

The general course of this claim is from [illegible] to [illegible]

This claim is situated and located in the [illegible] Mining District, in [illegible] County, State of Arizona, about 23 [illegible] in a [illegible] direction from [illegible]

Dated and posted on the ground the day and year first above written.

[illegible]

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date DEC 27 1954 Time 1:55 P. M., Docket 22 Official Records Page 381,
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder.

By Doris Tarkin Deputy.

200836

LOCATION NOTICE

LODE MINING CLAIM

This mining claim, the name of which is the Cotton #3 mining claim, was located by the undersigned U.S. Citizen of Phoenix on the 20 day of Dec 19 54

This claim is 600 feet long and 600 feet wide, and the point of discovery is 100 feet from the East end and 1400 feet from the West end of this claim.

The general course of this claim is from East to West

This claim is situated and located in the Sierra Ancha Mining District, in Gila County, State of Arizona, about 2 miles in a Southwest direction from Young at Tonto East side of the Pass Horse Mountain about 1 mile West of Cherry Creek - Gila County Arizona

Dated and posted on the ground the day and year first above written.

Homer Haught
Robert Haught
Patty Haught
Homer Oneal

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date DEC 27 1954 Time 1:55 P. M., Docket 22 Official Records Page 380
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder.

200835

By Doris Parkin Deputy.

LOCATION NOTICE

LODE MINING CLAIM

This mining claim, the name of which is the Citation #2 mining claim, was located by the undersigned U.S. citizen of American on the 20 day of Dec 1954

This claim is 1500 feet long and 600 feet wide, and the point of discovery is 0 feet from the East end and 1500 feet from the West end of this claim.

The general course of this claim is from East to West

This claim is situated and located in the Green Anchor Mining District, in Gila County, State of Arizona, about 2 miles in a Southwest direction from Young at Tucson Cost slope of Apache Mountain 1 mile west of Cherry Creek and Campground Claim.

Dated and posted on the ground the day and year first above written.

Homer Haught
Alfd Haught
John Haught
Warren McKee

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date DEC 27 1954 Time 1:55 P. M., Docket 22 Official Records Page 379
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder.

200834

By Lois Parkin Deputy.

STATE OF ARIZONA, County of Gila, ss:
I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date DEC 27 1954 Time 1:55 P. M., Docket 22 Official Records Page 378
Records of Gila County, Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder.

By Lois Parkin Deputy.

200833

DOCKET 22 PAGE 378

LOCATION NOTICE

LODE MINING CLAIM

This mining claim, the name of which is the Citation #1 mining claim, was located by the undersigned U.S. Citizens affiliate on the 20 day of Dec 1954

This claim is 1500 feet long and 600 feet wide, and the point of discovery is 100 feet from the East end and 1400 feet from the West end of this claim.

The general course of this claim is from East to West

This claim is situated and located in the Seven Springs Mining District, in Gila County, State of Arizona, about 23 miles in a Southerly direction from Payson on East slope of Mogollon Plateau, 1 mile West of Gila Creek and 6 miles adjoining Claims

Dated and posted on the ground the day and year first above written.

Homer Haught
Jobe Haught
Harriet Haught
Neff C. Haught

LOCATION NOTICE

LODE MINING CLAIM

This mining claim, the name of which is the SORRELL HORSE #1 mining claim, was located by the undersigned U.S. CITIZENS OF AMERICA on the 10 day of APRIL 1954

This claim is 150.0 feet long and 600 feet wide, and the point of discovery is 100 feet from the NORTH end and 1400 feet from the SOUTH end of this claim.

The general course of this claim is from NORTH to SOUTH

This claim is situated and located in the SIERRA ANCHA Mining District, in GILA County, State of Arizona, about 2 MILES in a SOUTHERN direction from CAGEL CABIN ON JUNIPER FLAT. ON THE EAST SLOPE OF MCFADDEN HORSE MOUNTAIN.

Dated and posted on the ground the day and year first above written.

ALFRED HAUGHT
HOMER HAUGHT
CLIFFORD MARTIN
VAN BAKER

STATE OF ARIZONA, County of Gila, ss:

I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date MAY 14 1954 Time 11:30 A. M., Docket 7 Official Records Page 359 Records of Gila County Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder.

193735

By Joseph Kinsman Deputy.

DOCKET 7 PAGE 360

LOCATION NOTICE

LODE MINING CLAIM

This mining claim, the name of which is the SORREL HORSE #2 mining claim, was located by the undersigned U.S. CITIZENS OF AMERICA on the 10 day of APRIL 19 54

This claim is 1500 feet long and 600 feet wide, and the point of discovery is 1500 feet from the NORTH end and ..... feet from the ..... end of this claim.

The general course of this claim is from NORTH to SOUTH

This claim is situated and located in the SIERRA ANCHA Mining District, in GILA County, State of Arizona, about 2 MILES in a SOUTHERN direction from CAGEL CABIN ON JUNIPER FLAT ON THE EAST SLOPE OF MCFADDEN HORSE MOUNTAIN - & CONNECTS (SORREL HORSE NO 1 ON BLUNS SOUTH

Dated and posted on the ground the day and year first above written.

ALFRED HAUGHT
HOMER HAUGHT
CLIFFORD MARTIN
VAN BAKER

STATE OF ARIZONA, County of Gila, ss:

I do hereby certify that the within instrument was filed and recorded at request of Homer Haught

Date MAY 14 1954 Time 11:30 A. M., Docket 7 Official Records Page 360, Records of Gila County Arizona.

WITNESS my hand and official seal the day and year first above written.

JOSEPH KINSMAN, County Recorder

193736

By Joseph Kinsman Deputy

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
APR 12 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. DMEA-4249
Metal or Mineral Uranium
Date Received 4-12-56
Estimated Cost $81,250.00
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: BIG SIX EXPLORATIONS, INC. (a corporation incorporated in Texas) R. J. Allison, Box 6, Young, Gila County, Arizona.
President: Roger F. Ashford, Box 775, Odessa, Texas.
Secretary: Bill R. Casstevens, Box 775, Odessa, Texas.

(*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 The land we wish to explore consists of a group of 7 contiguous unpatented lode claims situated in part of the W½ of Sec 4, T 6 N, R 14 E, on the Tonto Nat'l Forest, Gila County, Arizona. Although there are 22 claims involved in the mining lease and listed on

(*b*) State any mine name by which the property is known. (Cont. Sheet 1)

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise The Corporation is the lessee of 6 claims, and owner of 1 claim by discovery.

(*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. Inclosure No. 3 is a copy of our lease.

(*e*) If you own the land, describe any liens or encumbrances on it There are no liens on the CITATION NO. 5 claim, the only one owned by the Corporation.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See Sheet No. 1.

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

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

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

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

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

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

(*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 30 days and be completed within 12 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. See Inclosure No. 7.

Dated April 7, 1956

BIG SIX EXPLORATIONS, INC.
(Applicant)

By R. G. Allison

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

BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6,
Young, Gila County, Arizona

3. (a) Cont'd.

Inclosure No. 3, page 2, the Corporation is making application for aid in exploration on six of these claims only, plus the CITATION NO. 5 claim which is owned by the Corporation.

RECEIVED
APR 12 1956

.....

(f)	Name of the Claim	Docket	Page
	SORRELL HORSE NO. 1	7	359
	SORRELL HORSE NO. 2	7	360
	CITATION NO. 1	22	378
	CITATION NO. 2	22	379
	CITATION NO. 3	22	380
	CITATION NO. 4	22	381
	CITATION NO. 5	51	344 X

4. (a) An exploration adit was driven on a north-south trending mineralized fracture in the upper Dripping Spring quartzite during the past winter by the Corporation. The adit is shown on the Inclosures No. 4 and 5. Access to the adit is by 800 feet of steep trail above the campsite. A portable compressor at the camp furnished air to a jack-hammer with push-leg for drilling drift rounds. Due to blockiness of the ground in the vicinity of the fracture, the drift broke wider and in places higher than was intended. At 30 feet in from the portal the drift deviated from the fracture, and the last work in the drift was to blast a slab round near the face in a move to relocate the fracture. This adit is open and accessible for examination, although the back has caved to a height of 10 feet at a point 15 feet in from the portal, and is not entirely safe.

(b) This property has no history of production, and no proved ore reserves.

BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6
Young, Gila County, Arizona

4. (c) The group of claims lies on the lower slope at the northeast corner of McFadden Horse Mountain. The terrain slopes eastward from the property 1½ miles to Cherry Creek. Inclosures No. 1 and 2 show the location of the claims and details of the topography. The geology shown on Inclosure No. 1, the quadrangle map of the area, was furnished by the AEC office in Globe, and is the result of a reconnaissance survey of the area. Block faulting and erosian along a monoclinal fold parallel to Cherry Creek in the colored area on the map reveal a repetition of the Mescal and upper Dripping Spring formations dipping at a steep angle. Tilting of fault blocks within the boundaries of the property has been very slight if at all, and the for- remain nearly horizontal. Inclosure No. 2 is an enlargement of a part of the general area studied, and while it shows the sequence of the formations, their thickness and elevations of contacts are approximate only,because the geology was transferred from the small scale map by simply copying it.

The uranium mineralization has been found in steep dipping fractures in the upper Dripping Spring quartzite. The pattern consists of two sets of fractures: one strikes about north-south, and the other about S. 70°W. The hot spots mapped on Inclosure No. 5 were found from 8 to 30 feet above the diabase contact where the Dripping Spring forms bluffs 40 to 50 feet high.

A radiometric survey was made on the outcrop starting on the SW part of the SORRELL HORSE NO. 2 claim at a point 40 feet NE of the adit, and proceeding along the contour northerly around the point and onto the NE part of CITATION NO. 5 showed the following readings:

BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6
Young, Gila County, Arizona

4. (c) Cont'd.

Mark	MR/Hr.	Horizontal Distance to next mark, feet
D	1.5	95
B	3.4	10
C	0.8	10
A	4.0	40
Q	0.3	18
R	3.8	23
S	5+	35
T	2.8	3
U	2.8	65
V	2.5	110
W	1.6	40
X	0.6	35
Y	3.0	30
Z	4.0	

As shown on Inclosure No. 5 the outcrop of the upper Dripping Spring may be followed northerly onto CITATION NO. 4, thence onto SORRELL HORSE NO. 2 again. At the proposed adit site marked "B" there is a prominent fracture which gives readings of 4.0, 1.6, & 1.7 MR/Hr. In a zone extending laterally along the outcrop in this area a distance of 20 feet there is a consistant 0.25 MR/Hr reading, About 120 east a a reading of 0.9 MR/Hr was obtained at a spot marked "M". Beyond this point to the north the outcrop is hidden by detritus and soil cover. One exposure located 700 feet north of "M" produced a 1.25 MR/Hr reading.

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4. (c) Cont'd.

Inclosure No. 4, map of the exploration adit, also carries a tabulation of assay results of randomsamples taken over the period the drifting was in progress. The dates listed are from the assay reports, and do not indicate the sequence of sampling. The original surface was at a point "A", but was slabbed off to point "C" due to the blocky condition of the ground. Radiometric readings in the MR/Hr are also shown on the sketch.

(d) The road map, Inclosure No. 6, shows the route to the property from the supply point at Globe, and the location of the AEC Buying Station east of Globe, with mileages and road classification . The pioneer road from Board Tree Saddle 11 miles to the campsite at the property is steep and rough in places, but can be travelled by pickup truck with 4-speed transmission. Construction now in progress on the section of the road north of the Ellison Ranch on Cherry Creek, and improvement of the pioneer road will provide an all-weather road to the property from both Globe and Young. It will also replace the climb over the Sierra Anchas with a section of road which skirts the heights and approaches the stream gradient as it proceeds up Cherry Creek. This construction is scheduled for completion in August, 1956. Terrain details in this area are shown on Inclosure No. 1, the quadrangle map.

Residence accommodations will be at the tent camp spotted on the claim map, Inclosure No. 2. There is permanent water up the canyon 200 yards SW of camp. After completion of the improvement project on the pioneer road from Board Tree Saddle down to Cherry Creek, the trip form Young will be easy enough so that Pleasant

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Valley may be considered a residence point.

4. (e) The Globe-Miami area comprises an active mining district, and Young is a center for some small mines, lumbering, and ranching, Both areas are a source of mine labor. There is a branch of the Arizona State Employment Service in Globe. This agency serves as a clearing house for job-seekers and employers in the district.

There are several mine supply hpuses , and a machine shop in the Globe-Miami area to meet the ordinary requirements of the local mines. Good stocks of spare parts are available in the Phoenix area which is an easy 2 hour drive from Miami.

As stated in the sub-paragraph above, there is a source of water sufficient for mining and camp requirements in the canyon SW of the camp.

There is no public power source in the area, Electric power would have to be provided by a gasoline or diesel electric set when it becomes necessary.

.....

5.(b) The proposed work is indicated on Inclosure No. 5. The work will be organized into three stages. Each stage is designed to furnish sufficient information on which to base judgment either to proceed with the next stage, or to abandon the project. It is characteristic of the uranium mineralization in the Sierra Ancha district that it occurs principally in the vertical fractures. Discovery of an orebody will depend on finding mineralized fractures of ore grade, and wall rock mineralized strongly to a depth of a foot or two on either side to make possible selective mining. The

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drifting program outlined is designed to explore both sets of fractures, and the underground drilling of long holes up to 50 feet in depth to supplement the information gained by drifting.

Stage i consists of two parts: (a) access road building, and benching, and (b) prospect drifting. The road will extend the existing road from campsite up to the diabase-Dripping Spring contact on a 12½% grade for easy access to the adit sites. A branch of the road will extend northward to the area of the Dripping Spring formation that is to be uncovered by 'dozing off the soil and detritus. This material will form a bench-road at the desired elevation and afford easy access for prospecting and exploration. The prospect drifting in Stage 1 would explore both sets of fractures in the Dripping Spring for mineralization. The proposed adits at "A" and "B" on Inclosure No. 5 are spotted to confirm strong surface radioactivity at depth, and by their position ~~and by their position~~ and direction to prove up important ore tonnage if the mineralization is persistant. The adit at "C" presumes that strong surface radioactivity may be found at that point, but would naturally be shifted north or south to whatever place may be regarded as most likely to find ore after the benching exposes the outcrop..There is a possibility that surface water percolating through the humus of the soil cover in the area may have become acidic enough to leach any uranium minerals away from the outcrop, so that there would be no indication of uranium on the Geiger counter. In this event the location of the adit would have to be determined by study of the bedding and fracturing

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5. (b) Cont'd

in the Dripping Spring formation. The first two drifts will be "A" and "B", and if the findings are encouraging in both, the full 1,000 of drifting planned for Stage 1 would be completed in these two places. In this case adit "C" would be driven in Stage 3, but should one of the first two fail to find substantial mineralization, it would be stopped, and "C" started. The ultimate depth of any of these drifts will of course depend on tenor of the ore.

Should the drifting of Stage 1 prove favorable, then Stage 2 underground long hole drilling will be initiated. These holes will be drilled from the drifts and crosscuts to explore further the fracture pattern. The radioactivity in these holes will be tested with a probe. Two thousand feet of long hole drilling is planned for Stage 2.

Continued favorable discoveries in Stage 2 would call for embarking on Stage 3, which consists of 1,000 feet of drifting and 2,000 feet of long holing to be done concurrently. If the orebody has been well delimited in Stage 2, the work in Stage 3 will consist of drifting and long hole drilling at closer intervals to prove up the tonnage and grade in the deposit.

.....

5. (d) The operation will be supervised by Jack McK. Pardee, a mining engineer registered in Arizona. He is 42 years old, and has worked underground as miner, shift boss, and engineer for Miami Copper Company. He was superintendent on a porphyry copper exploration project in southern Peru, South America, for 2 years, and returned to this country 15 months ago.

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6. (a) None.

(b) Labor, supervision, consultants.

(Unit cots are based on 4,700 ft. of road and bench, 2,000 ft. drift, and 4,000 ft of long hole drilling.)	Road & Bench	Drift-ing	Long Holes
2 Miners, $15/shift.			
2 Muckers, $13/shift.			
$28.			
2.60 O. T.			
$30.60 + 12.75% = $34.50		$8.55	$0.69
1 Foreman, $600/mo.	$0.09	2.71	0.33
1 Engineer-supervisor, 8 days/mo/, $50/day.	0.06	1.80	0.22
Lost time due to snow, flood, or equipment failure, 10 days.		0.14	0.02
Sub total	$0.15	$13.20	$1.26

(c) Operating materials and supplies.

Dynamite, $0.22/lb.	$0.18	$2.20	
Caps, $0.10 ea.	0.01	0.50	
Fuse, $0.03	0.01	0.90	
Sub total	$0.20	$3.60	
Diesel fuel, $0.20/gal.		1.25	
Motor oil		0.12	
Gasoline, $0.30/gal	0.03	0.44	0.06
Carbide, miners lamp		0.03	
First aid supplies, $60		0.03	
Sub total	$0.03	$1.87	$0.06

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6. (d) Operating equipment.

	Road & Bench	Drift-ing	Long Holes
1 Tractor-Dozer, D-8 Cat, rental $144/day w/ fuel & operator. ?	$0.68		
1 Compressor, #365, rental $508/ mo. ?	0.04	$ 2.45	$0.39
2 Mucking machines, rental $300/mo. ea. ?		2.90	
1 Drifter, auto.,4" w/ bar crossarm, hoses. RRental, $300/mo. ?			0.20
2 Jackhammers w/ push leg. Purchase, $750 ea. ?	0.01	0.37	
2 Blowers w/ motors. Purc., $250 ea.		0.21	0.02
Gasoline and oil for blower.		0.40	
800 ft. Ventube, $0.50/ft		0.10	
300 ft. Hoses, air & water, oilers, Purc. $300		0.15	
Drill steel, 1" hex. w/ Tungsten carbide insert bits, for jackhammer	0.01	1.00	
100 pcs. Drill steel, 4' sectional, w/ couplings, $4 ea.			0.10
30 ea. Rock bits, 2½" tungsten carbide insert, $22 ea.			0.17
3 Water pressure tanks, $100 ea. ?		0.10	0.03
11½ tons Rails, 16#, w/ fish plates, bolts, spikes, & ties, $260/ton.		2.50	
Pipe & fittings,2" & 1"		0.45	
1 Water tank, 250 gal.,portable, $125.		0.06	
Hand tools: shovels, picks, axes, saws, hammers, crow bars, wrenches, levels. $200.		0.08	0.01

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6. (d). Cont'd.

		Road & Bench	Drift-ing	Long Holes
4 Mine cars, $300 ea delivered.			$0.60	
2 Trucks, depreciation: $500 ea.			0.44	$0.06
1 Geiger counter, $262.50			0.13	
1 "Reelmaster" probe w/ 100' cable, $225.				0.06
Sub total		$0.74	$1.94	$0.98

(e) Rehabilitation repairs.

Improve water supply by installing 55-gal. drum at spring, and pipe line to make water available at camp.

700 ft. Std. pipe, 1", $0.28/ft. = $196.			
6 Unions, $1.10 ea.	6.60		
Sales tax	4.06		
	$206.66		
Labor, 1 day	34.20		
Total	$240.86	$0.11	$0.01

(f) New buildings, improvements.

Preparation of 4 sites for drifting, $300 ea., $1,200 total	0.60	
2 Tents, wall., 14' x 16' w/ floor, cots, stove, & kitchen outfit: $500. total	0.22	0.02
Sub total	$0.82	$0.02

(g) Miscellaneous.

Repairs and maintenance of equipment	$0.50	$0.02

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Box 6
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6. (g) Cont'd.

			Roads & Bench	Drift-ing	Long Holes
Analytical work.					
Sampling:					
Bulk muck samples					
Channel samples					
	$500.				
Assays:					
300 Radiometric	$300				
140 Chemical	200				
	$500				
		$1,000		$0.44	$0.03
Accounting, $1,200				0.26	0.02
Labor insurance.					
(Included in par. 6. (b) above)					
Workman's Compensation Ins.		7.75%			
Old Age & Survivors Ins.		2.00			
Employer's Liability Ins.		2.70			
Federal Unemployment Ins.		0.30			
		12.75%			
(h) Contingencies.					
Total: $920.				$0.26	$0.10
TOTAL UNIT COSTS			$1.12	$33.00	$2.50

TOTAL COST BY STAGES:

Stage 1

(a) Road.

3,800 ft. Earth work,	$0.50/ft.	$1,400
1,000 ft, Rock work,	2.50/ft.	2,500
900 ft. Benching,	1.50/ft.	1,350
		$5,250

(b) Drifting.

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6. (h) Cont'd.

Site "A"	500 ft.
Site "B"	200 ft.
Site "C"	300 ft.

1,000 ftt , $33.00/ft. = $33,000.

Total Stage 1, Road & Drifting $38,250.

Stage 2

Long hole drilling, 2,000 ft., $2.50/ft. $ 5,000.

Stage 3.

Drifting, 1,000 ft., $33.00/ft.	$33,000.	
Long Hole Drilling, 2,000 ft., $2.50/ft.	5,000.	$38,000.

TOTAL CONTRACT: $81,250.

7. (a) Under Sec. 7 (b) DMEA No. 1 , the Government agrees to pay 75% of total allowable costs of exploration projects for uranium. The Corporation will pay 25% of such costs.

(b) Funds will be advanced as required to R. J. Allison for purchase and rental of the necessary equipment and supplies to initiate and continue this program.

The Corporation has placed ~~xk~~ one ¼-ton Jeep at Mr. Allison's disposal. Depreciation of this vehicle will be charged against the project in proportion to it's use on the job.

xxx

INCLOSURES:

No. 1 Quad. Map.
No. 2 Claim Map.
No. 3 Lease
No. 4 Exploration Adit.
No. 5 Proposed Exploration.
No. 6 Road Map.
~~Minutes~~
No. 7 Minutes of Special Meeting.

INCLOSURE NO. #3

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MINING LEASE

THIS AGREEMENT, made and entered into as of the 1st day of NOVEMBER, 1955, by and between ALFRED HAUGHT and SUSIE MAE HAUGHT, also known as Susie Haught, husband and wife, HOMER HAUGHT and BETTYE HAUGHT, husband and wife, C. A. HAUGHT, also known as Toby Haught, JOE HAUGHT, DONALD WAYNE HAUGHT, GLENN MORRIS HAUGHT, also known as Glenn Haught, VAN BAKER, VIRGIL BAKER, RICHARD BAKER, HARVEY McKEE, CLIFFORD MARTIN, JACK MARTIN, MRS. ARTHUR MAUREL, D. K. MURPHY, NICKIE MURPHY and FRANK CHAPMAN, all of Gila County, Arizona, parties of the first part, hereinafter called "Lessors," and ROGER F. ASHFORD, CHARLES CHICK FAIR, BILL R. CASSTEVENS, DAVID L. GREENLEES and WILSON E. CONNELL, all of Odessa, Texas, and R. J. ALLISON of Young, Gila County, Arizona, doing business under the firm name and style of Big Six Exploration Co., parties of the second part, hereinafter called "Lessees,"

W I T N E S S E T H:

That the Lessees are desirous of obtaining from and have applied to the Lessors for a lease on the mining claims hereinafter described for the term, at the rental and royalty, and on the terms and conditions hereinafter set forth,

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions hereinafter set forth and the sum of One Dollar ($1.00) by Lessees to Lessors in hand paid, receipt whereof is hereby acknowledged, the Lessors have given and granted, and by these presents hereby do give and grant to the Lessees the right and privilege to mine and operate the mining property herein described upon the following terms and conditions, to wit:

1. PROPERTY: Those certain unpatented lode mining claims situated in the Sierra Ancha Mining District, Gila County, State of Arizona, of which the names, together with the numbers of

Dockets and pages of Dockets of Official Records wherein their location notices are recorded in the office of the County Recorder of said Gila County, Arizona, are as follows, to wit:

NAME	DOCKET	PAGE
Sorrell Horse #1	7	359
Sorrell Horse #2	7	360
Citation #1	22	378
Citation #2	22	379
Citation #3	22	380
Citation #4	22	381
Horse Shoe #1	10	291
Horse Shoe #2	10	292
Horse Shoe #3	10	293
Horse Shoe #4	10	436
Crying Jew #1	20	62
Crying Jew #2	20	63
Betty Jo #1	16	256
Betty Jo #2	16	257
Betty Jo #3	16	258
Betty Jo #4	16	259
Chappo #1	18	105
Chappo #2	18	106
Chappo #3	18	107
Chappo #4	18	108
Chappo #5	18	109
Chappo #6	18	203

2. POSSESSION - TERM - OPERATION: Lessees are entitled to take possession of said premises and to explore, sample and operate the same and extract and ship ores therefrom, subject to the conditions herein set forth from the 1st day of Nov., 1955 and until the 1st day of Nov., 1965; provided, however, that Lessees, at their option, may extend said lease for an additional ten (10) year term upon the same terms and conditions herein set forth, but without any further right of extension in the event said mining claims are producing uranium ores in commercial quantity. Said option to extend this lease for an additional ten (10) year term shall be exercised by delivering written notice to Lessors, or their representative, not less than thirty (30) days before the termination of the original term.

All work done upon said premises by the Lessees shall be done in a good and workmanlike manner and after the manner of

good mining. The laws of the State of Arizona and all requirements of the State Mine Inspector shall be complied with promptly.

3. ROYALTY:

(A) Throughout the term of this agreement the Lessors reserve and the Lessees agree to pay a royalty on all ores extracted from said mining property by the Lessees and shipped, sold or otherwise disposed of, as rental for the use and possession of said mining premises, as follows:

> Ten percent (10%) of the sale price or net smelter returns on all ores mined and extracted from said property.

(B) Sale price within the meaning of this lease shall be the purchase price paid for such ores and concentrates f.o.b. mine bins, plus all additional payments, premiums or bonuses of whatever kind or character and from whomsoever received or receivable, which the Lessees may receive or be entitled to receive by reason of the operation or maintenance of the mining claims or property or the production, sale, distribution or other disposal of any of the ores, concentrates and metals therefrom: provided, that in the case of the sale of fissionable source materials, amounts included in the purchase price specifically for transportation of said ores and amounts received specifically for development or exploration shall not be included as part of the sale price. Except as hereinabove provided, no deduction shall be made for hauling or any other charges of whatsoever character.

(C) Net smelter returns within the meaning of this agreement shall be the correct returns as shown by liquidation sheets furnished by the smelter treating such ores and concentrates, after such smelter shall have made its deductions for railway freight and switching charges, treatment and usual smelting deductions, plus all additional payments, premiums or bonuses of whatever kind or character, and from whomsoever received or receivable, which the Lessees may receive or be entitled to

receive by reason of the operation or maintenance of the mining claims or property, or the production, sale, distribution, or other disposal of any of the ores, concentrates and metals therefrom, subject to the provisions of any federal laws, rules or regulations with respect thereto.

(D) Lessees shall sell said ores or concentrates valuable for fissionable source materials only to the United States Government or any agency thereof authorized to purchase fissionable source materials.

(E) Minimum Royalty and Payment of Royalty. From and after February 1, 1956, in the event royalties for the preceding month have not equaled or exceeded the sum of One Hundred Dollars ($100.00), said Lessees shall pay such sum as is necessary on February 1, 1956 to produce a minimum royalty of One Hundred Dollars ($100.00) for such preceding month. Likewise, on the first day of each subsequent month during which this lease is in force and effect, in the event royalties for the preceding month have not equaled or exceeded the sum of One Hundred Dollars ($100.00), Lessees shall pay such sum on the 1st day of such month as is necessary to produce a minimum royalty of One Hundred Dollars ($100.00) for such preceding month. Lessees shall remit to Harvey McKee of Young, Arizona, as the agent of Lessors herein, the royalties due within ten (10) days after payment for such ores is received by Lessees, and pay to him as such agent the minimum royalty above provided as and when required by the terms hereof. Royalties in excess of the minimum royalty paid in any one month shall not apply to or be credited against minimum royalties accruing for any other calendar month. Lessors hereby appoint said Harvey McKee their agent to distribute said royalty payments among Lessors as their interests may appear and consent that Lessees shall have no responsibility in connection with such distribution.

4. TAXES: The Lessees, at all times during the life of this agreement, shall pay promptly all taxes that have been or may

be levied for the year 1955 and thereafter during the life of this agreement upon said mining claims, or any machinery, equipment or improvements of Lessees placed thereon, or production of Lessees therefrom.

5. NOTICE OF NON-LIABILITY: The Lessees shall not incur any debts or liens against said property or against any part thereof during the life of this agreement, and shall indemnify and save harmless the Lessors and said property from any and all liens. The Lessees further agree to record and to post on the premises, prior to commencing any operations thereon under this lease, and keep posted at their own cost and expense, a notice as provided by law that the said Lessees are responsible for all claims and demands in connection with the operation of said property, and that the Lessors and said property are not liable for any liens or claims resulting from said operations. All miners, laborers and other persons who may labor or furnish labor or materials on or for said premises during the life of this agreement, and to whom any sum may be due from the Lessees for labor or materials, shall be promptly paid by the Lessees.

6. LIABILITY FOR INJURIES: The Lessees hereby assume any and all liability or liabilities arising or to arise from accidents or injuries to their agents or employees or any other person in or about the premises while the same are in the possession of the Lessees, and the Lessors shall be indemnified against any liability or responsibility for or on account of any such injuries, it being understood that the hazard of all such liability or liabilities is taken into consideration by the parties hereto in fixing the consideration under this agreement.

7. INSURANCE: The Lessees shall, at all times during the life of this agreement, carry and maintain liability insurance under the Workmen's Compensation Law and under the Occupational Disease Liability Law of the State of Arizona, satisfactory to the Industrial Commission of the State of Arizona.

The Lessees shall also, at their own cost and expense, comply strictly with all the terms of the Arizona Workmen's Compensation Law and the Arizona Occupational Disease Liability Law.

The Lessees shall comply with all provisions of the Federal Wage and Hour Law, and shall make all payments due or to become due under the Federal and State Social Security Laws, Unemployment Compensation Law, tax laws, or any other laws now in effect or that may hereafter be enacted affecting the employees of the Lessees, wages paid the employees of the Lessees, and the products removed from the said premises.

8. INSPECTION: The Lessors, individually or through any duly authorized representative, shall have the right to enter upon said premises, or any part thereof, and to inspect the same at any time during the life of this agreement, at their risk, and shall have the right to inspect the records of the Lessees insofar as the same cover shipments of ores and concentrates, at any reasonable time, but without unreasonable inconvenience to the Lessees.

9. ANNUAL ASSESSMENT WORK: The Lessees shall perform the annual assessment work for the assessment year ending July 1, 1956 at their own expense and for each year thereafter throughout the life of this agreement, if assessment work is required by law, and shall complete such work on or before the 1st day of April of each assessment year and record proper proof thereof within three (3) months after July 1 of each year; provided, however, that if Lessees surrender or Lessors give notice of the termination of this agreement on or before the 1st day of April of any calendar year hereafter, the Lessees shall not be required to perform assessment work for said assessment year.

10. DEFAULT: In the event the Lessees shall make default in any of the terms or provisions hereinabove contained, then the Lessors may terminate this agreement upon thirty (30) days' notice to the Lessees of their intention to declare this agreement at an end. If the Lessees shall fail within said thirty (30) days to correct and make good any violations of the terms and provisions of this agreement on account of which such notice of default has been given, then and thereupon this agreement shall terminate. Notwithstanding the foregoing provisions with reference to default, it is stipulated and agreed that if the Lessees shall fail to pay royalties, including minimum royalties, as and when hereinabove provided, or shall fail to record and post and keep posted notices of non-liability as hereinabove provided, or shall fail to secure proper liability insurance as hereinabove provided before commencing operations hereunder, and to maintain the same, the Lessors may terminate this agreement forthwith without notice.

11. TERMINATION: The Lessees may cease operations and may terminate all further liability hereunder by thirty (30) days' written notice to the Lessors of their election to terminate said agreement.

In the event of a termination of said agreement, the Lessees shall forthwith deliver to the Lessors the peaceable possession of said premises, and shall be relieved of any further liability hereunder; but in the event of the termination of this agreement by either of said parties, the Lessees shall not be discharged from any obligation in favor of the Lessors that may theretofore have accrued under the terms hereof.

12. NOTICES: All notices provided for herein may be given in writing by personal delivery of said notice, or may be given by registered mail addressed to Harvey McKee, Young, Arizona, as agent of the Lessors, and to R. J. Allisen, Young, Arizona, as agent of the Lessees, and said thirty (30) day period shall run

from the date of mailing said notices or from the date of personal delivery thereof.

13. Time is of the essence hereof, and all the terms and provisions herein contained extend to and are binding upon the heirs, executors, administrators and assigns of the respective parties hereto, except as hereinabove provided.

14. RELEASE: Upon the surrender or termination of this agreement, as hereinabove provided, the Lessees shall execute and deliver to the Lessors a good and sufficient release of this agreement and of the lease hereinabove granted, and upon termination Lessees agree to deliver to Lessors on demand all logs, assay results of any drilling or other development work performed, and all maps or blueprints which may relate to said mining premises that may be made by or for Lessees.

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

Alfred Haught
Alfred Haught

Susie Mae Haught
Susie Mae Haught

Homer Haught
Homer Haught

Bettye Haught
Bettye Haught

C. A. Haught
C. A. Haught

Alfred Haught
Joe Haught

Donald Wayne Haught
Donald Wayne Haught

Glenn Morris Haught
Glenn Morris Haught

Van Baker
by Alfred Haught Attorney in fact
Van Baker

(Forming part of Mining Lease, Alfred Haught et al and Roger F. Ashford, et al.)

Virgil Baker By
~~Homer Haught Attorney in fact~~
Virgil Baker

Richard Baker By
~~Homer Haught Attorney in fact~~
Richard Baker

Harvey McKee
Harvey McKee

Clifford Martin
by ~~Alfred Haught Attorney in fact~~
Clifford Martin

Jack Martin
by ~~Alfred Haught Attorney in fact~~
Jack Martin

Mrs Arthur Maurel
~~Alfred Haught Attorney in fact~~
Mrs. Arthur Maurel

D. K. Murphy
D. K. Murphy

Nickie Murphy By D. K. Murphy
Nickie Murphy

Frank Chapman
Frank Chapman

Parties of the First Part

Roger F. Ashford
Roger F. Ashford

Charles Chick Fair
Charles Chick Fair

Bill R. Casstevens
Bill R. Casstevens

David L. Greenlees on ref.
David L. Greenlees

Wilson E. Connell
Wilson E. Connell

R. J. Allison
R. J. Allison

Parties of the Second Part

(Forming part of Mining Lease
Alfred Haught, et al, and Roger
F. Ashford, et al.)

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APR 12 1956

STATE OF ARIZONA,
County of Gila. } SS.

On this, the 22 day of October, 1955, before me, Wm L Turner, the undersigned officer, personally appeared ALFRED HAUGHT and SUSIE MAE HAUGHT, husband and wife, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm L Turner
Notary Public

My commission expires: 2/2/1958

STATE OF ARIZONA,
County of Gila. } SS.

On this, the 22 day of October, 1955, before me, Wm L Turner, the undersigned officer, personally appeared HOMER HAUGHT and BETTYE HAUGHT, husband and wife, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm L Turner
Notary Public

My commission expires: 2/2/1958

STATE OF ARIZONA,
County of Gila. } SS.

On this, the 22 day of October, 1955, before me, Wm L Turner, the undersigned officer, personally appeared C. A. HAUGHT, JOE HAUGHT, DONALD WAYNE HAUGHT, and GLENN MORRIS HAUGHT, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm L Turner
Notary Public

My commission expires: 2/2/1958

[illegible] part of [illegible] Lease, Alfred Haught, [illegible], and Roger [illegible] [illegible]

STATE OF ARIZONA, }
County of Gila. } ss.

On this, the 22 day of October, 1955, before me, Wm. L. Turner, the undersigned officer, personally appeared ALFRED HAUGHT, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument as attorney in fact for VAN BAKER, and acknowledged that he executed the same as the act of his principal for the purposes and consideration therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm. L. Turner
Notary Public

My commission expires:
February 2-1958

STATE OF ARIZONA, }
County of Gila. } ss.

On this, the 22 day of October, 1955, before me, Wm. L. Turner, the undersigned officer, personally appeared HOMER HAUGHT, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument as attorney in fact for VIRGIL BAKER and RICHARD BAKER, and acknowledged that he executed the same as the act of his principals for the purposes and consideration therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm. L. Turner
Notary Public

My commission expires:
2/2/1958

STATE OF ARIZONA, }
County of Gila. } ss.

On this, the 22 day of October, 1955, before me, Wm. L. Turner, the undersigned officer, personally appeared ALFRED HAUGHT, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument as attorney in fact for CLIFFORD MARTIN and JACK MARTIN, and acknowledged that he executed the same as the act of his principals for the purposes and consideration therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm. L. Turner
Notary Public

My commission expires:
2/2/1958

(Forming part of Mining Lease, Alfred Haught, et al, and Roger F. Ashford, et al.)

RECEIVED
APR 12 1956

STATE OF ARIZONA,
County of Gila. } SS.

On this, the _____ day of _____, 1955, before me, _____, the undersigned officer, personally appeared VAN BAKER, VIRGIL BAKER and RICHARD BAKER, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My commission expires:

STATE OF ARIZONA,
County of Gila. } SS.

On this, the 22 day of October, 1955, before me, W. L. Turner, the undersigned officer, personally appeared HARVEY BAKER, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

W. L. Turner
Notary Public

My commission expires: 2/2/1958

STATE OF ARIZONA,
County of Gila. } SS.

On this, the _____ day of _____, 1955, before me, _____, the undersigned officer, personally appeared CLIFFORD MARTIN and JACK MARTIN, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My commission expires:

(Forming part of Mining Lease,
Alfred Haught, et al, and Roger
W. Ashford, et al)

RECEIVED
APR 12 1956

STATE OF ARIZONA,
County of Gila. } ss.

On this the 22 day of October, 1955, before me, W. L. Turner the undersigned officer, personally appeared ALFRED HAUGHT, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument as attorney in fact for MRS. ARTHUR HAUGHT, and acknowledged that he executed the same as the act of his principal for the purposes and consideration therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

W. L. Turner
NOTARY PUBLIC

My commission expires: 2/2/1958

STATE OF ARIZONA,
County of Gila. } ss.

On this, the 22 day of October, 1955, before me, Lewis M. Murphy the undersigned officer, personally appeared D. K. MURPHY AND NICKIE MURPHY, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Bernadette Brown
NOTARY PUBLIC

My commission expires: 4/19/1956

STATE OF ARIZONA,
County of Gila. } ss.

On this, the 22 day of October, 1955, before me, W. L. Turner the undersigned officer, personally appeared FRANK CHAPMAN, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

W. L. Turner
NOTARY PUBLIC

My commission expires: 2/9/1958

(Forming part of Mining Lease,
Alfred Haught, et al, and Roger
P. Ashford, et al.)

STATE OF TEXAS,
County of Ector } SS.

On this, the 3rd day of November, 1955, before me, Cecil Butler, the undersigned officer, personally appeared ROGER P. ASHFORD, CHARLES CHICK FAIR, BILL R. CASSTEVENS, DAVID L. GREENLEES and WILSON E. CONNELL, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument, and acknowledged that they executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Cecil Butler
Notary Public

My commission expires: 6-1-57

STATE OF ARIZONA,
County of Gila. } SS

On this, the 22 day of October, 1955, before me, Wm. L. Turner, the undersigned officer, personally appeared R. J. ALLISON, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Wm L Turner
Notary Public

My commission expires: 2/9/1958

INCLOSURE NO. 7.

RECEIVED
APR 1 3 1956

The above and foregoing is a true and correct copy of the minutes of a special meeting of the Board of Directors held on March 6, 1956, at 8:30 P. M. as shown by the minute books of the Coporation in my charge, all of which I certify.

Bill R. Courtemanche
Secretary, Big Six Explorations, Inc.

(Corporate Seal) A true copy, I certify.

Roger F. Ashford
Roger F. Ashford President

THE STATE OF TEXAS
: ss
COUNTY OF ECTOR

This instrument was acknowledged before me this the 9th day of March, A. D. 1956, by Roger Ashford, President of Big Six Explorations, Inc.

Cecil Luther
Notary Public, in and for, Ector County, Texas.

My commission expires June 1, 1957.

BIG SIX EXPLORATIONS, INC.

MINUTES OF A SPECIAL MEETING OF THE BOARD OF DIRECTORS

A special meeting of the Board of Directors of Big Six Explorations, Inc., a Texas Corporation, was held at the offices of the Corporation at 8:30 P. M. 1956, in Odessa, Ector County, Texas, pursuant to a waiver of notice of such meeting signed by all of the Directors, and a majority of he Directors were present and voting. Roger Asford, President , presided. It was determined that a quorum of the Directors were present for the transaction of business.

The President advised the Directors that additional funds were needed for the de elopment of the holdings of the Corporation in Arizona and that additional funds would have to be borrowed for such purpose. After discussion, the following resolution was unanimously adopted by the Directors on motion duly made, seconded and unanimously carried:

> "RESOLVED: That R. J. Allison, a director of the Corporation, be and he is hereby designated as the agent of the Corporation for the purpose of making an application to the proper agency of the United States Government for a loan for the development of Uranium on the lands, minerals rights, mineral claims and mineral leases held by the corporation in Arizona, and that said agent is authorized to complete such application, sign the name of the corporation thereto as the agent of the Corporation, and to forward and deliver such application to the proper government agency for consideration; provided however that when the loan is to be closed the same will be closed by the proper officers of the Corporation."

There being no further business, on motion duly made seconded and carried the meeting was adjourned.

Roger Asford

Roger Asford, President

ATTEST:

Bee R. Lantrem

Secretary.

RECEIVED
APR 12 1956

INCLOSURE NO. 4

BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6, Young, Gila Co.,
Arizona

EXPLORATION ADIT

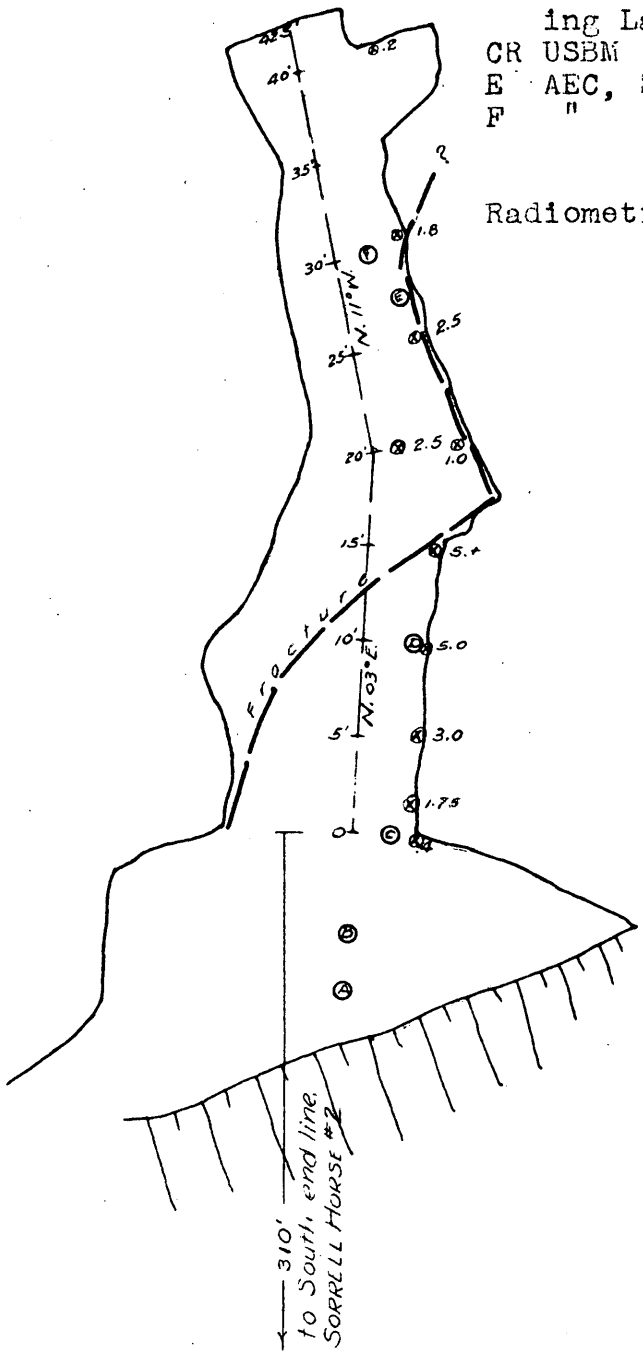
Assay Map & Radiometric Survey.

Assay Results:

Ltr.	Laboratory	Date	% U_3O_8 Radio.	% U_3O_8 Chem.
A	AEC, S.L.City	12/23/55	0.20	0.17
B	" "	12/30/55	0.47	
C	" "	"	0.27	
D	El Paso Testing Lab.	12/19/55		0.76
CR	USBM	1/24/56	0.29	0.24
E	AEC, S.L.City	2/28/56	0.53	
F	" "	12/30/55	0.72	

Radiometric, MR/Hr.-------⊗2.5

Scale: 1" = 10'.



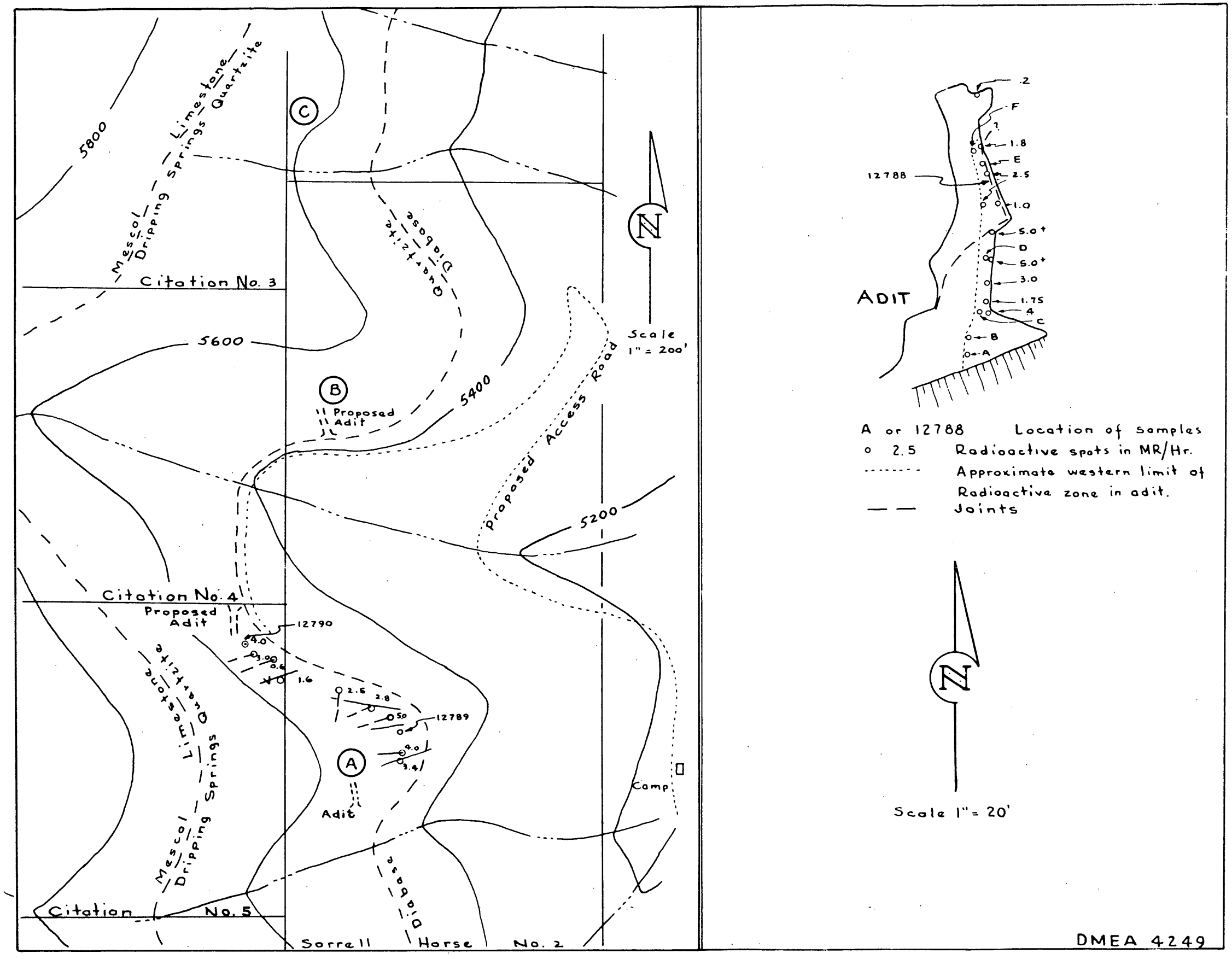
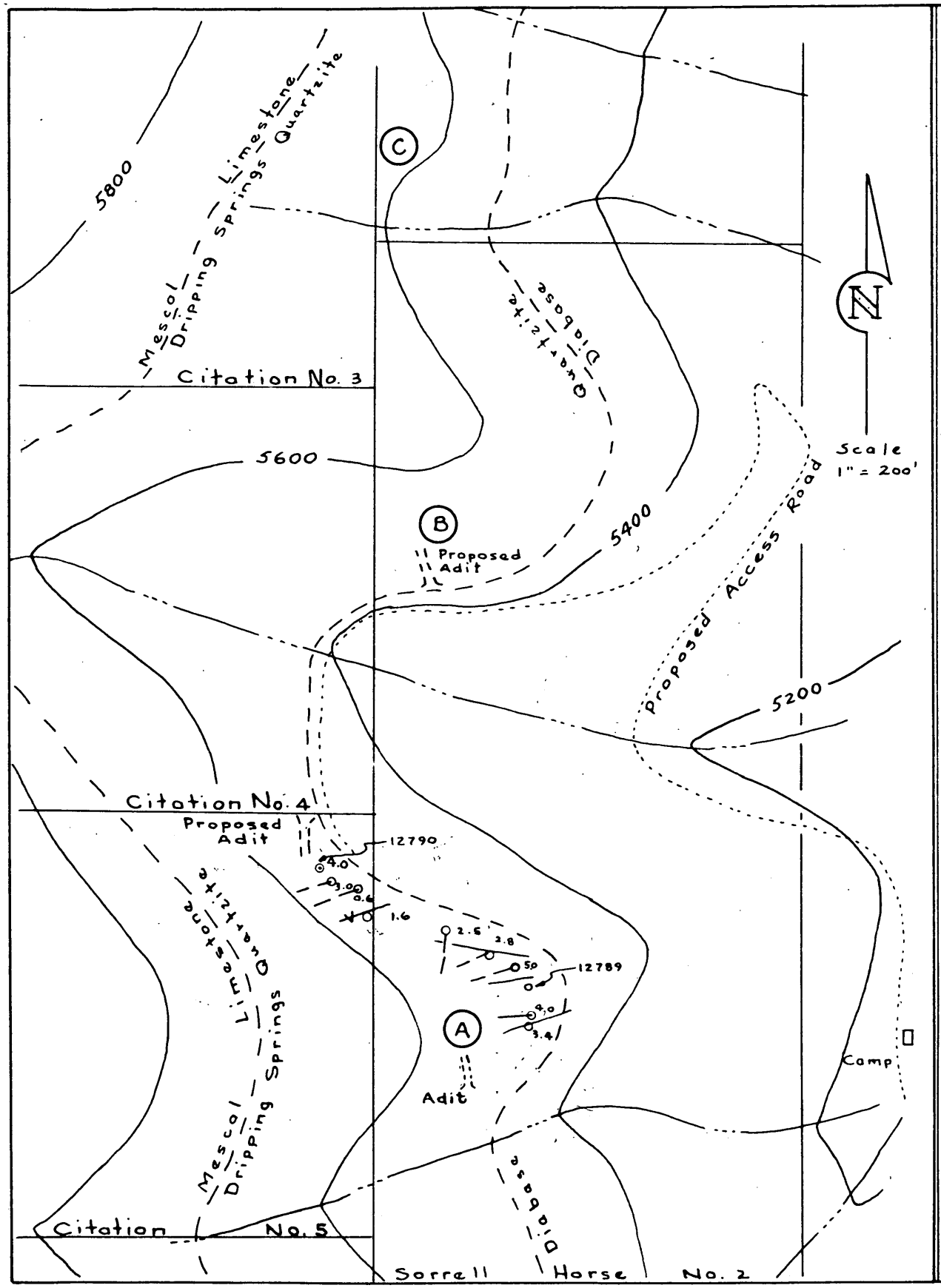
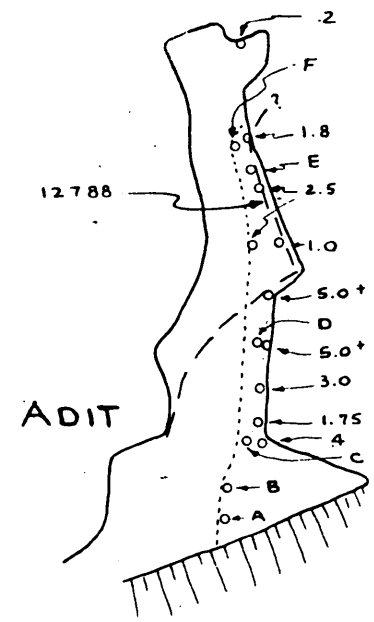


FIG. - 3 - GEOLOGIC MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZONA





A or 12788 Location of samples

o 2.5 Radioactive spots in MR/Hr.

- - - - - - Approximate western limit of Radioactive zone in adit.

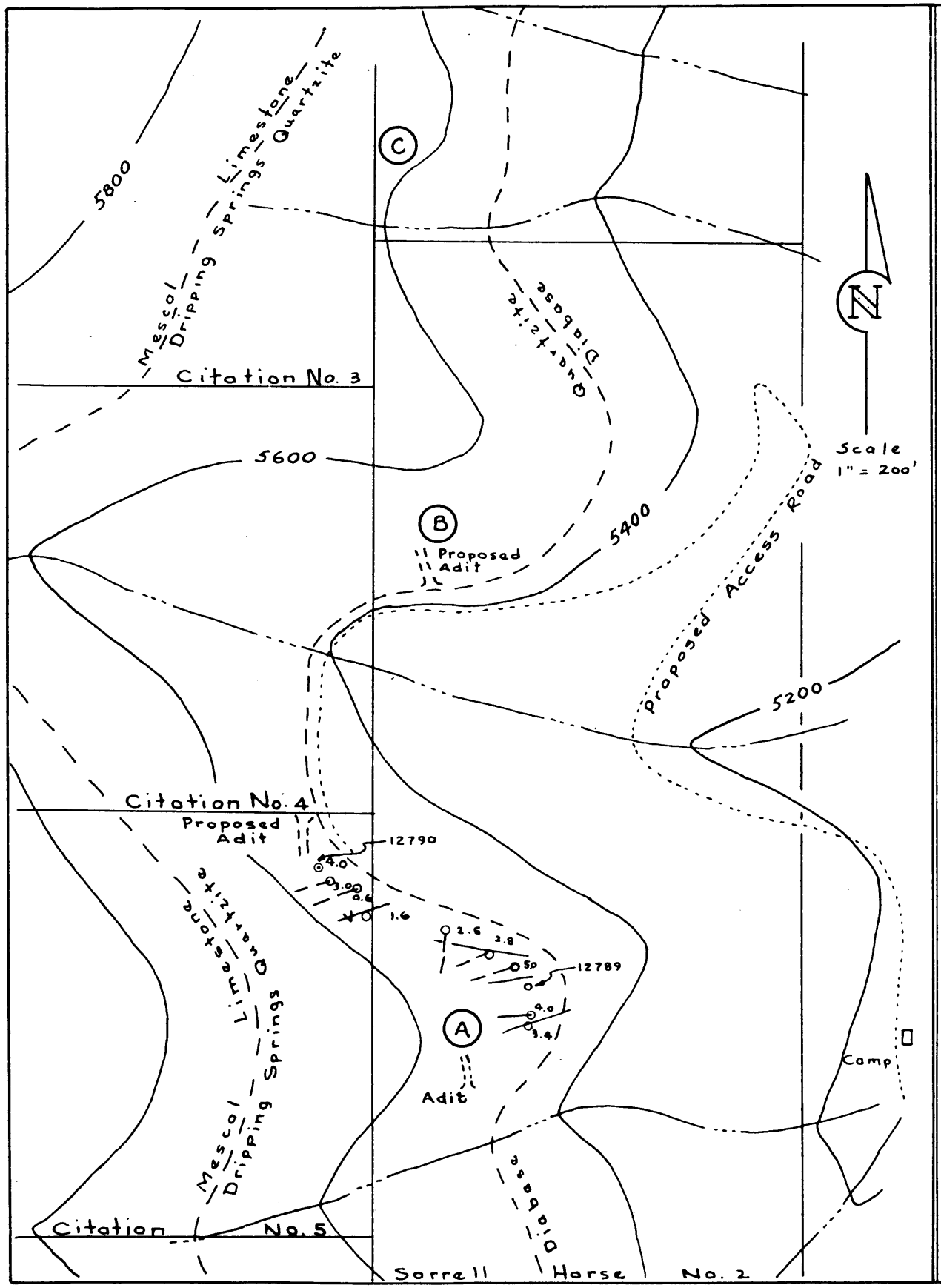
— — Joints

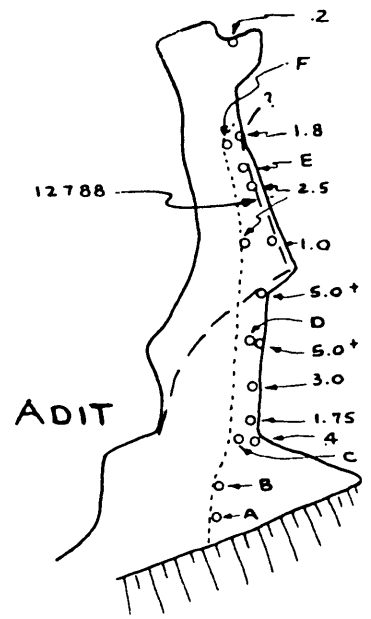
Scale 1" = 20'

DMEA 4249

FIG. - 3 - GEOLOGIC MAP, BIG SIX EXPLORATION INC.

GILA COUNTY, ARIZONA





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GILA COUNTY, ARIZONA

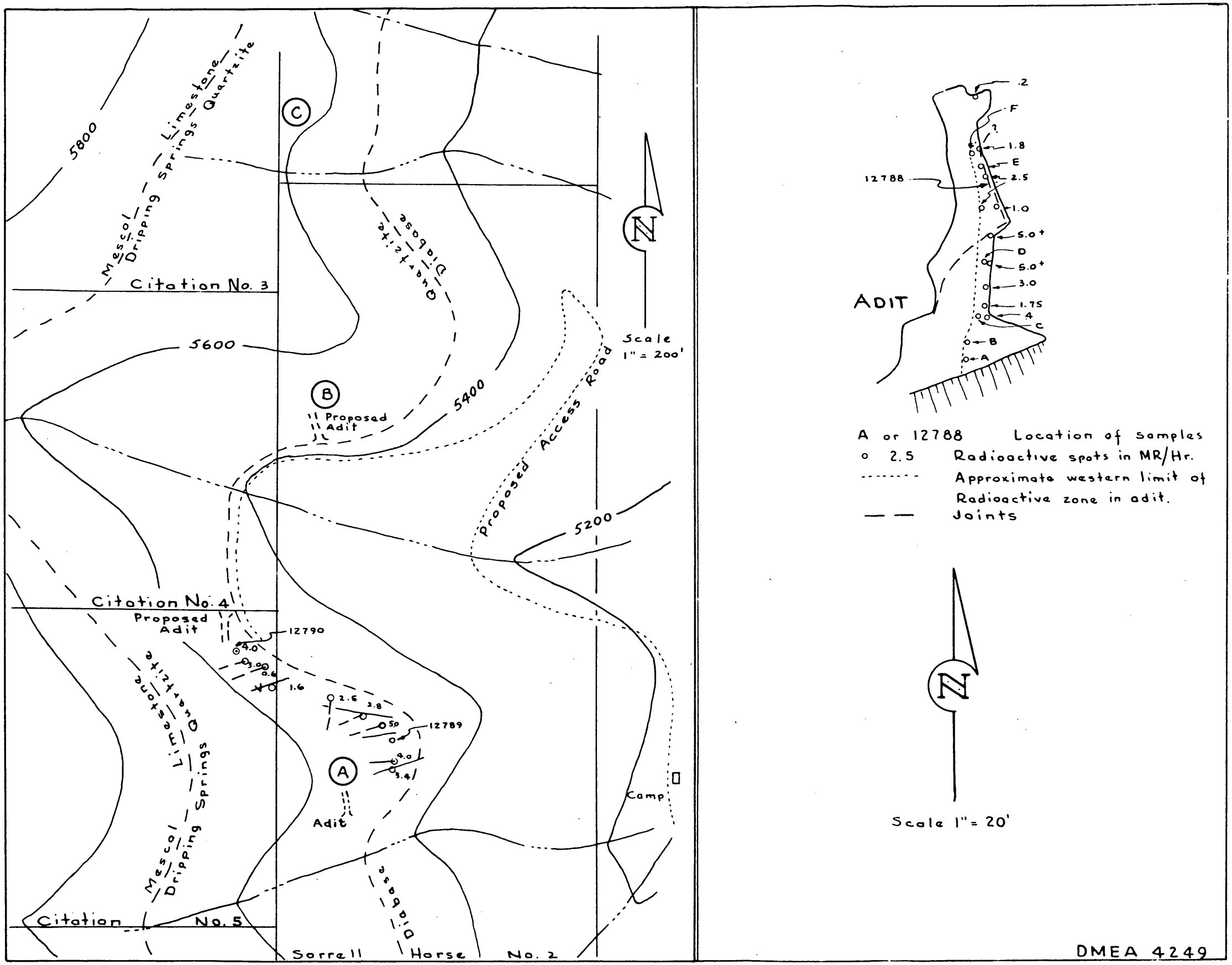
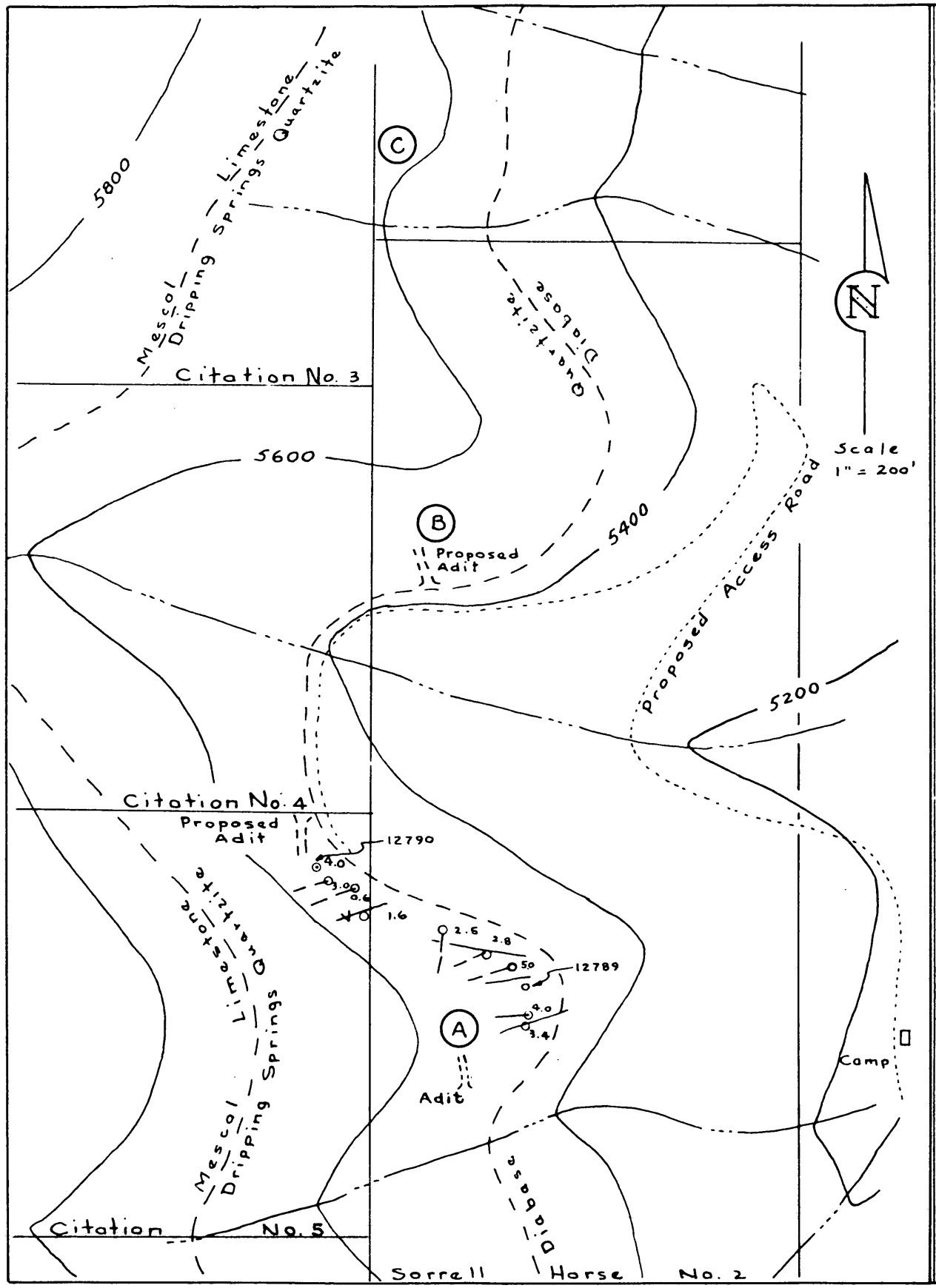
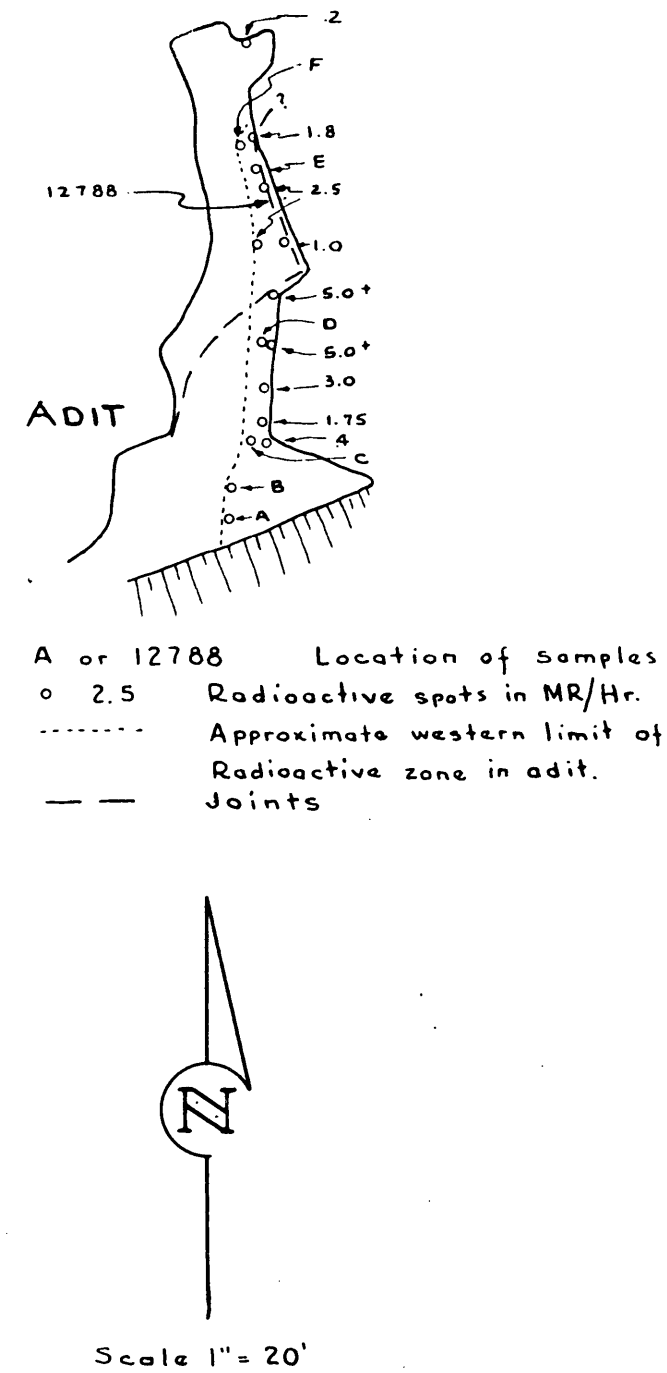


FIG. - 3 - GEOLOGIC MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZONA





DMEA 4249

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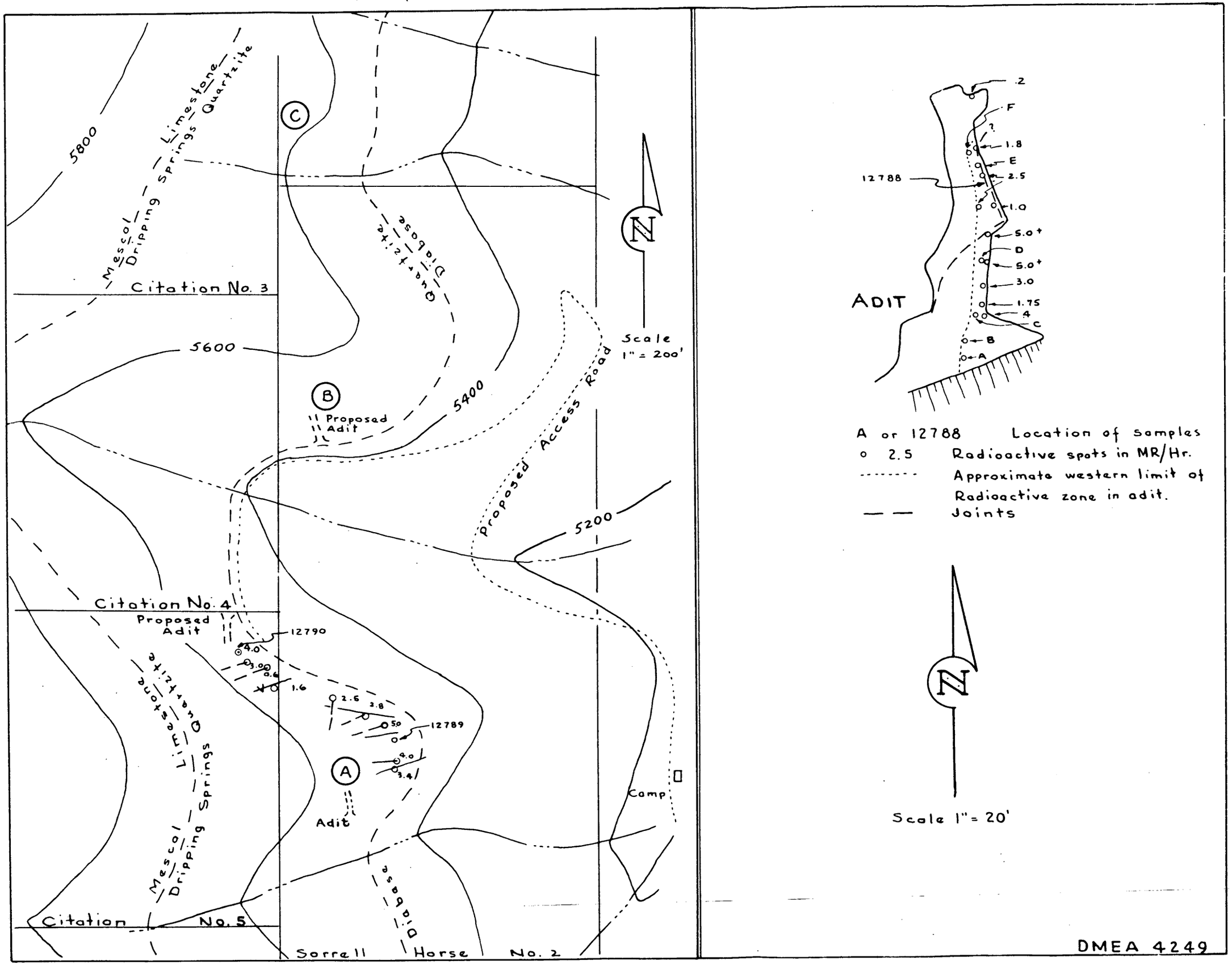
GILA COUNTY, ARIZONA



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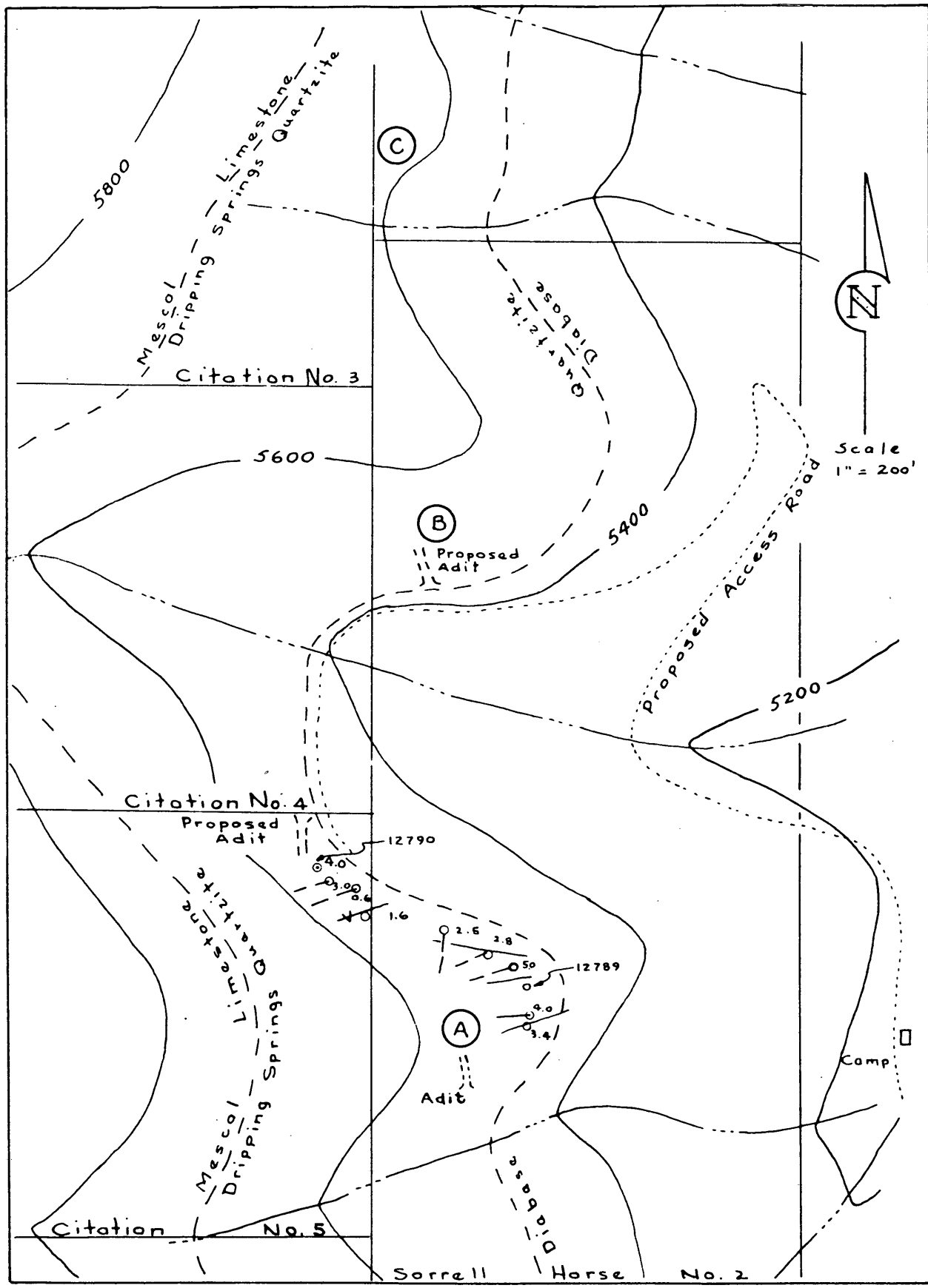
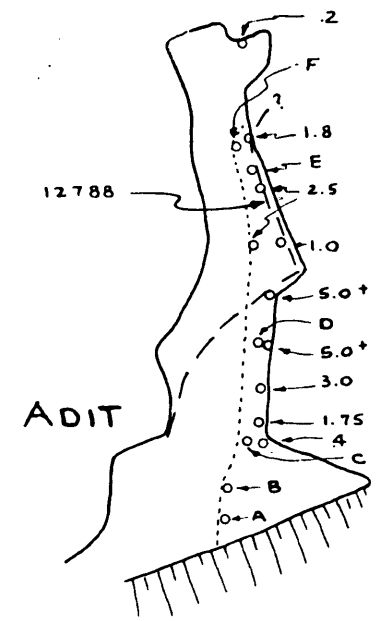
GILA COUNTY, ARIZONA





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— — Joints

Scale 1" = 20'

DMEA 4249

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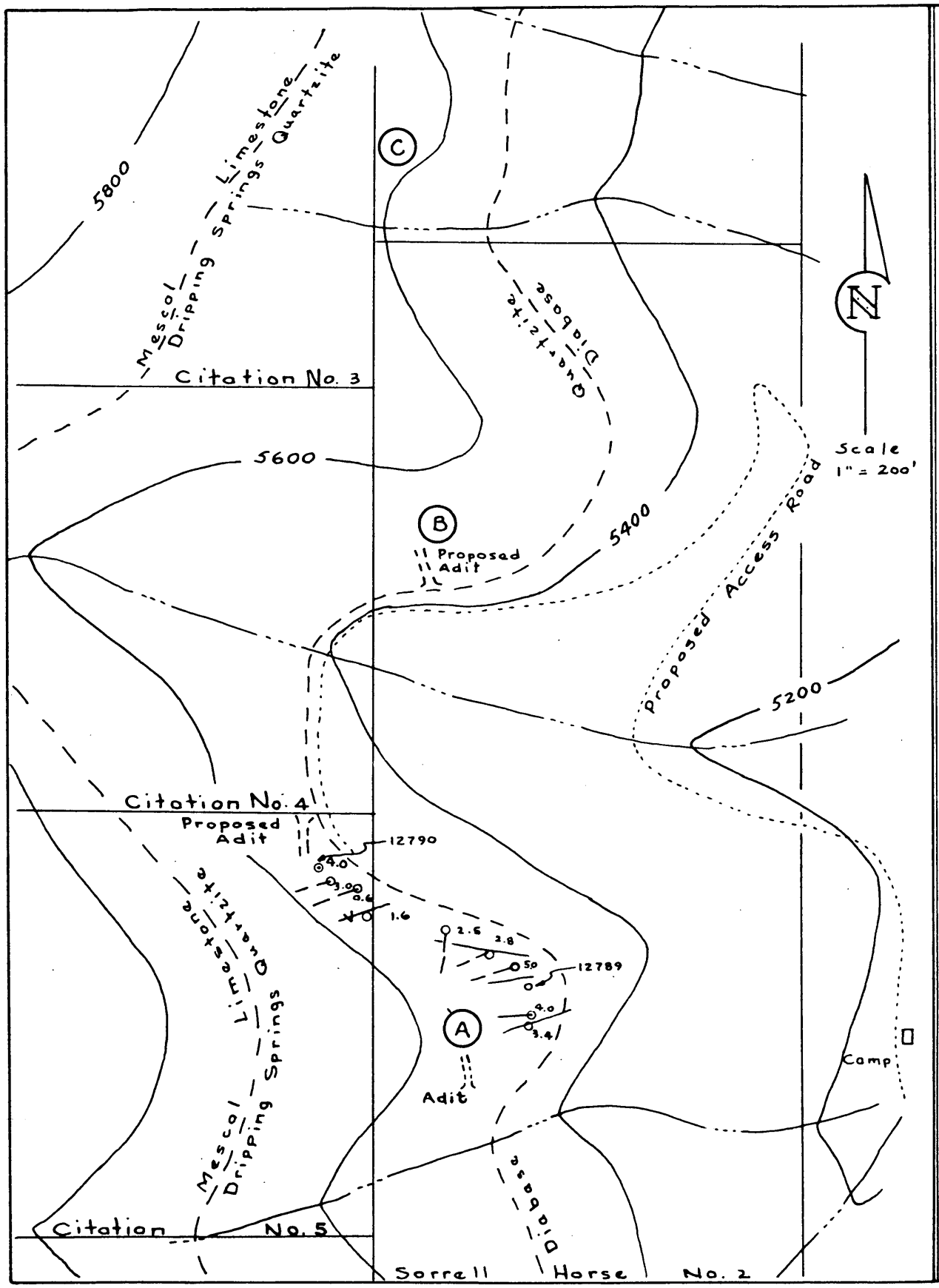
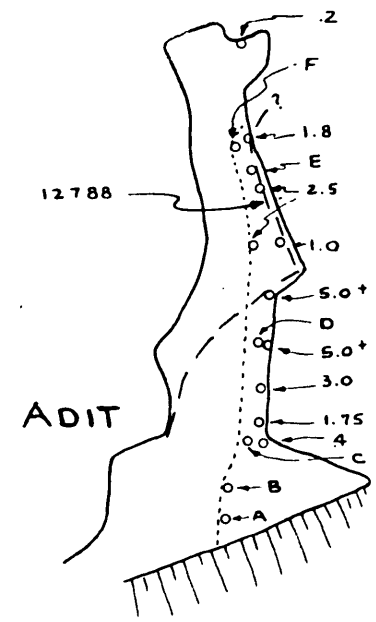
GILA COUNTY, ARIZONA





A or 12788 Location of samples

o 2.5 Radioactive spots in MR/Hr.

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— — Joints

Scale 1" = 20'

DMEA 4249

FIG. - 3 - GEOLOGIC MAP, BIG SIX EXPLORATION INC.

GILA COUNTY, ARIZONA

DOCKET COPY

Ellis

Project Summary Report

By: F. L. Knouse March 31, 1958

1. Docket No. DMEA-4249 (Uranium)
Contract No. Idm-E1019

Operator - Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Property - Consists of seven contiguous unpatented lode mining claims in Section 4, T. 6 N., R. 14 E., G. & S. R. M. & B., Gila County, Arizona. The claims are Citation Nos. 1 through 5, and Sorrell Horse Nos. 1 and 2.

Property Rights -

Owner of Citation No. 5 claim, and controls remaining claims by lease signed by owners November 1, 1955. A Consent to Lien and Subordination Agreement, signed by the landowners August 11, 1956, is attached to the contract.

2. Contract dated October 16, 1956.

The project work was started November 1, 1956, and was completed late in May, 1957.

Work Authorized -

Consists of a two-stage underground program to explore the Dripping Springs quartzite that underlies the property for uranium-bearing ore.

Stage I

Consists of 2800 feet of access road construction, 250 feet of adit (crosscut or drift) and 650 feet of long-hole percussion drilling.

Stage II

Consists of 300 feet of crosscutting, and 650 feet of long-hole percussion drilling.

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. Code ~~120~~		4/3
2. " ~~110~~	FJ	"
3. " ~~100~~	Cow	4/4
4. ~~" 220~~	Coe	4/9
5. " 700		
FROM: Ernest Wm. Ellis		

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions X Your information

REMARKS:

DMEA-4249 Idm-E1019, Big Six Explo.Inc.

Completion letter to Operator not to be sent until August 13, 1958 - 6 months after receipt of Operator's final report.

INT.-DUP. SEC., WASH., D.C.

M8278

Estimated and completed cost of the project work

Stage I

Actual Cost	Est. Cost	Work Completed Units	Work Completed Cost
2800 ft. road @ $2.33/ft.	$ 6,524.00	2800	$6,524.00
Fixed Unit Costs			
250 ft. adit @ $31.00/ft.	7,750.00	250	7,750.00
35 ft. timbering @ $4.50/ft.) (or bolting) @ $4.00/bolt)	157.50	4	18.00
500 ft. long-hole drilling - holes less than 50 ft. deep @ $1.50/ft.	750.00	477	715.50
150 ft. long-hole drilling - holes deeper than 50 ft. @ $3.00/ft.	450.00	150	450.00
50 sample chemical analyses @ $5.00/each	250.00	7	35.00
Estimated Cost Stage I	$15,881.50		

Stage II

Fixed Unit Cost		
300 ft. crosscut @ $31.00/ft.	$ 9,300.00	
35 ft. timbering @ $4.50/ft.) (or bolting) @ $4.00/bolt)	157.50	
500 ft. long-hole drilling - hole less than 50 ft. @ $1.50/ft.	750.00	
150 ft. long-hole drilling - hole deeper than 50 ft. @ $3.00/ft.	450.00	
50 chemical sample analyses @ $5.00/each	250.00	
Estimated Cost Stage II	$10,907.50	
Estimated total cost of Project (rounded)	$26,788.00	$15,492.50
Govt. Participation @ 75%	$20,091.00	$11,619.38

Amendments

No. 1, extended the completion date of the contract work until November 30, 1957. Also extended the period of royalty payment to the Government from production from 10 to 11 years.

Shortly before Stage I work was completed, the Operator notified the Government that additional exploration of the

property was not warranted and requested that the contract be terminated. By letter, dated July 12, 1957, the Field Team advised Operator that no further work would be approved.

Final Reports

Operator's, dated October 18, 1957, received in Division February 21, 1958.

Field Team's, dated November 31, 1957, received in Division March 3, 1958.

3. Audit Report of Review, dated February 18, 1958

Total cost as billed by Contractor		$16,595.51
Exceptions:		
Prior to review	$1,103.01	
Herewith	0.00	1,103.01
Total Accepted Cost		$15,492.50
Amount paid Operator (75% Govt.Part.)		$11,619.38

4. Certification - None

The Field Team recommended that no certification of discovery should be issued. The writer concurs with the Field Team's recommendation. No minable ore was discovered and no potential ore zones were encountered.

Production

No ore was produced from the property before or during the DMEA contract.

5. Comments

The Field Team reports that all phases of the project work were completed in an efficient manner. The Operator submitted satisfactory monthly and final reports but delayed the final until October 18, 1957

The project was established to explore an anomalous radioactive fractured contact zone of Dripping Spring quartzite with a thick diabase sill. In the mine area the Dripping Spring quartzite beds lie a few feet to 40 feet above the sill and contain a zone about 35 feet thick in which anomalous radioactivity is erratically distributed. Locally, the area of radioactivity appeared to be concentrated on the joints of two principal, systems:

fracture

(1) a northerly trending system, and (2) a N. 70° E. system. Areas of anomalous radioactivity and joints are exposed above the diabase sill on cliffs 40 to 50 feet high. A* survey of a 43-foot adit along a westerly trending fracture of joint system showed eU_3O_8 ranging from 0.12 to 0.72 percent.

Radioactive zones encountered in the 250-foot adit and 12 long-drill holes completed were erratic, non-persistent, and generally insignificant. There are no visible minerals, other than an occasional yellow oxide coating at the surface outcrop.

The results of the project were unfavorable. No minable ore was encountered and no potential ore zones were indicated. Also, no further exploration of the property by either the Government or the Operator is recommended.

F. L. Knouse

F. L. Knouse

* radiometric

[x] Audited

[ ] Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of March 29, 1958

Incl. Voucher for November 15, 1958

[✓] Actual Cost

[✓] Agreed Unit Costs

Name: Big Six Explorations, Inc.

Docket No. 4249

State: Gila County, Arizona

Commodity: Uranium

Idm-E No. 1019

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	550 ft.	$17,050.00	250 ft.	$7,750.00	$7,750.00
" " Timbering	70 ft.	315.00	4 ft.	18.00	18.00
Raising					
Shafts					
Winzes					
Drilling (Specify) Percussion: 100' Than 50'	1000 ft.	1500.00	479 ft.	715.50	715.50
" " More than 50'	300 ft.	900.00	150 ft.	450.00	450.00
Surface Excavation					
Underground Excavation					
Roads and Trails 2800' ft		6,524.00		6,524.00	6,524.00
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 100 chem analyses		500.00		35.00	35.00
(Rounded) Totals		$26,788.00		$15,492.50	$15,492.50

Prepared by F. Kuoman

71626

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/23/58	Ching	700
4/24	Ellis	700
Hold until 8/13	Chandler	800
8/13	Ashford	120
"	Johnson	110
"	Whitney	100
8/13	H. G.	220
		700

AUG 14 1958

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. DMEA-4249 (Uranium)
Contract No. Idm-E1019
Sorrell Horse and Citation Claims
Gila County, Arizona

Dear Mr. Ashford:

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

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

Your interest in the DMEA exploration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Copies to:
Homer Haught
Alfred C. Haught
Alfred C. Haught, Attorney in Fact for Van Baker
Alfred C. Haught, Attorney in Fact for Clifford L. Martin
C. A. Haught
Harvey McKee (All of these addressed at Young, Arizona)
Admr.'s Reading File
Contract Adm. and Audit Division
Mr. Ching
DMEA Field Team, Region III (2)
MChing/gla 4-23-58

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/23/58	Ching	700
4/24	Ellis	700
Hold until 8/13/58	Chandler	800
8/13	[illegible]	120
"	[illegible]	110
"	[illegible]	100
8/14	[illegible]	220
		700

AUG 14 1958

Mr. Homer Haught
Young, Arizona

Re: Docket No. DMEA-4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Dear Mr. Haught:

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 August 11, 1956.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

MChing/gla
4-23-58
Admr.'s Reading File
DMEA Field Team, Region III (2)
Mr. Ching

Identical letters to: (All letters addressed to Young, Arizona)
Alfred C. Haught
Alfred C. Haught, Attorney in Fact for Van Baker
Alfred C. Haught, Attorney in Fact for Clifford L. Martin
C. A. Haught
Harvey McKee

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 3 1958

DATE		CODE
3/4	C	220
1/4	Com	100
"		110
3/4		800
3/5	FLR	700

February 26, 1958

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrel Horse and Citation claims), Gila County, Arizona - FINAL SUMMARY REPORT

The subject contract was considered completed upon completion of the work under Stage I and the Operator was so advised by letter from the Field Team, Region III, dated July 12, 1957.

The original and two copies of the Final Engineering and Geologic Report were forwarded by memorandum of November 21, 1957 and the original and one copy of the Operator's Final Report were forwarded by memorandum of February 17, 1958.

Final payment to the Operator was processed by this office February 25, 1958 in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Division, DMEA, dated February 18, 1958.

Exploration work completed under Stage I of the contract consisted of 2,800 feet of access road construction, 250 feet of drifting, 4 feet of drift timbering, percussion drilling of holes less than 50 feet in length 477 feet, percussion drilling of holes greater than 50 feet in length 150 feet, and chemical analysis of 7 samples for U_3O_8 content; all at a total accepted cost of $15,482.50, toward which the Government contributed 75 percent, or an amount of $11,619.38.

The exploration work performed did not result in the discovery or development of a significant quantity of uranium ore; therefore, Certification of the project is not recommended.

W. H. King
W. H. King

E. N. Harshman
E. N. Harshman

FINAL
F.T. REPORT

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

November 20, 1957

DATE	INITIALS	
11/25	gb	220
11/29	[illegible]	130
11/29	C	220
12/9	Com	100

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

In further reference to your letter of November 1, 1957, enclosed are the original and one copy of the joint Final Engineering and Geologic Report, dated November 13, 1957, by T. M. Romslo, Mining Engineer, Bureau of Mines, and W. L. Emerick, Geologist, Geological Survey, pertaining to work completed under the subject contract.

The Operator's final report has not yet been received, but will be forwarded to you as soon as it is received in this office.

The Field Team's final report will be forwarded to you next week.

E. N. Harshman

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
11-29-57
(date)

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Box 4126 University Station
Tucson, Arizona

NOV 15 1957

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 25 1957

DATE	INITIALS	SYM
11/29	JB	130
		220

November 13, 1957

Memorandum

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

From: T. M. Romslo
W. L. Emerick

Through: E. N. Harshman

Subject: Docket No. DMEA-4249 (Uranium), Contract No. Idm-E1019,
Big Six Explorations, Inc. (Sorrell Horse and Citation Claims),
Gila County, Arizona
Joint final engineering and geologic report.

Enclosed are the original and 9 copies of a joint final engineering and geologic report pertaining to work completed under the subject contract.

T. M. Romslo
U. S. Bureau of Mines

W. L. Emerick
U. S. Geological Survey

TMR:WLE:ms

cc: W. H. King (9)
E. N. Harshman
DMEA/TUC
W. L. Emerick

Reviewed by
DMEA OPERATING COMMITTEE
11-29-57
(Date)

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

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

JOINT FINAL ENGINEERING AND GEOLOGIC REPORT

REGION III

11/29 JB 130 220

DOCKET DMEA-4249 (Uranium), Contract IDM-E1019,

Big Six Explorations, Inc. (Sorrell Horse and Citation Claims),

Gila County, Arizona

W. L. Emerick, Geologist
U. S. Geological Survey

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

November 13, 1957

Reviewed by
DMEA OPERATING COMMITTEE
11-29-57
(date)

DOCKET DMEA-4249 (URANIUM), CONTRACT IDM-E1019,
BIG SIX EXPLORATIONS, INC. (SORRELL HORSE AND CITATION CLAIMS),
GILA COUNTY, ARIZONA

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ILLUSTRATIONS

Fig. No.		
1	Location map	Following page 5
2	Claim map	Following page 7
3	Geology map	Following page 8
4	Plan of DMEA adit	In folder

SUMMARY, CONCLUSIONS AND RECOMMENDATION

The Sorrell Horse and Citation Claims in Gila County, Arizona were explored for uranium during 1956 and 1957 by the Big Six Explorations, Inc., with governmental aid authorized by the amended Defense Production Act of 1950.

The corporation's application for assistance in explorations costing an estimated $81,200.00 was received by the Defense Minerals Exploration Administration April 12, 1956. Processing of the application under Docket DMEA-4249 included a field examination of the property that resulted in favorable findings. As a result, a 2-stage exploratory project costing an estimated total of $26,788.00 was authorized by contract Idm-E1019, dated October 16, 1956.

Anomalous radioactivity in the area of the Sorrell Horse and Citation claims was first recorded by areal surveys that were made by the Atomic Energy Commission during 1953. Uranium was discovered on the claims in 1954 by the present owners who did very little exploratory work on the property before leasing it to the applicant late in 1955. During the following few months, the applicant built roads, made radiometric surveys, did some sampling and drove a short adit on a mineralized zone. No ore of shipping grade was produced.

The area of the mine on the Sorrell Horse and Citation claims is underlain by nearly horizontal beds of the Dripping Spring quartzite that were intruded by a thick diabase sill. In the mine area anomolous radioactivity was erratically distributed over a zone about 35 feet thick lying a few feet above the sill. Locally, areas of radioactivity are concentrated on or near the joints of either a northerly trending system or a N. 70° E. system. Radioactive zones in the DMEA adit were confined to a single bed, ranging from 2 to 12 inches in thickness, in the quartzite. The radioactivity in the adit was erratic, non-persistent, and generally insignificant, and it did not seem to be related, as far as could be determined, to the jointing or fracturing in the quartzite. Little is known of the mineralogy of the deposit, but the primary uranium mineral is believed to be uraninite.

No ore reserve estimations were made owing to the erratic nature and insignificance of the occurrences.

Explorations authorized by the contract were started November 1, 1956 and were terminated in May 1957, upon completion of essentially all the first stage work. All of the work was completed in an efficient manner under the supervision of R. J. Allison. It comprised 2800 feet of access road, 250 feet of adit of which 4 feet at the portal was timbered, 627 feet of percussion drilling in 12 holes and the chemical analysis of 7 samples from the adit. Total allowable cost of the work was $15,492.50, of which the Government's share at 75 percent was $11,619.38. These costs are before the DMEA final audit of the Operator's accounts and $500.00 withheld pending receipt of the Operator's final report.

The Operator and the Government mutually agreed that additional exploration of the property was not justified as no minable ore was encountered and no potential ore zones were indicated. Therefore issuance of a Certificate of Discovery by the DMEA is not in order.

INTRODUCTION

This report describes an exploratory project at the Sorrell Horse and Citation claims, Gila County, Arizona, that was conducted by the Big Six Explorations, Inc. with Government aid authorized by the amended Defense Production Act of 1950.

The application for aid was received by the Defense Minerals Exploration Administration April 12, 1956. It was assigned docket number DMEA-4249, reviewed by the Operating Committee, and forwarded to the Field Team, Region III for an examination of the property and recommendations. Proposed explorations comprised road building, rim-stripping, drifting and crosscutting and percussion drilling of long holes. Total cost of the work was an estimated $81,200.00.

The claims were examined June 4 and 5, 1956, by J. N. Faick, geologist, formerly of the U. S. Geological Survey, and T. M. Romslo, mining engineer, U. S. Bureau of Mines. A 2-stage project recommended by the examining team was approved after revisions and was authorized by Contract Idm-E1019, dated October 16, 1956.

Authorized work of the contract was started November 1, 1956 and was completed late in May 1957.

TOPOGRAPHY, PHYSICAL FEATURES AND CLIMATE

The Sorrell Horse and Citation claims are situated on the northwestern slope of McFadden Horse Mountain that has a peak altitude of 7,523 feet. The claims at an average altitude of 5,400 feet are in an

extremely rugged area. A range of 1,000 feet in elevation within a half mile is not unusual and 50- to 100-foot vertical cliffs are common.

A heavy growth of vegetation includes juniper, pinon pine and oak trees, some of which are suitable for mine timbers. However, cutting of trees is restricted since the claims are within the Tonto National Forest. Drainage is easterly to Cherry Creek, a perennial, south-flowing stream about 1 mile from the claims. Water for domestic and mining purposes is obtainable from springs, of which a few flow the year around.

The climate is generally mild. However, snow storms and heavy rainfalls may render roads impassable and force suspension of mining operations for short periods. Annual precipitation of 15 to 18 inches probably occurs about equally as rain and snow.

LOCATION AND ACCESSIBILITY

The Sorrell Horse and Citation claims are about 30 air miles north of Globe, Arizona, and are situated in the W½ of sec. 4, T. 6 N., R. 14 E., Gila County, Arizona (fig. 1). Globe and adjacent Miami are the nearest towns having mine supply houses and machine shops. They are located on U. S. Highway 60 and 70. A branch of the Southern Pacific railroad services Globe and the Atomic Energy Commission's ore purchasing depot at the nearby settlement of Cutter.

The trip from Globe to the claims, described in the following log, may be made by the ordinary passenger automobile when the roads are dry. When the roads are wet, travel beyond Board Tree Saddle should not be attempted with other than a 4-wheel drive vehicle.

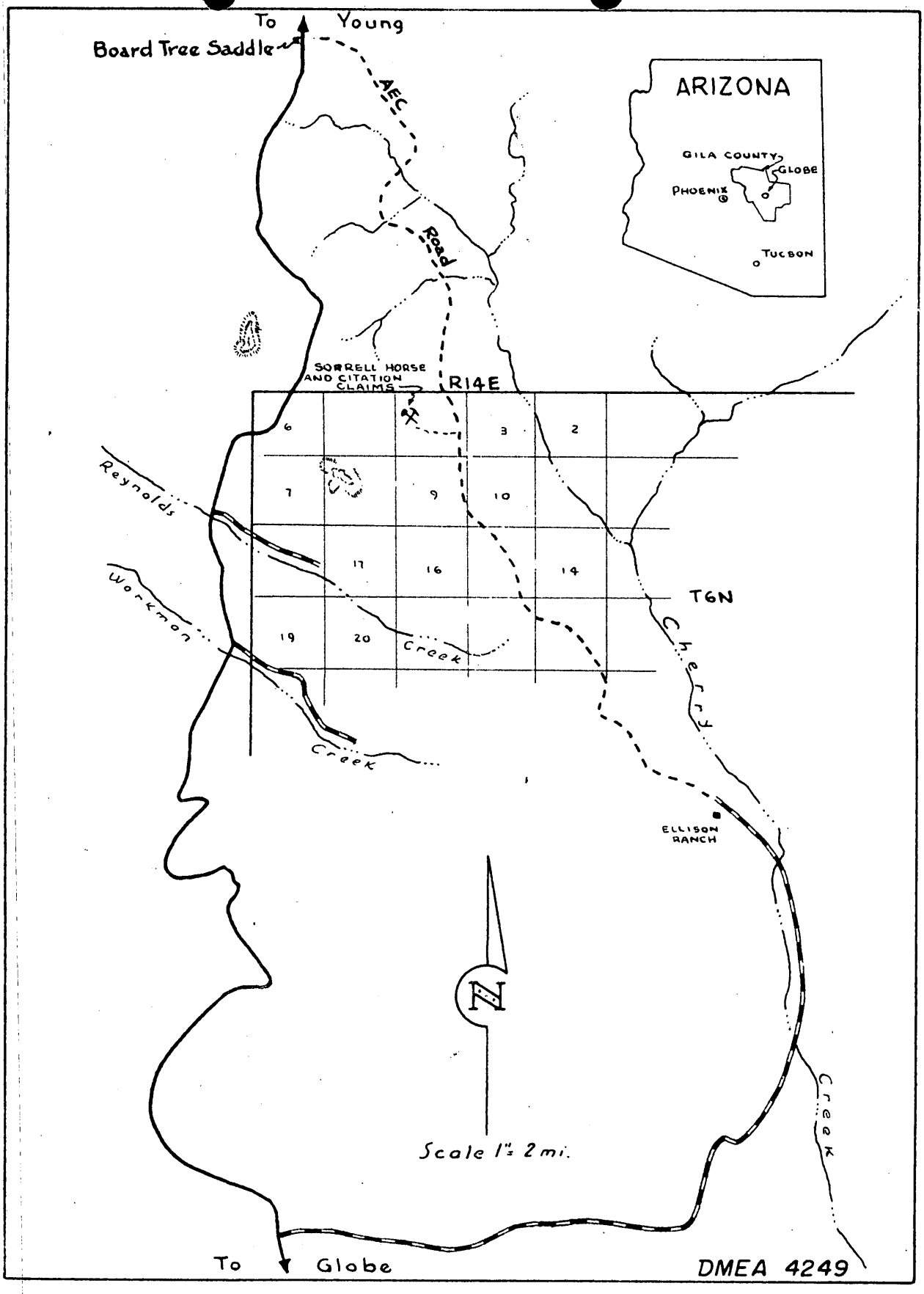


FIG.-1-LOCATION MAP, BIG SIX EXPLORATIONS INC.
GILA COUNTY, ARIZ.

Road Log	Miles
Junction U. S. Highway 60-70 and State Highway 88 at a few miles west of Globe	0.0
North on paved State Highway 88	14.0
Northeasterly on "Young" road to junction with AEC road built in early 1957 (first 5 miles paved, remainder graded dirt and gravel)	49.3
Southeasterly on graded AEC road to junction with southwesterly-trending unimproved access mine road	58.6
Proceed on access road to a fork at a camping site	59.5
Follow right fork to mine workings at	60.7

HISTORY AND PRODUCTION

Uranium first was discovered north of Globe in early 1950. Since then the area has been intensely prospected and many properties containing radioactive zones have been located. To date all favorable zones have been found in the Precambrian Dripping Spring quartzite formation. Some of the favorable zones have been explored by drill holes and drifts, but only a few small deposits of shipping grade ore have been developed.

Uranium first was discovered on the Big Six property by the present owners in 1954. The discovery was made shortly after the Atomic Energy Commission made an areal survey of the area and released a map showing anomalous readings in the area of the Big Six property. This area includes the adjacent Black Brush property which was also explored with Governmental aid under contract Idm-904, Docket DMEA-3935.

Little work was done on the Big Six property until December 1955, shortly after the Big Six Explorations, Inc. acquired the property under a lease and option agreement. During the following 2 months, a tent camp was established, bulldozer trails were built, radiometric surveys were made, location work was done, and a short adit was driven. A geologist of the Atomic Energy Commission cooperated with the applicant on the surveys. Other work performed before that described in this report comprised surveying and sampling of outcrops.

No ore was produced during the pre-DMEA operations.

EXTENT AND OWNERSHIP OF PROPERTY

The Big Six property comprises a group of 7 unpatented lode mining claims, Citation Nos. 1 to 5, and Sorrell Horse Nos. 1 and 2 (fig.2).

Big Six Explorations, Inc. is the owner of Citation claim No. 5 by location during 1955. All the other claims are held by the company under a Mining Lease of November 1, 1955 with the following persons, all of Gila County, Arizona:

Alfred Haught and wife, Susie Mae
Homer Haught and wife, Betty

C. A. Haught	Clifford Martin
Joe Haught	Jack Martin
Donald Wayne Haught	Mrs. Arthur Maurel
Glenn Morris Haught	D. K. Murphy
Van Baker	Nikie Murphy
Virgil Baker	Frank Chapman
Richard Baker	Harvey McKee

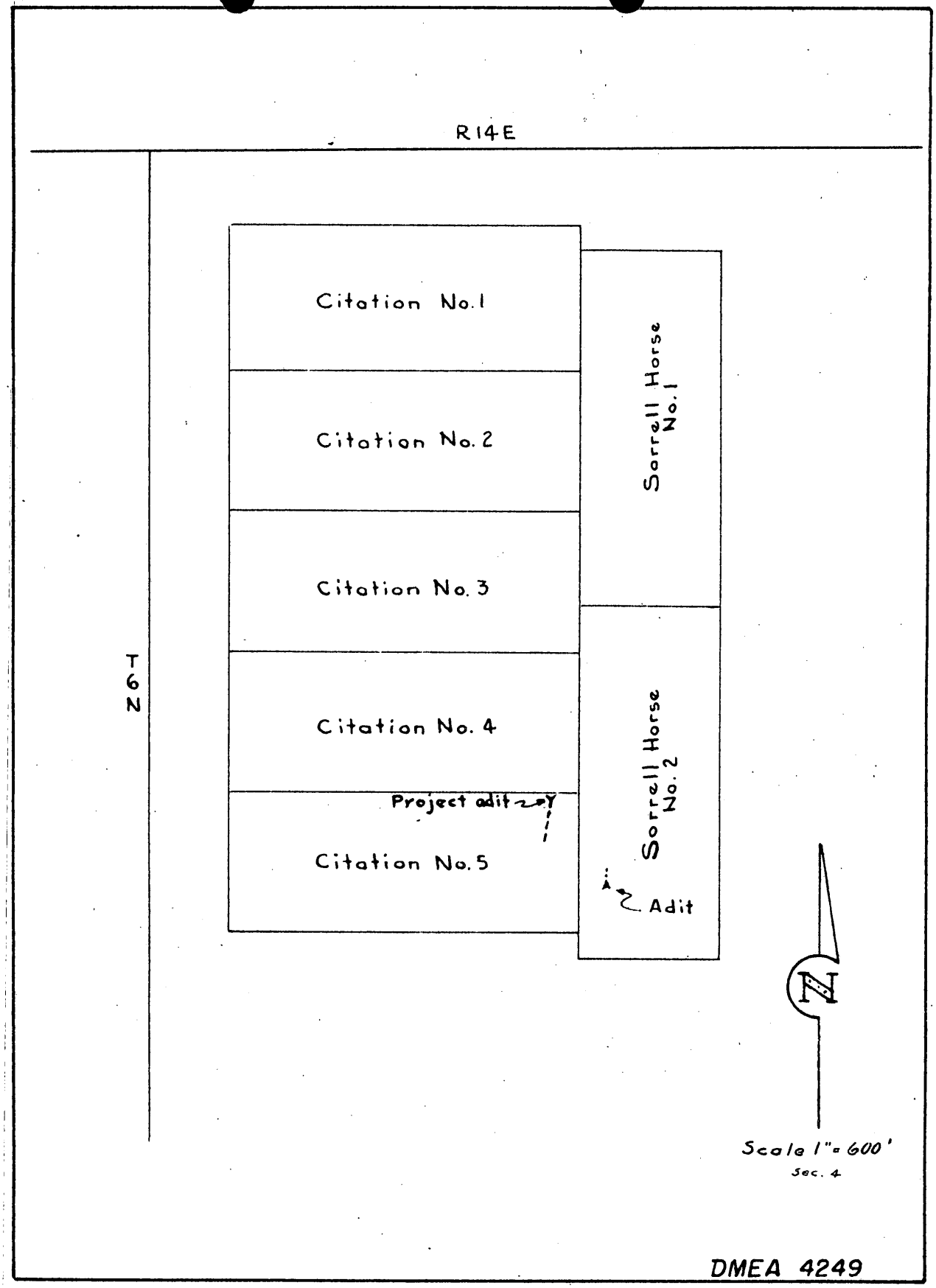


FIG.-2- CLAIM MAP, BIG SIX EXPLORATIONS INC.
GILA COUNTY, ARIZ.

Signers of the lease for Big Six Explorations, Inc. are: Roger F. Ashford, Charles Chick Fair, Bill R. Cässtevens, David L. Greenless, and Wilson E. Connell, all of Odessa, Texas, and R. J. Allison of Young, Arizona. Officers of the company include Roger F. Ashford, president; Bill R. Casstevens, secretary; and R. J. Allison, director.

GEOLOGY

The occurrences of radioactivity on the Sorrell Horse and Citation claims are in the lower part of the upper member of the Dripping Spring quartzite of the Precambrian Apache group. In the district, the Dripping Spring quartzite is conformably underlain by the Barnes conglomerate and conformably overlain by lower members of the Mescal limestone. Sills and dikes of diabase intrude the rocks of the Apache group in the district. Block faulting constitutes the most prominent structure in the district, but locally the upper member of the Dripping Spring quartzite has abundant smaller faults, fractures and joint planes.

The area of the mine on the Sorrell Horse and Citation claims (Fig. 3) is underlain by nearly horizontal beds of the Dripping Spring quartzite, which have been intruded near the contact of the upper and

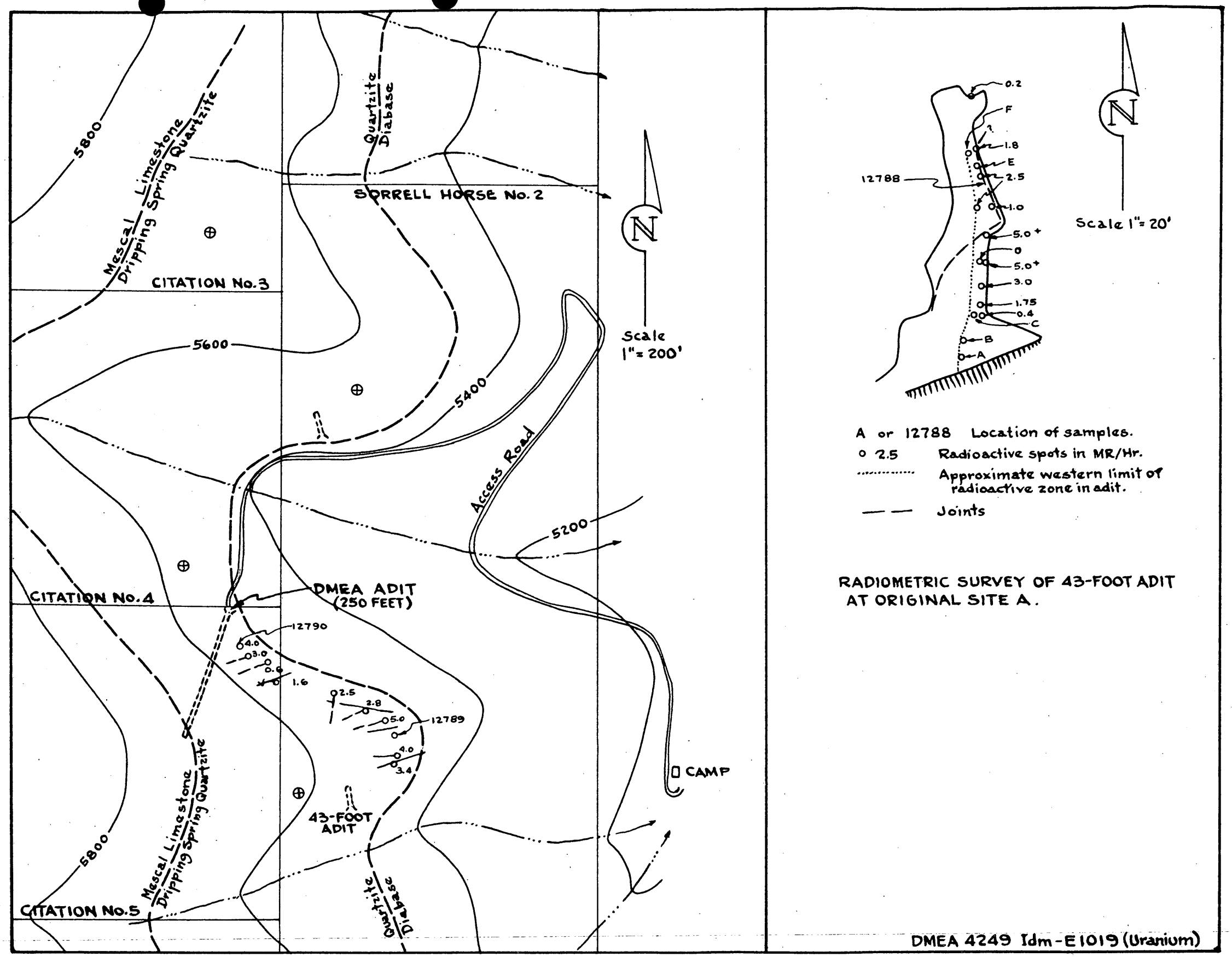


FIGURE 3.- GEOLOGY MAP, BIG SIX EXPLORATIONS, INC., GILA COUNTY, ARIZONA.

lower members by a diabase sill about 1,000 feet in thickness. The sill, though apparently concordant with beds in the vicinity of the mine, is said to be discordant in its broader aspects and cuts obliquely across the quartzite beds at a small angle. East of the mine area, along Cherry Creek, it is said that the quartzites are intensely deformed, probably as a result of faulting and intrusion of the sills.

In the mine area the Dripping Spring quartzite beds lie a few feet to about 40 feet above the sill and contain a zone about 35 feet thick in which anomolous radioactivity is erratically distributed. Locally, the areas of radioactivity appear to be concentrated on the joints of two principal systems: (1) a northerly trending system, and (2) a N. 70° E. system. The areas of anomolous radioactivity and the joints are exposed above the diabase sill on cliffs 40 to 50 feet high. Radioactivity in some places along the cliff face ranged from 3 to 5 times background when tested with a Geiger counter, but this is not unusual inasmuch as most of the upper member of the Dripping Spring quartzite is more or less radioactive.

Prior to start of the DMEA program, the radioactive zone in the Dripping Spring quartzite had been tested by underground work in an adit near the south end of the zone on the Sorrell Horse No. 2 claim (Fig. 3). This adit, about 43 feet in length, was started on a radioactive fracture zone but deviated from the fracture and passed shortly into barren quartzite. Figure 3 shows a radiometric survey

made by the operator in the short adit prior to the DMEA program and also along the outcrop northward from the adit. Results of assays on samples taken by the AEC, the operator, and by DMEA field examiners during this survey are shown below.

No. or Letter	Sampled by	Date Reported	U_3O_8 Radiometric	U_3O_8 Chemical	Description
A	AEC	12/23/55	0.20	0.17	
B	Operator	12/30/55	0.47		
C	AEC	12/30/55	0.27		
D	Operator	12/19/55		2.36	Selected specimen.
CR	Operator(?)	1/24/56	0.29	0.24	Repeat of "C".
E	Operator	2/28/56	0.33		Vert. cut 3.3 ft. in east wall.
F	AEC	12/30/55	0.72		Probably grab sample.
12788	DMEA	1/26/56	0.01	0.006	18-inch sample 2-3.5 ft. above floor, 25 ft. from portal.
12789	DMEA	1/26/56	0.26	0.12	2 ft. vertical chip sample.
12790	DMEA	1/26/56	0.16	0.16	4 ft. vertical chip sample.
12791	DMEA	1/26/56	0.12	0.13	Grab sample of ore on dump.

It was noted that most of the radioactivity was apparently concentrated in the jointed quartzite underlying a prominent physiographic nose in the southwestern part of the Sorrell Horse No. 2 claim. A second zone of greater than normal radioactivity lay approximately 800 feet north of the 43-foot adit. In this second zone the radioactivity appeared to be associated with northerly trending joints, whereas on the southwestern part of the Sorrell Horse No. 2 claim the association of radioactivity seemed to be with westerly trending joints.

In driving the 250-foot DMEA adit, several zones of above normal radioactivity were encountered in the back of the adit at distances from the portal of about 35, 50, 75, 140, and 150 feet and at the face (Fig. 4). The radioactive zones appeared to be confined to a single bed or lens of altered coarse-grained arkosic quartzite, ranging in thickness from 3 to 12 inches. The locations and assay results of 7 samples taken by the operator along the bed, and also of two check samples taken by DMEA representatives are shown on Figure 4. The radioactivity was spotty and did not seem to be related, as far as could be determined, to the jointing or fracturing in the quartzite, but as noted elsewhere in the district original joints or early fracturing in the formation are presently obscured by later alteration or metamorphism. Twelve percussion drill holes (Fig. 4) were drilled to test the favorable appearing radioactive zones in the back of the 250-foot adit. Results of the drilling, which were negative, are described elsewhere in this report.

Structurally and lithologically the radioactive zones on the Sorrell Horse and Citation claims are similar to other uranium occurrences in the Dripping Spring quartzite in the district. In this area the radioactive occurrences are erratic, non-persistent, and generally insignificant. Control of mineralization was probably related to jointing and bedding in the formation.

Little is known of the mineralogy of the deposit. There are no visible minerals, other than an occasional yellow oxide coating at surface outcrops. No uranium minerals can be seen in the underground workings, but

in the Workman Creek area to the south the primary mineral was suggested to be uraninite.

THE PROJECT

Work authorized by Contract with Costs

STAGE I

Actual Costs			
2800 feet access road	@ $2.33/ft.	$6,524.00	
Fixed Unit Costs			
250 feet of adit	@ $31.00/ft.	7,750.00	
35 feet of timbering	@ $ 4.50/ft.	157.50	
(or bolting)	@ $ 4.00/bolt		
500 feet of percussion drill hole (depth less than 50 feet)	@ $1.50/ft.	750.00	
150 feet of percussion drill hole (depth 50 feet or deeper)	@ $3.00/ft.	450.00	
50 chemical analyses	@ $5.00/sample	250.00	
Estimated total cost of Stage I			$15,881.50

STAGE II

Actual Costs			
None			
Fixed Unit Costs			
300 feet of crosscut	@ $31.00/ft.	$9,300.00	
35 feet of timbering	@ $ 4.50/ft.	157.50	
(or bolting)	@ $ 4.00/bolt		
500 feet of test hole (less than 50 feet)	@ $ 1.50/ft.	750.00	
150 feet of test hole (depth 50 feet or deeper)	@ $ 3.00/ft.	450.00	
50 chemical analyses	@ $ 5.00/sample	250.00	
Estimated total cost of Stage II			$10,907.50
Estimated total cost of project (rounded to)			$26,788.00
Government participation @ 75%			$20,091.00

Work Completed

Work authorized by Contract Idm-E1019 was initiated November 1, 1956, when R. J. Allison, Director of the corporation and project supervisor, started to acquire equipment and supplies. He previously had arranged for Mr. Wayne Hammond to furnish a bulldozer and operator under a subcontract. Mr. Hammond arrived and started building an access road November 9, shortly after Mr. Allison and an assistant had closely "flagged" the route. A portable 105 CFM compressor, jackhammers and explosives had been hauled to the property from Globe by the Operator's 4-wheel-drive International pickup truck. Construction of the road, about 10 feet wide and 3000 feet long, involved the moving of about 3,350 cubic yards each of dirt and rock from the route. It was completed December 5, 1956.

Equipment for driving the adit, a 210 CFM rotary type compressor, a ramp-slusher loader and jack-leg pneumatic drills were hauled in shortly after the road was completed. Meanwhile, a powder magazine had been built and a trench had been excavated from the end of the road to the portal. Driving of the 250-foot adit (Fig. 4), with a minimum cross section of 5 by 7 feet was started about December 10 and was completed late in March 1957. Mineralized zones in the adit, all spotty, were chip sampled by the operator and the 7 samples obtained (Fig. 4) were assayed. Two of the zones were check-sampled

by a DMEA inspector who visited the project each month. Timbering of the adit was necessary only at the portal where a 4-foot long set was installed.

During the following month, the operator requested and received authorization for the drilling of 12 percussion holes. A log of the holes that were completed during May 1957 follows.

LOG OF PERCUSSION DRILLED HOLES

Model 620 Minerals Engineering (Babble) Counter Used - Calibrated at .12% U_3O_8

Hole No.	Bearing	Inclination (plus)	Depth (Feet)	Equivalent U_3O_8 at indicated depths																	
				5'	10'	15'	20'	25'	26'	27'	30'	35'	40'	43'	44'	45'	50'	55'	60'	65'	70'	75'
1	S60W	45°	50	.03	.04	.02	.03	.04			.04	.02	.02			.03	.02					
2	S19W	60°	50	.04	.04	.02	.03	.04			.03	.02	.02			.04	.04					
3	S60W	45°	50	.05	.07	.03	.05	.05			.03	.05	.05			.03	.05					
4	S19W	60°	50	.10	.09	.07	.06	.11		.12	.08	.09	.05			.03	.06					
5	S60W	45°	50	.07	.08	.05	.06	.04			.06	.06	.05			.06	.05					
6	S19W	60°	50	.08	.09	.07	.07		.10	.20	.08	.06	.06			.06	.07					
7	S60W	45°	50	.03	.04	.05	.02	.03			.05	.03	.03	.12	.25	.03	.03					
8	S60W	45°	50	.05	.05	.06	.07	.06			.04	.02	.05	Hole caved at 41'								
9	S19W	60°	50	.05	.05	.02	.04	.03			.04	.02	.03			.03	.02					
10	S60W	45°	75	.06	.04	.03	.04	.04			.03	.02	.03			.03	.05	.04	.04	.05	.06	.03
11	S19W	60°	75	.06	.07	.06	.06	.04			.04	.04	.03			.05	.05	.04	.04	.05	.06	.03
12	S19W	15°	36	.07	.06	.05	.04	.04			.05	.04	36'	.04								
	Total		636																			

Shortly after completion of the drilling, the last of Stage I work, the operator notified the DMEA that additional explorations were not warranted, and requested that the contract be terminated. As the DMEA had already decided not to approve additional work, the request was approved. At this writing, official notice of termination was being withheld pending receipt of the Operator's Final Report and release of a Report of Review of Contract expenditures by the Contract Administration and Audit Division, DMEA.

Cost of Work Completed

Stage I

Actual Costs		
2800 feet access road	@ $2.33/ft.	$ 6,524.00*
Fixed Unit Costs		
250 feet of adit	@ $31.00/ft.	7,750.00
4 feet of timbering	@ $ 4.50/ft.	18.00
477 feet of percussion drill holes (depth less than 50 ft.)	@ $1.50/ft.	715.50
150 feet of percussion drill holes (depth 50 feet or deeper)	@ $ 3.00/ft.	450.00
7 chemical assays	@ $ 5.00/sample	35.00
Total cost of project		$15,492.50**
Government's participation @ 75%		11,619.38**

*Allowable portion of Operator's reported actual total cost of $7,622.01 for 3,000 feet of road.

**Before final audit and $500.00 withheld pending receipt of Operator's Final Report.

RESULTS OF THE PROJECT

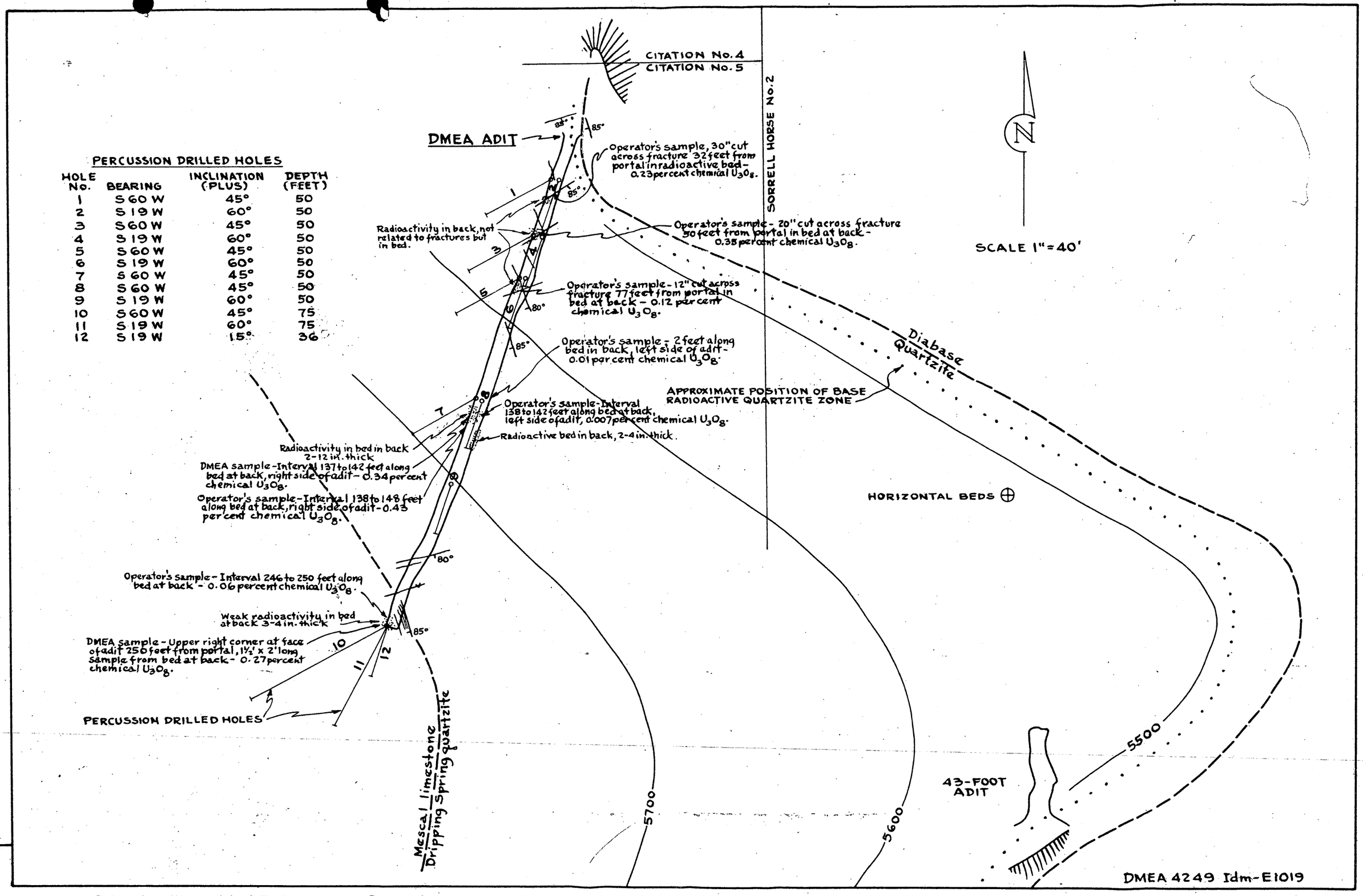
The results of the project were unfavorable inasmuch as no minable uranium ore was encountered. However, the findings do contribute to other factual information that indicates there is little chance for the localization of significant amounts of uranium ore in the Dripping Spring formation. As no minable ore was encountered and no potential ore zones were indicated, issuance of a Certificate of Discovery by the DMEA is not in order.

ORE RESERVES

Because of the non-persistent and erratic nature of the radioactivity in the Dripping Spring formation of the area, and the insignificance of the occurrences, no reserve estimations were considered.

EFFICIENCY OF OPERATION

All phases of the project were completed in an efficient manner under the supervision of Mr. R. J. Allison.



PERCUSSION DRILLED HOLES

HOLE No.	BEARING	INCLINATION (PLUS)	DEPTH (FEET)
1	S 60 W	45°	50
2	S 19 W	60°	50
3	S 60 W	45°	50
4	S 19 W	60°	50
5	S 60 W	45°	50
6	S 19 W	60°	50
7	S 60 W	45°	50
8	S 60 W	45°	50
9	S 19 W	60°	50
10	S 60 W	45°	75
11	S 19 W	60°	75
12	S 19 W	15°	36

FIGURE 4.- PLAN OF DMEA ADIT SHOWING LOCATION OF PERCUSSION DRILLED HOLES, BIG SIX EXPLORATIONS, INC., GILA COUNTY, ARIZONA.

Official file

224 New Customhouse
Denver 2, Colorado
February 25, 1958

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium) Contract Ldm-81019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona - FINAL PAYMENT

Reference is made to our memorandum of August 9, 1957, whereby we transmitted the final Form NF-104, Operator's Monthly Report and Voucher, for the month of May 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 to the Operator be made on the following basis which is in conformance with the Report of Review of reported project costs by the Contract Administration and Audit Division, dated February 18, 1958.

Basis for Final Payment:

Total accepted cost----------	$15,492.50
Government participation at 75%------	11,619.38
Total Prior Payments----------	11,119.38
Balance due the Operator----------$	500.00

Original signed by
W. H. KING

W. H. King

[illegible]
cc: [illegible] Op. Comm. (2)
[illegible]
[illegible] Div., Reg. III
[illegible]
[illegible]
[illegible]
[illegible] Div., Reg. III
[illegible]

$500.00
NS

2/27/58 DMEA-58-92

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/21	Talbert	800
2/24	C	220
2/24	LK	700

FEB 21 1958

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

Re: Docket No. DMEA-4249
Contract No. Idm-E1019
Big Six Explorations, Inc.

Dear Mr. Finch:

Your Report of Review on the referenced contract is acceptable. You are authorized to make normal distribution.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Director
Contract Administration
and Audit Division

EDTalbert/wb
February 21, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE
2/19	C	220
2/24	FLK	700

224 New customhouse
Denver 2, Colorado

February 17, 1958

Memorandum

To: T. H. Brading, DMEA Auditor

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-K1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

The subject contract was considered completed upon completion of the work under Stage I of the contract and the Operator was so advised by letter from this office dated July 12, 1957.

The Operator has rendered a final accounting and a final engineering and geologic report 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 services completed on a Fixed Unit Cost basis are as follows:

Drifting	250 feet
Drift timbering	4 feet
Percussion drilling (Holes less than 50 feet in length)	477 feet
Percussion drilling (Holes greater than 50 feet in length)	150 feet
Chemical analysis of samples for U_3O_8 content	7.

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

Original signed by
W. H. KING

W. H. King

JWT:prl

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

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

February 17, 1958

DMEA
RECEIVED FEB 19 1958

DATE	INITIAL	CODE
2-19	C	220
2/20	[illegible]	800
2/21	[illegible]	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrell-Horse and Citation claims), Gila County, Arizona

Enclosed are the original and one copy of a Final Report submitted by the Operator, pertaining to work completed under the subject contract.

The Field Team Final Summary Report will be submitted as soon as all other matters are resolved which are a prerequisite to closing the account.

W H King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REGION III

SOUTHWEST
EXPERIMENT STATION

DMEA
DEPARTMENT OF THE INTERIOR
FEB 13 1958
REGION III
DENVER, COLORADO

P. O. BOX 4097
UNIVERSITY STATION
TUCSON, ARIZONA

February 11, 1958

W.O.

Memorandum

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

From: T. M. Romslo
W. L. Emerick

Through: E. N. Harshman

Subject: Operator's Final Report, Docket DMEA-4249 (Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims) Gila County, Ariz.

Enclosed are the original and 4 copies of the captioned report.

The report appears to be acceptable after our penciled additions to the plan map.

DMEA
FEB 19 1958
INITIALS | CODE

T. M. Romslo
U. S. Bureau of Mines

W. L. Emerick
U. S. Geological Survey

CC W. H. King (9)
E. N. Harshman
W. L. Emerick
DMEA-4249
DF

TMRomslo:frj

Box No. 6,
Young, Arizona,
October 18, 1957.

Mr. W. R. Storms,
U. S. Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
OCT 31 1957
TUCSON, ARIZONA

Re: DMEA - 4249 - Uranium
Contract No. Idm. E1019
Big Six Explorations, Inc.,
Box No. 6, Young, Arizona.

Dear Sir::

As per agreement in DMEA 4249, Contract No. Idm. E1019, we are submitting herewith final report on this operation.

In November, 1956, a starting date of DMea Contract No. Idm. E1019 was set, and equipment including a D-8 Dozer, 105" Compressor and other necessary equipment was moved on to the job and work was started on the road.

Dozing was fairly easy through the diabase, with a few large boulders that had to be drilled and shot, until we came to the diabase, Dripping Springs contact. At this time we were constantly drilling and dozing in solid rock to the portal, with walls as high as 22' at times. The road was finished in December, 1956, with about 200' more than was originally figured, which was probably the reason for the costs being higher than originally estimated.

In December, 1956, a drift was started about South 19° W. at the site marked on maps in contract. The drift was run to a depth of 250', with some mineral shown at what appeared to be cross fractures. These places were sampled and assayed, with some fairly good showings.

With bad weather, freeze-ups, inaccessibility and overbreaking in drift, due to fractured ground, progress was very slow. We also had two road cave-ins, and a dozer had to be brought back to open up again. There was also some trouble with seeping water.

When drifting was completed we were ready for the long-hole drilling in Stage I. A D-99 4" Gardner-Denver Liner was bought and drilling was started. Twelve holes were drilled with long-hole equipment, ten holes under 50' and two holes over 50'. Again we had trouble drilling, due to fractures and the blockiness of the ground.

Samples were saved at 4' intervals, which showed what we thought was ore on fractures, but was actually thin beds that were too narrow to be mined. Since the drilling did not show any more ore we then decided to discontinue work.

Very truly yours,

BIG SIX EXPLORATIONS, INC.,

R. J. Allsion

R. J. Allsion.

RJA:wb

U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
JAN 29 1958
TUCSON, ARIZONA

OPR's FINAL Report

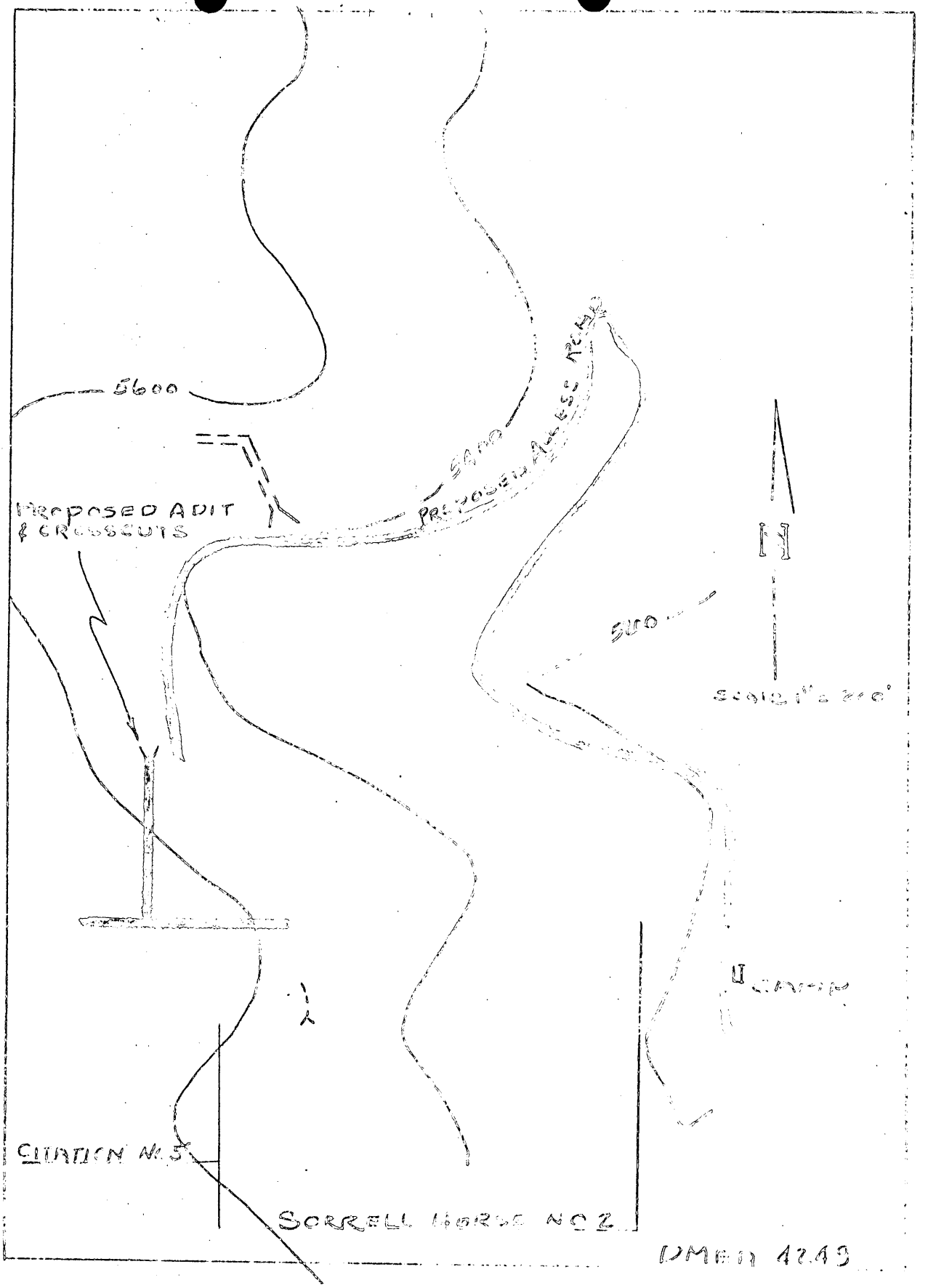


FIG. - 4 - PROPOSED EXPLORATION BIG SIX EXPLORATION INC.,
GILA COUNTY, ARIZONA

ORIGINAL COPY
DMEA
RECEIVED FEB 19 1958

DATE	INITIALS	CODE

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
JAN 30 1958
TUCSON, ARIZONA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

TOTAL _ FINAL

Month of Nov. 15, 1957 Docket No. DMEA 4249 Contract No. Idm E1019

Operator's Name Big Six Explorations, Inc., Minerals Uramium

Address Box No. 6, Young, Arizona

Contract Amount, $ 26788.00 Government Participation: 75% Amount, $ 20091.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		1165.50	1165.50			
~~XXXXXXX~~ Assaying		40.00	40.00			
Crosscutting						
Drifting		7750.00	7750.00			
Timbering		18.00	18.00			
(2) Labor and Supervision:						
Labor		1175.82	1175.82			
Supervision		850.00	850.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		169.58	169.58			
Pipe						
Track						
(4) Operating Equipment:						
Rental		4212.50	4212.50			
Purchase		183.14	183.14			
Depreciation		83.60	83.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		174.12	174.12			
Sampling and Analysis						
Payroll Taxes		40.52	40.52			
Liability Insurance		173.28	173.28			
Gal and Oil		396.06	396.06			
Telephone		2.20	2.20			
(8) Contingencies (specify):						
Accounting		141.67	141.67			
Miscellaneous		19.52	19.52			
TOTALS		16595.51	16595.51			

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

Date 11-15-57 *Payee Big Six Explorations, Inc.

Per A. G. Olson Title Director

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. ..... in accordance with the terms of the contract.

Signature ..... Title ..... Date .....

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
JAN 30 1958
TUCSON, ARIZONA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

TOTAL - FINAL

Month of 11-15- 1957 Docket No. DMEA 4249 Contract No. Idm E1019

Operator's Name Big Six Explorations, Inc. Minerals Uranium

Address Box 6, Young, Arizona

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting				7750.00	250	31.00	550	31.00
Crosscutting								
Raising								
Shafts								
~~Winzes~~ Timbering				18.00	4	4.50	70	4.50
Drilling: ~~Coxx~~ - 50 ft.	Ft.	[illegible]	[illegible]	715.50	477	1.50	1000	1.50
~~Xxxxx~~ 50 ft.	Ft.			450.00	150	3.00	300	3.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				7622.01	3000	2.48		6524.00
Assays				40.00	8	5.00		5.00
Total Distributed Costs				16595.51				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs				16595.51				

	Total Costs Authorized by Contract
Road	6524.00
Drifting	17050.00
Timbering	315.00
Drilling	2400.00
Assaying	500.00
Total (Rounded to)	26788.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 11-15-57 Operator BIG SIX EXPLORATIONS, INC.

Per [signature] Title Director

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

BIG SIX EXPLORATIONS, INC.
Young, Arizona.

LOG OF COMPLETED DRILLING

Model 620 Minerals Engineering (Babble) Counter
Used - Calabrated at .12

HOLE NUMBER	DISTANCE	ANGLE	READING AT FIVE FOOT INTERVALS OR FRACTION THERE OF AS SHOWN:																	
			5'	10'	15'	20'	25'	26'	27'	30'	35'	40'	43'	44'	45'	50'	55'	60'	65'	70'	75'
#1 S 60 W	50'	45°	.04	.04	.02	.03	.04			.04	.02	.02			.03	.02					
#2 S 19 W	50'	60°	.04	.04	.02	.03	.04			.03	.02	.02			.04	.04					
#3 S 60 W	50'	45°	.05	.07	.03	.05	.05			.03	.05	.05			.03	.05					
#4 S 19 W	50'	60°	.10	.09	.07	.06	.11		.12	.08	.09	.05			.03	.06					
#5 S 60 W	50'	45°	.07	.08	.05	.06	.04			.06	.06	.05			.06	.05					
#6 S 19 W	50'	60°	.08	.09	.07	.07		.10	.20	.08	.06	.06			.06	.07					
#7 S 60 W	50'	45°	.03	.05	.05	.02	.03			.05	.03	.03	.12	.25	.03	.03					
#8 S 60 W	50'	45°	.05	.05	.06	.07	.06			.04	.02	.05	Hole caved at 41'								
#9 S 19 W	50'	60°	.05	.05	.02	.04	.03			.04	.02	.03			.03	.03					
#10 S 50 W	75'	45°	.06	.04	.03	.04	.04			.03	.02	.03			.03	.05	.04	.04	.05	.06	.03
#11 S 19 W	75'	60°	.06	.07	.06	.06	.04			.04	.04	.03			.05	.05	.04	.04	.05	.06	.03
#12 S 19 W	36'	15°	.07	.06	.05	.04	.04			.05	.04 at 36'	.04									

Samples of cutting from drill holes saved at intervals of five feet show no values when checked with counter, thus it seemed unnecessary to have them assayed.

Highest readings obtained from probing the holes logged above would indicate only small local enriched areas.

S. J. Pellson

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 14 1958
DATE | INITIALS | CODE
2/14 | C | 220
2/14 | | 800
2/14 | | 700

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

February 11, 1958

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
(Sorrell Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Reference is made to our letters of August 9, 1957 and January 2, 1958, regarding the rendering by your company of a final engineering and geologic report pertaining to work completed under the Contract as provided for under Article 7(c) thereof.

As considerable time has elapsed since the project work was completed and we have not received the required final report, your prompt attention to the matter is requested. Otherwise, if the final report is not in our hands on or before March 1, 1958, it will be necessary that we refer the matter to the Washington Office, DMEA, for such action as is indicated in order to protect the Government's interest.

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/Tucson (Romslo)
Emerick
Corres. file
Townsend
Chron.

DMEA
RECEIVED JAN 6 1958

DATE	INITIALS	CODE
1/6	gb	220
1/6	[illegible]	800
1/6	[illegible]	700

224 New Customhouse
Denver 2, Colorado
January 2, 1958

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. 4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Reference is made to our letter of August 9, 1957, regarding the rendering by your company of a final engineering and geologic report pertaining to work completed under Contract Idm-E1019, as provided for under Article 7(c) of the contract.

We are desirous of closing this account at an early date, therefore, we will appreciate your prompt attention to the matter of rendering the required final report.

Yours very truly,

Original signed by
W. H. KING

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

JWT:hmh

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

DGEA
DEC 5 1957
DETAILS | CODE
15 C 220
15/6 FLK 700

IN REPLY REFER TO:

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

December 4, 1957
Re: DMEA 4249, Idm-E1019
Big Six Explorations
Sorrell Horse and Citation claims
Gila County, Arizona
Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of Field Team Final Report filed with final memo 12/26/58

The contract, awarded October 16, 1956, approved the expenditure of $26,788.00 on the exploration of uranium-bearing narrow fractures in Dripping Spring quartzite. The quartzite in nearly horizontal beds is intruded by a thick diabase sill. Locally areas of radioactivity are concentrated on or near joints of 2 systems, a northerly and a N. 70° E. system.

Exploratory work consisted, besides considerable road work, of a 250 foot adit, and 627 feet of percussion drilling. The cost was $15,492.50. The contract was terminated by mutual agreement. No minable material was found and the examiners and I recommend that no certificate of discovery be issued.

N. E. Nelson

N. E. Nelson

Files

DMEA
DEPARTMENT OF THE INTERIOR
NOV 29 1957
REGION III
DENVER, COLORADO

November 27, 1957

Mr. R. J. Allison
P. O. Box No. 6
Young, Ariz.

Re: Operator's Final Report, Docket No. DMEA-4249 (Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Black Brush Claims), Gila County, Ariz.

Dear Al:

Please advise when I may expect to receive your final report that was returned to you for revision, October 31, 1957.

T. M. Romero

CC W. H. King (2)
DMEA-4249
DF

12/2 220
12/3 800
700

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

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 12 1957

DATE	INITIALS	CODE
11/12	C	220
"	Krause	700

November 7, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrel Horse and Citation claims), Gila County, Arizona

In reference to your inquiry of November 1, 1957, the rough draft of a final engineering and geologic report is about completed and the report is expected to be available for forwarding by the end of November.

The Operator's report was received at the Tucson Office, but it was considered inadequate and was returned to the Operator for revision. Definite information as to when the revised report will be received is not available, but we believe it can be expected by the time the engineering and geologic report is completed.

E. N. Harshman

E. N. Harshman

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/31	Knouse	700
10/31	Ellis	700
11/1	GCS	1300
"	Johnson	110
		~~100~~
		~~248~~
11/4	C	220
		700

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

NOV 1 1957

Re: Docket No. DMA-4249 (Uranium)
Contract No. Idm-61019
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Dear Mr. Harshman:

Please advise when we may expect to receive the final reports from the Operator and the Field Team, for the subject project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

FLKnouse/izm 10-31-57
cc: Mr. Knouse
Operating Committee
Admr.'s Reading File
THKiilsgaard, 5224

8623

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 13 1957

			220
8/13	Q		800
8/13	E.E.J.		700
	FLK		

224 New Customhouse
Denver 2, Colorado

August 9, 1957

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket DMEA-A249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Form MF-104, Operator's Monthly Report and Voucher, for May, 1957, together with all supporting data, has now been received in this office and is being processed for payment.

The cost of five chemical analyses was reported on Form MF-104, however, assay results were submitted for only four samples. The cost of one chemical analysis is disallowed.

The amount of $500.00, which was withheld from the April 1957, voucher, is reinstated and an equal amount is withheld from the May, 1957 voucher, pending resolution of matters prerequisite to closing the account, which include;

1. Rendering to the Government a final report as required under Article 7(a), of the contract form.

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

If you have any questions regarding the above please feel free to contact this office.

Yours very truly,

Original signed by
E. N. HARSHMAN

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

JDC:hmh
cc: Mr. R.J. Allison
Big Six Explorations, Inc.
Box 6, Young, Arizona
Chmn. Op. Comm. (2)
Harshman
DMEA/Tucson
Emerick
Townsend
Corres.file, Reg.III
Chron

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 29 1957

DATE	INITIALS	CODE
7/29	C	220
7/29	[illegible]	800
"	FLK	700

224 New Customhouse
Denver 2, Colorado

July 26, 1957

CERTIFIED AIR MAIL

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: DMEA Docket-4249 (Uranium)
Contract Ida-E1019
Big Six Explorations, Inc.
(Sorrell Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Reference is made to our letter to you dated July 9, 1957, whereby we advised you that a portion of the supporting material submitted with Form MF-104, Operator's Monthly Report and Voucher, for May, 1957, was not acceptable to the Government, and was therefore returned to Mr. R. J. Allison for correction. The requested material, consisting of corrected assay certificates and a map showing sample locations has not yet been received in this office.

Unless the above material is received in this office by August 10, 1957, Form MF-104, Operator's Monthly Report and Voucher, for May, 1957, will be placed in line for processing, and the amount reported for assaying will be disallowed.

Yours very truly,

Original signed by
W. H. KING

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

JDC:hmh
cc: Mr. R. J. Allison, Director
Big Six Explorations, Inc.
Box 6, Young, Arizona

Chmn. Op. Comm. (2)
Harshman
DMEA, Tuc.
Emerick
Townsend
Cooper
Corres. file, Reg. III

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

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE
7/15	C	220
"	~~FLK~~	700

July 12, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

Enclosed are three copies of Notice to the Operator that the Government's approval for work under Stage II will not be forthcoming.

Also enclosed are three copies of a joint memorandum, dated July 8, 1957, from T. M. Romslo, Mining Engineer, Bureau of Mines, and W. L. Emerick, Geologist, Geological Survey, pertaining to the matter.

W. H. King

W. H. King

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE

[illegible] New Customhouse
Denver 2, Colorado

July 12, 1957

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
[illegible] North Jefferson
Odessa, Texas

Re: Docket No. DMEA 4249 (Uranium),
Contract No. IAm-21019
Big Six Explorations, Inc.
(Sorrell Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Exhibit "A" of the Contract provides that the Operator shall perform all the work under Stage I and as much of the Stage II work as is approved in advance in writing by the Government.

As you have performed all of the work outlined under Stage I, and since the Government's approval will not be forthcoming for any work under Stage II, therefore the Contract is to be considered completed upon completion of the Stage I work and upon your rendering to this office the final accounting report and an acceptable final engineering and geologic report, as provided for in Article 7(a) of the Contract form.

A nominal sum will be withheld from reimbursement to you in processing your final accounting report, pending receipt of your final engineering and geologic report and release to this office of a Report of Review of Contract expenditures by the Contract Administration and Audit Division, DMEA; after which final payment to you will be effected.

Very truly yours,

Original signed by
W. H. KING

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

JVT:prl

cc: Chm. Op. Comm. - 3
Finance Office,
Region III
Amendment file,
Region III
Marshman
Emerick
DMEA/Tucson
DMEA Auditor, Reg. III
Townsend
Corres. file
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JUL 10 1957
REGION III
DENVER, COLORADO

MINERAL DEPOSITS
DMEA
RECEIVED
JUL 10 1957

U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

July 8, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 15 1957

DATE	INITIALS	CODE
	E. W. H.	

Memorandum

To: W. H. King

From: T. M. Romalo
W. L. Emerick Through: E. N. Kaufman

Subject: Docket DMEA-4049 (Uranium), Contract Ida-E1010
Big Six Explorations, Inc.
(Sorrell Horse and Citation claims) Gila County, Arizona

Reference is made to your letter of July 2, 1957, requesting a joint report containing field examiners' recommendations relative to termination of the above subject contract in its present status.

Stage I of the subject contract, all of which has been completed by the operator, included:

2,800 lineal feet of access road,
250 feet of adit (drift),
500 feet of percussion drill test holes less than 50 feet in depth,
150 feet of percussion drill test holes with depths of 50 feet or over.

The percussion drill test holes were designed to test radioactive zones in and above an intermittently mineralized horizontal bed in the Dripping Spring quartzite at the back of the 250-foot drift. The mineralized bed ranges in thickness from 3 to 12 inches and averages about 3-1/2 inches. Percussion drill test holes were drilled in radioactive zones at the face of the drift and at distances of 35, 50, 75, 140 and 150 feet from the portal.

Ten percussion drill test holes of 50 feet depth and 2 percussion drill test holes 75 feet in depth were completed and probed by the operator in May 1957. Drill cuttings from the 12 percussion drill test holes were checked with a geiger counter by the field examiners on June 5, 1957. Nothing of significance was indicated by either the operator's probing of the holes or the field examiners' check of drill hole cuttings.

Stage I work under the contract indicated that the zones of radioactivity in the Dripping Spring quartzite on the property were small, intermittent and insignificant in occurrence and quality. Stage I work of the contract adequately explored the zones of radioactivity and exposed the nature of the occurrences on the property. The field examiners do not, therefore, feel that under the findings of Stage I of the contract further exploration work under Stage II would be justified, and they recommend that the contract be terminated in its present status.

Original signed by
T. M. Romslo

T. M. Romslo
Mining Engineer, U. S. Bureau of Mines

W L Emerick

W. L. Emerick
Geologist, U. S. Geological Survey

TMR:WLE:mm

cc: King (10)
Marshman
DMEA-Tucson
Emerick

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 11 1957

DATE	INITIALS	CODE
7/1	C	226
7/11	[illegible]	800
	~~Voucher~~	700

224 New Customhouse
Denver 2, Colorado
July 9, 1957

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
220 N. Jefferson
Odessa, Texas

Re: Docket DMEA-4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Reference is made to your telephone call to this office on July 1, 1957, relative to payments due Big Six Explorations, Inc., under the referenced contract.

Form MF-104, Operator's Monthly Report and Voucher for May, 1957, covering the long hole drilling costs, has been received by the field office, and inspection of the work was made on June 25, 1957, by DMEA personnel. A part of the May report was not acceptable and was therefore returned to Mr. Allison for revision or additional information. As of July 5, 1957, the data had not been returned to the Government.

When the May, 1957, report is received in this office, complete with all necessary data, the voucher will be processed for payment, and the amount withheld from the March, 1957, voucher will be reinstated; however, a reasonable amount will be withheld from the May, 1957, voucher, pending resolution of matters which are prerequisite to closing the account. You will be further advised by this office when the May, 1957, voucher is processed.

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, TUC.
Emerick
Townsend
Corres. file, Reg. III
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JUL 8 1957
REGION III
DENVER, COLORADO

July 5, 1957

Memorandum

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

From: T.M. Romale, Mining Engineer, Tucson, Ariz.

Subject: Docket DMEA-4249 (Uranium) Contract Ida-E1019, Big Six Explorations, Inc. (Sorrel Horse and Citation Claims), Gila County, Arizona

Reference is made to your memorandum to me of July 2, 1957.

As mentioned in the Weekly Reports for June 24-28 and July 1-5, the referred to report was received and inspected by me June 25. A portion of the report, map and assay certificates, was found inacceptable and was returned to R. J. Allison the same day for necessary corrections. It had not been returned at this writing.

On July 3 I wrote Mr. Allison and asked that the data be returned not later than July 10 so that I could complete my report before July 12, the day before I leave on a 3-week vacation. On July 5, I was unsuccessful in an attempt to contact him by telephone.

The complete report will be mailed to you provided the corrected data is received before July 12. If the data is not received I will forward to you on July 12 my report and the available portion of the operator's report. Mr. Storms will be asked to forward the maps and assay certificates when received.

The requested joint report of recommendation will be mailed to you next week.

Original signed by
T. M. Romale

T.M. Romale

cc: W.H. King (orig. & 8)

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 11 1957

DATE	INITIALS	CODE

224 New Customhouse
Denver 2, Colorado

June 13, 1957

6/17 C 220
6/18 800
6/19 700

Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4249 (Uranium) Contract Idm-E1019
Big Six Explorations, Inc. (Sorrel Horse and Citation claims), Gila County, Arizona

Enclosed is a copy of a letter dated June 11, 1957, from the subject operator, requesting that all correspondence and checks be mailed to:

Big Six Explorations, Inc.
220 N. Jefferson
Odessa, Texas.

In the future please send all checks to the above address.

W. H. KING
W. H. King

JDC:hh

cc: Chmn. Op. Comm. (2)
Harshman
DMEA-Tus.
Hasler
Townsend
Corres. file, Reg. III
Chron.
} w/copy of Oper. letter of 6/11/57

BIG SIX EXPLORATIONS, INC.
220 N. JEFFERSON
ODESSA, TEXAS

DMEA
DEPARTMENT OF THE INTERIOR
JUN 12 1957
REGION III
DENVER, COLORADO

June 11, 1957

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

RE: Docket DMEA-4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Gentlemen:

In reference to the above contract, we would like to request that all correspondence and checks be mailed to Big Six Explorations, Inc. at their home office:

220 N. Jefferson, Odessa, Texas.

Very truly yours,

Roger F. Ashford, President
Big Six Explorations, Inc.

DMEA
RECEIVED JUN 13
DATE | INITIALS

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

224 New Customhouse
Denver 2, Colorado

June 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 14 1957

DATE	INITIALS	CODE
6/14	C	220
/14	Com	100
6/19	~~[illegible]~~	700

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4249 (Uranium) Contract Idm-E1019
Big Six Explorations, Inc. (Sorrell Horse and
Citation claims) Gila County, Arizona -
INTERIM EXAMINATION REPORT

Enclosed are four copies of a joint interim report by T. M. Romslo, Mining Engineer, Bureau of Mines, and W. L. Emerick, Geologist, U. S. Geological Survey, covering progress under the subject contract through June 5, 1957.

Stage I work has been completed and it is the opinion of the Field Examiners that Stage II work will not be justified.

W H King
W. H. King

Enclosures

MINERAL RESOURCES
RECEIVED
JUN 11 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4186 University Station
Tucson, Arizona

Memorandum June 7, 1957

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

From: W. L. Emerick
T. M. Romslo

Through: E. N. Harshman
W. R. Stoms

Subject: Interim examination, Docket DMEA 4849 (Uranium) Big Six Exploration, Inc., Sorrell Morse and Citation claims, Gila County, Ariz.

A brief visit to the above subject property was made by T. M. Romslo and W. L. Emerick on June 5, 1957, for the purpose of making the regular monthly progress inspection and to make a joint check on the progress of DMEA exploration work. The field examiners were accompanied by E. J. Allison, of the operating company.

Cuttings from twelve long-holes drilled in the 250-foot adit, to test for radioactive zones above an intermittently mineralized bed of quartzite at the back of the adit, were checked with a geiger counter. For locations, bearings, and inclinations of holes reference is made to letter to Acting Executive Officer, dated April 15, 1957, from J. E. Faick and T. M. Romslo. No significant readings above background were obtained on any of the sample cuttings. Each sample checked represented an interval of 5 feet.

One drill hole was also re-probed in the field team's presence, with results essentially the same as recorded by the operator in original probing of the same hole.

Nothing of significance was encountered by the long-hole drilling of favorable radioactive zones in the 250-foot adit, or in work done before the long-hole drilling. Consequently, the field examiners do not feel that Stage II work under the contract would be justified. This opinion was also intimated by Mr. Allison, and it is probable that his monthly progress report for May will so indicate, along with other findings.

W L Emerick
W. L. Emerick, Geologist
U. S. Geological Survey

T M Romslo
T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

OFFICE FILE COPY
DMEA
RECEIVED
DATE CODE

WLE:TMR:ms
cc: Acting Executive Officer (8)
Harshman
Stoms
Emerick

DMEA
DEPARTMENT OF THE INTERIOR
JUN 11 1957
REGION III
DENVER, COLORADO

June 3, 1957

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Division of Rare and Miscellaneous Metals

Subject: Amendment to contract

Mr. Ellis has reviewed Amendment No. 1, dated May 21, 1957, to Contract Idm-E1019, Docket, DMEA-4249, Big Six Explorations, Inc., which was executed by the Operator and the Acting Executive Officer of Region III. Mr. Ellis has approved the amendment and believes it does not require further review by the Legal Division.

Grace L. Ault

Grace L. Ault

FINAL DISTRIBUTION

MADE AUG 13 1957

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III
224 New Cotton House, Denver 2, Colorado

Administrative Audit Difference Statement

Big Six Explorations, Inc.
220 N. Jefferson
Odessa, Texas

Date: August 12, 1957
Payee's Reference: May 1957

DMEA-4249

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed	$	1190.50
Difference	$	5.00
Amount Approved	$	1185.50

The reason for the difference was due to:

Disallow:	Claimed 5 chemical analyses @ $5.00 ea.	$25.00
	Results have been submitted for only 4 analyses @ $5.00 ea.	20.00
	Disallow 1 chemical analysis	5.00
Reinstate:	$500.00 which was withheld from the March 1957 voucher.	
Withhold:	$500.00 pending resolution of matters which are prerequisite to closing the account.	

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

EXTRA COPY
DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE
8/15	FLK	700

R-III-B & F Form No. 4
4-15-52 D

224 New Customhouse
Denver 2, Colorado

August 9, 1957

EXPEDITE
DMEA
RECEIVED AUG 13 1957
DATE | INITIALS | CODE

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket-4449 (Uranium) Contract Xdm-E1019
Big Six Explorations, Inc. (Sorell Horse and Citation claims) Gila County, Arizona - Operator's Monthly Progress Report for the month of May, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

Except as otherwise indicated below, we consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. All of the work during May, 1957, was performed at fixed Unit Costs in accordance with the contract form. Payment is recommended on the following basis, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Amount to be Disallowed, Chemical Analyses:

The Operator has reported a total of five Chemical analyses on Form MF-104 for May, 1957. Results have been submitted for only four analyses, therefore the reported cost for one chemical analysis is to be disallowed.

Disallow the reported cost for one Chemical Analysis at $5.00---------- $5.00

Amounts to be reinstated and withheld:

Reinstate an amount of $500.00, which was withheld from the March, 1957, voucher.

Withhold an amount of $500.00, pending resolution of matters which are prerequisite to closing the account. The contract is considered completed, and the Operator was notified by letter of July 12, 1957.

Reconciliation with Amount Reported by the Operator on Form MF-104, for May, 1957

Amount reported on Form MF-104, for May, 1957	$1190.50
Amount to be disallowed	5.00
Total accepted cost for May, 1957	$1185.50
Government participation at 75 percent	889.13

Amounts to be reinstated and withheld

Amount to be reinstated	$500.00	
Amount to be withheld	500.00	
Net reinstatement or deduction		0.00
Balance due the Operator		$ 889.13

Remarks:

Date of Report ---------- June 15, 1957
Date Received in Field Office ---------- June 25, 1957
Date Received in Region Office ---------- July 15, 1957
Reason for delay: Held pending receipt of map and assay certificates from Operator.

Original signed by
E. N. HARSHMAN
E. N. Harshman

JDC:hmh
cc: Chmn. Op. Comm. (2))w/copy of complete
BMEA/Tucson) report
MF-104 file, Reg. III)
Harshman)
Emerick) w/copy of Engr's report
Townsend)
Chron

DMEA

DEPARTMENT OF THE INTERIOR

JUL 15 1957

REGION III
DENVER, COLORADO

July 12, 1957

Memorandum

To: [illegible] H. King, Executive Officer, DMEA Field Team, Region III

From: [illegible] M. [illegible], Mining Engineer, Tucson, Arizona

Subject: Progress report for May 1957, Case of DMEA-4240 (Uranium) Contract Idn-7101?, Big Six Explorations, Inc. (Carrell House and Citation Claims), Pima County, Ariz.

Enclosed with this report in quintuplicate are 5 copies each of the operator's forms [illegible]-104 and 104A, radiometric log and narrative report.

On June 5, 1957, [illegible] L. Emerich and I visited subject property for the purpose of making my regular monthly progress inspection and to jointly check on the results of the work. We were accompanied by [illegible]. J. Allison, Director of the [illegible] and project supervisor.

I found that the 12 percussion drill holes approved by the Acting Executive Officer's letter of April 29, 1957 had been completed, reportedly during May. As reported in our joint memorandum to you of June 7, 1957, Mr. Emerich and I tested the cuttings which had been sacked in 5-foot intervals and check probed 1 of the holes. No significant readings above background were obtained from any of the cuttings. Findings from the probing of hole 7 were essentially the same as reported by the applicant.

ANALYSIS OF THE PROJECT PROGRESS

The report was received and inventoried at Tucson June 25, 1957. The map and assay certificates were found in a mailable and were returned to Mr. Allison the same day. A request that the material be corrected and returned before June 10 was mailed June 3. Attempts to contact Mr. Allison by phone July 5 and 8 were unsuccessful. The material had not been returned on July 11 when I completed this report for forwarding on July 12, the day before taking off on a 3-week vacation. If the corrected maps and assay certificates are received before mailing time they will be enclosed with this report; otherwise, Mr. [illegible] will be asked to forward them to you.

[illegible] H. King (5)
By DMEA-[illegible]
[illegible]

Attachment

DMEA
RECEIVED AUG [illegible] 1957
DATE | INITIALS | CODE

Form MF-104

Drilling - The $1,165.52 is for the 477 feet and 15 feet of [illegible] hole at $[illegible] and $3.00 per foot [illegible]. The 477 feet comprised holes 1 to 7 that were each drilled to a depth of 50 feet and included [illegible] 47-foot holes and holes 2 that could not be drilled beyond 36 feet. The 150 feet is for holes 10 and 12 that were each drilled to a depth of 75 feet. The depths of the holes are shown on the operator's radiometric log. Hole 5 was drilled to a depth of 50 feet as indicated by cuttings but due to ravelling it could be logged only to a depth of 40 feet.

Assaying - The $25.00 is for the assay of 5 samples at the specified cost of $5.00 each. It should be approved if acceptable assay certificates and a map showing the locations and descriptions of the samples is made available. Incidentally, the map also should show the same information for the previously reported 3 assays.

Totals - The monthly cost of $1,190.50 appears to be correct. The other costs, $15,405.01 and $16,595.51, also appear to be correct before the previous disallowance of $1,098.01.

Form MF-104A

The form has been properly completed.

NARRATIVE REPORT

The report is acceptable. The map, as originally received, also would have been acceptable if it had included the previously mentioned sampling data.

RECOMMENDATIONS

Joint memoranda of June 7 and July 8 by Mr. Emerick and me recommend that contract be terminated as all approved work of Stage I had been completed with unfavorable results.

Continue to withhold the $500.00 pending official termination of the contract, a final audit, and receipt of the operator's Final Report.

Original signed by
T. M. Romslo
T. M. Romslo

Box No. 6,
Young, Arizona,
June 15, 1957.

Mr. W. R. Storms,
U. S. Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

Re: DMea - 4249 - Uranium
Contract No. Idm. E1019
Big Six Explorations, Inc.,
Box No. 6, Young, Arizona.

Attention: Mr. Traver.

Dear Sir:

Pursuant to DMea 4249, Contract No. Idm. E1019, we herewith submit narrative report for May, 1957, together with Maps and Log of completed drilling, and completed Forms MF104 and MF104A.

During May the drilling in Stage I was completed, with ten (10) holes under fifty feet, and two (2) holes over fifty feet.

After drilling, probing and catching samples at five foot intervals we found very little showing in the probing of the holes or in the samples, except one spot at 27½ feet in Hole No. 4 and one spot at 27½ feet in Hole No. 6, as shown on the accompanying Log.

Mineralization in the drift and in the drill holes was spotty, probably due to bedding. Since no appreciable mineralization was found at any of drilling spots we feel it is not advisable to spend more time or money at this time. If more information is available at a later date on Uranium in the Dripping Springs we may consider more work.

We will submit a final report in the near future.

Very truly yours,

BIG SIX EXPLORATIONS, INC.,

R. J. Allison

R. J. Allison, Director.

RJA:wb
Encls.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4249 Contract No. Ion. E1019
Operator's Name Big Six Explorations, Inc. Minerals Uranium
Address Box 6, Young, Arizona
Contract Amount, $ 26700.00 Government Participation: 75 % Amount, $ 20091.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1165.50		1165.50			
~~Bulldozing~~ Assaying	25.00	15.00	40.00			
Crosscutting						
Drifting		7750.00	7750.00			
Timbering		18.00	18.00			
(2) Labor and Supervision:						
Labor		1175.02	1175.02			
Supervision		850.00	850.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		169.53	169.53			
Pipe						
Track						
(4) Operating Equipment:						
Rental		4212.50	4212.50			
Purchase		183.14	183.14			
Depreciation		83.60	83.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		174.12	174.12			
Sampling and Analysis						
Payroll Taxes		40.52	40.52			
Liability Insurance		173.28	173.28			
Gas and Oil		396.06	396.06			
Telephone		2.20	2.20			
(8) Contingencies (specify):						
Accounting		141.67	141.67			
Miscellaneous		19.52	19.52			
TOTALS	1190.50	15405.01	16595.51	1185.50	15,405.01	16,590.51
				14	1,098.01	1,098.01
					14,307.00	15,492.50
					$ 889.13	

RECEIVED AUG 15 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 6-15-57 Payee Big Six Explorations, Inc.
Per [signature] Title Director

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(See instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
Signature [signature]
(Authorized Certifying Officer)
Date 8/12/57 Voucher DMA 58-14
(See other side)

Previous Disallowance
Note: Withhold 500.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdM-E 1019 in accordance with the terms of the contract.

Signature T M Remolo Title Mining Engineer Date 7-11-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. M. Hendrickson Title acting Executive Officer Date AUG 9 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May, 195 7 Docket No. DMEA 4249 Contract No. Idm 61019

Operator's Name Big Six Explorations, Inc.

Address Box No. 6, Young, Arizona

Minerals Uranium

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting				7750.00	250	31.00	550	31.00
Crosscutting								
Raising								
Shafts								
Winzes Timbering				10.00	4	4.50	70	4.50
Drilling: Core 50 ft	Ft	715.50	477	715.50	477	1.50	1000	1.50
Churn 50 ft	Ft	450.00	150	450.00	150	3.00	300	3.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				7622.01	3000	2.48		6524.00
Assays	Ea	25.00	5	40.00	8	5.00		5.00
Total Distributed Costs		1190.50		16595.51				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1190.50		16595.51				

Total Costs Authorized by Contract	
Road	6524.00
Drifting	17050.00
Timbering	315.00
Drilling	2400.00
Assaying	500.00
Total (rounded to)	26700.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 6-15-57 Operator Big Six Explorations, Inc.

Per [signature] Title Director

Remarks:

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

(Instructions on reverse)

(For Government use only)

RECEIVED AUG 15 1957 D.M.E.A.

[signature]

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

BIG SIX EXPLORATION INC.
LOG OF COMPLETED DRILLING

Model 620 Minerals Engineering (Babble) Counter Used Calabrated at .12 (0.4 U3O8) mg

Hole Number	Distance	Angle	Reading At 5' Intervals Or Fraction There Of As Shown																			
			5'	10'	15'	20'	25'	26'	27'	30'	35'	36'	40'	43'	44'	45'	50'	55'	60'	65'	70'	75
Hole #1 S 60 W	50'	45°	.04	.04	.02	.03	.04			.04	.02		.02			.03	.02					
Hole #2 S 19 W	50'	60°	.04	.04	.02	.03	.04			.03	.02		.02			.04	.04					
Hole #3 S 60 W	50	45°	.05	.07	.03	.05	.05			.03	.05		.05			.03	.05					
Hole #4 S 19 W	50'	60°	.10	.09	.07	.06	.11		.12	.08	.09		.05			.03	.06					
Hole #5 S 60 W	50'	45°	.07	.08	.05	.06	.04			.06	.06		.05			.06	.05					
Hole #6 S 19 W	50'	60°	.08	.09	.07	.07		.10	.20	.08	.06		.06			.06	.07					
Hole #7 S 60 W	50'	45°	.03	.05	.05	.02	.03			.05	.03		.03	.12	.25	.03	.03					
Hole #8 S 60 W	50'	45°	.05	.05	.06	.07	.06			.04	.02		.05	Hole caved at 41'								
Hole #9 S 19 W	50'	60°	.05	.05	.02	.04	.03			.04	.02		.03			.03	.03					
Hole #10 S 60 W	75'	45°	.06	.04	.03	.04	.04			.03	.02		.03			.03	.05	.04	.04	.05	.06	.03
Hole #11 S19 W	75'	60°	.06	.07	.06	.06	.04			.04	.04		.03			.05	.05	.04	.04	.05	.06	.03
Hole #12 S 19 W	36'	15°	.07	.06	.05	.04	.04			.05	.04	.04										

Samples of cuttings from drill holes saved at intervals of 5' show no value when checked with counter thus it seems unnecessary to have them assayed.

Highest readings obtained from probing the holes logged above would indicate only small local enriched areas.

DMEA
PARTMENT OF THE INTERIOR
AUG 7 - 1957
REGION III
DENVER, COLORADO

August 5, 1957

Memorandum

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

From: T. M. Romslo, Mining Engineer, Tucson, Arizona

Subject: Progress Report for May 1957, Docket DMEA 4249 (Uranium) Contract Ida-E1019, Big Six Explorations, Inc. (Sorrell Horse and Ollerton Claims), Gila County, Ariz.

Enclosed are the original and 4 copies of map and assay certificates that I returned to the Operator for corrections and revisions June 25, 1957. The data was corrected and returned to Tucson July 31, 1957.

The corrected map shows the locations and assays of 4 of the reported 5 samples and marks the locations of 3 previously approved samples. The assays of the 4 new samples are shown on the certified certificates. It follows that approved assaying costs at $5.00 per sample should be $20.00 instead of the reported $25.00.

Original signed by
T. M. Romslo

T. M. Romslo

CC W. H. King (8)
DMEA-4249
DF

T. M. Romslo:fr

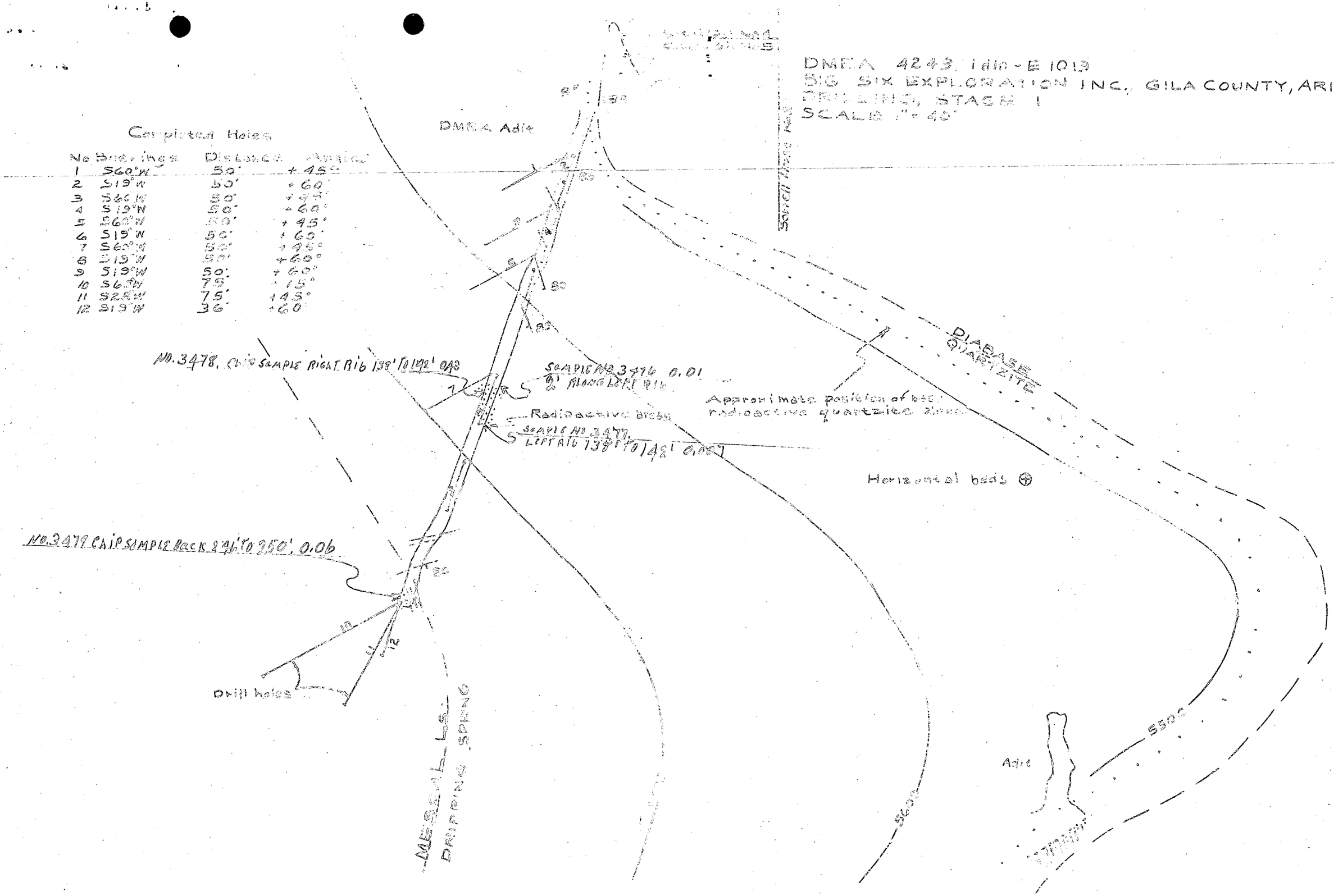
EXTRA COPY
DMEA
RECEIVED AUG 15 1957

DATE	INITIALS	CODE

DMEA 4249, Idn - E 1019
BIG SIX EXPLORATION INC., GILA COUNTY, ARIZ.
DRILLING, STAGE 1
SCALE 1" = 40'

Completed Holes

No	Bearings	Distance	Angle
1	S60°W	50'	+45°
2	S19°W	50'	+60°
3	S60°W	50'	+45°
4	S19°W	50'	+60°
5	S60°W	50'	+45°
6	S19°W	50'	+60°
7	S60°W	50'	+45°
8	S19°W	50'	+60°
9	S19°W	50'	+60°
10	S60°W	75'	+15°
11	S28°W	75'	+45°
12	S19°W	36'	+60°



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

May 29, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrel Horse and Citation claims), Gila County, Arizona

Enclosed are the original and two copies of Amendment No. 1 to Contract No. Idm-E1019, which has been executed to extend the date fixed for completion of the project work to November 30, 1957, and to increase the maximum period for payment of royalty and lien for payment thereof to eleven years from the date of the Contract.

Also enclosed are four copies each of the Operator's letters of May 10 and May 15, 1957, relative to the extension of the completion date.

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

E. N. Harshman

E. N. Harshman

Enclosures

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 31 1957

DATE	INITIALS	CODE
5/31	C	220
	es	130
6/18	FLR	700

BIG SIX EXPLORATIONS, INC.
220 N. JEFFERSON
ODESSA, TEXAS

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

May 15, 1957

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

RE: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
(Sorrell Horse and Citation Claims)
Gila County, Arizona

Dear Mr. Harshman:

In reference to my letter of May 10, 1957, I am sorry that I did not explain the situation more clearly.

In referring to the weather, I was speaking of the time between November 1956 and May 1957. During that period of time there were several times that our raod was washed out and we had to get a doger to repair it. Even the road that the State put on Sherry Creek was washed out at times.

Then there were several days lost because of the severe snow storms.

The only time we shut down was during the above mentioned weather or when there was equipment failure.

We are at the present working on the final part of stage one which is long hole drilling. We expect to finish this long hole drilling by the end of May.

In requesting an extension of the contract, I was anticipating the work on stage two in the event that we feel it advisable to continue on stage two and the government O. K.s stage two.

Very truly yours,

Roger F. Ashford

Roger F. Ashford, President
Big Six Explorations, Inc.

BIG SIX EXPLORATIONS, INC.
220 N. JEFFERSON
ODESSA, TEXAS

DMEA
DEPARTMENT OF THE INTERIOR
MAY 13 1957
REGION III
DENVER, COLORADO

May 10, 1957

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

RE: Docket DMEA-4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation Claims)
Gila County, Arizona

Gentlemen:

In reference to the above contract the Big Six Explorations, Inc. wish to request a six months extension.

The severe winter and spring rains made access to the project practically impossible, thereby hindering transportation of men and supplies.

Thanking you in advance for your consideration, I remain,

Yours very truly,

Roger F. Ashford

Roger F. Ashford, President
Big Six Explorations, Inc.

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 27 1957

DATE		CODE
5/27		220
5/27		800
7/11	Change	700

224 New Customhouse
Denver 2, Colorado

May 22, 1957

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
220 N. Jefferson
Odessa, Texas

Re: Docket DMEA-4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

Enclosed are the original and five copies of proposed Amendment No. 1 to the Contract Idm-E1019, which we have prepared in reference to your letters of May 10, 1957, and May 15, 1957, to extend the date fixed for completion of the project work to November 30, 1957. In addition, the Amendment increases the maximum period for payment of royalties and lien for payment thereof to eleven years from the date of the Contract.

If the Amendment is satisfactory, all copies are to be signed by you as indicated, the corporate seal affixed, and all copies promptly returned to this office. Upon return of the signed copies of the Amendment, and after signature by the Acting Executive Officer, DMEA Field Team, Region III, for the Government, an executed copy of the Amendment will be returned to you.

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

Yours very truly,

Original signed by
E. N. HARSHMAN

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

Enclosures

JDC:hh

OFFICIAL FILE COPY DMEA RECEIVED MAY 16 1957		
DATE	INITIALS	CODE
5/16	C	220
5/17	[illegible]	800
~~5/20~~	~~[illegible]~~	~~700~~

224 New Customhouse
Denver 2, Colorado

May 13, 1957

(VIA AIR MAIL)

Mr. Robert F. Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. DMEA 4289 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
(Sorrell Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

In your letter of May 10, 1957, requesting six months extension of the Contract, it is implied that operations under the Contract will be suspended for a period of time.

If that is the case, please advise by return mail the date the last work was performed under the Contract and the date on or before which operations will be resumed.

Very truly yours,

Original signed by
E. N. HARSHMAN

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

JWT:prl

cc: Chan. Op. Comm.-2
Harshman
Storms
Emerick
Townsend
Corres. file
Chron.

Official
EXTRA COPY
DMEA
RECEIVED MAY 16 1957

DATE	NAMES	CODE
5-16	Hanover	700
5-16	~~[illegible]~~ [illegible]	700

224 New Customhouse
Denver 2, Colorado

May 15, 1957

CERTIFIED MAIL

Mr. R. J. Allison, Director
Big Six Explorations, Inc.
Box 6
Young, Arizona

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
(Gerrell Horse and Citation claims)
Gila County, Arizona

Dear Mr. Allison:

Reference is made to project work approval issued by the DMEA Field Team, Region III, under date of April 29, 1957, pertaining to the drilling of twelve percussion drill holes under the provisions of Stage I of the Contract.

Regardless of the stated depths of holes Nos. 1 to 9, inclusive, and hole No. 12 on the map entitled, "DMEA 4249, Idm-E1019, Big Six Explorations, Inc., Gila County, Arizona, Proposed Drilling, Stage I," which is attached thereto and made a part of the work approval, holes Nos. 1 to 9, inclusive, and hole No. 12 shall not be drilled to a depth exceeding 49 feet, in order to conform with provisions in the Contract.

Nothing in this change of work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By E. N. Harshman
E. N. Harshman
Acting Executive Officer

JWT:prl
cc: Chmn. Op. Comm. -4
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
Storms

cc: Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
280 North Jefferson
Odessa, Texas
(via Certified Mail)

Emerick
Townsend
Corres. file
Chron.

1 copy to USGS
5/16/57

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 6 1957

DATE		CODE
5/6	C	220
5/6		800
5-7		700

224 New Customhouse
Denver 2, Colorado

May 2, 1957

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket DMEA-4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citation claims)
Gila County, Arizona

Dear Mr. Ashford:

The completion date for all of the work outlined in Contract Idm-E1019 is May 31, 1957. If you anticipate that for reasons beyond your control you will be unable to complete all of the contract work by May 31, 1957, you should immediately 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 will be required.

Yours very truly,

Original signed by
E. N. HARSHMAN

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

cc: Mr. R. J. Allison, Director
Big Six Explorations, Inc.
Box 6, Young, Arizona

Chmn. Op. Comm. (2)
Harshman
Storms
Townsend
Corres.File, Reg. III
Chron.

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

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957

DATE	INITIALS	CODE
5/1	C	220
5/1	Knowe	700

April 29, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

Enclosed are four copies of project work approval issued by the DMEA Field Team, Region III.

Also enclosed are two copies of the Operator's request and four copies of data from the field examiners pertaining to the matter.

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

E. N. Harshman

E. N. Harshman

Enclosures

1 set to USGS
5/7/57

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957
DATE | INITIALS | CODE

824 New Customhouse
Denver 2, Colorado

April 29, 1957

Mr. R. J. Allison, Director
Big Six Explorations, Inc.
Box No. 6
Young, Arizona

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-EL019
Big Six Explorations, Inc.
(Sorrell Horse and Cibetian claims)
Gila County, Arizona

Dear Mr. Allison:

In reference to your request of April 10, 1957, this constitutes the Government's approval for the drilling of twelve (12) percussion drill holes at the locations, direction, inclination, and depth as indicated on the map entitled, "DMEA 4249, Idm-EL019 Big Six Exploration Inc., Gila County, Arizona, Proposed Drilling, Stage I," which is attached hereto and made a part of this work approval.

Cutting samples are to be saved on 5-foot intervals and otherwise handled as provided for in the Contract.

Nothing in this work approval shall be construed to increase the estimated total cost of the project, the aggregate amount which the Government may be required to contribute, the fixed unit cost of any item of work, nor any item of allowable cost which is expressly designated "maximum."

Very truly yours,

DMEA Field Team, Region III

By E. N. Harshman

E. N. Harshman
Acting Executive Officer

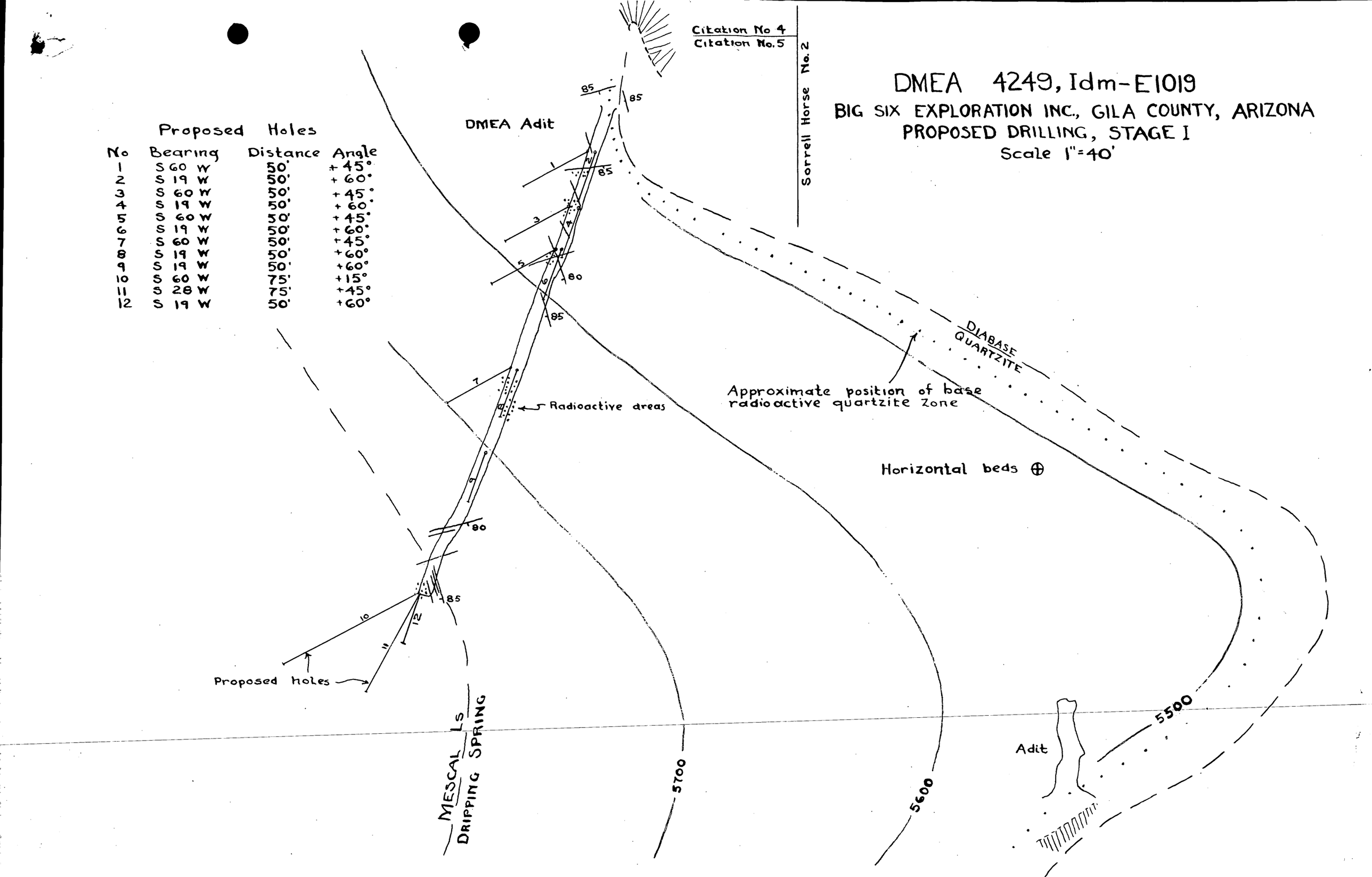
JWT:prl
cc: Chairman, Op. Comm. (4)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
Storms
Emerick
Townsend
Corres. file
Chron.

DMEA 4249, Idm-E1019

BIG SIX EXPLORATION INC., GILA COUNTY, ARIZONA

PROPOSED DRILLING, STAGE I

Scale 1"=40'



Proposed Holes

No	Bearing	Distance	Angle
1	S 60 W	50'	+45°
2	S 19 W	50'	+60°
3	S 60 W	50'	+45°
4	S 19 W	50'	+60°
5	S 60 W	50'	+45°
6	S 19 W	50'	+60°
7	S 60 W	50'	+45°
8	S 19 W	50'	+60°
9	S 19 W	50'	+60°
10	S 60 W	75'	+15°
11	S 28 W	75'	+45°
12	S 19 W	50'	+60°

DMEA
DEPARTMENT OF THE INTERIOR
APR 29 1957
REGION III
DENVER, COLORADO

MINERAL DEPOSITS
RECEIVED
APR 29 1957
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957

DATE	INITIALS	CODE
	EWH	

April 19, 1957

Memorandum

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

From: J. N. Faick
T. M. Romalo

Through: W. L. Emerick WLE
W. R. Storms WRS

Subject: Proposed long-hole drilling, Docket DMEA-[illegible]
(Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Arizona.

Please find enclosed the 24 copies of the requested map showing the approximate locations and designs of the proposed 12 long holes.

Regarding sampling, we recommend that the General Provisions of Exhibit "A" be applicable to:

1. Drill cuttings from 5-foot intervals,

2. Radiometric probing of holes at intervals of approximately 2.5 feet.

J. N. Faick
J. N. Faick, Geologist
U. S. Geological Survey

T M Romalo
T. M. Romalo, Mining Engineer
U. S. Bureau of Mines

JNF:TMR:ms

cc: Executive Officer (8)
Harshman
Storms
Emerick

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 1 1957
DATE | INITIALS | CODE

DMEA
DEPARTMENT OF THE INTERIOR
APR 17 1957
REGION III
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

April 15, 1957

Memorandum

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

From: J. N. Faick
T. M. Ramalo

Through: W. L. Emerick
W. K. Storms

Subject: Proposed long-hole drilling, Docket DMEA-4249 (Uranium)
Contract 14s-21619, Big Six Explorations, Inc.
(Sorrell Horse and Citation Claims), Gila County, Arizona

Reference is made to R. J. Allison's letter and map of April 10, 1957, to W. K. Storms. The letter contains a request for approval of allowable long-hole drilling following completion of authorized drifting of Stage I.

The proposed drilling is designed to test for radioactive zones above an intermittently mineralized 3 to 12 inch thick bed of quartzite at the back of the adit. This bed is at the base of a radioactive zone a few tens of feet thick, as indicated by scattered anomalous readings at the surface. The zone is horizontally bedded quartzite of the Dripping Spring Formation.

The proposed holes are to be drilled in and to the west of the vertical plane of the adit, and will explore a considerable part of the mineralized quartzite. Most of the radioactivity appears to extend above and into the west wall of the adit, in the direction of most of the proposed drilling. The proposed drilling is shown (incorrectly) on the applicant's map, and the geology is shown on the attached DMEA map.

The drilling which is to be done for 6 stations is as follows:

(1) At Stations 1, 2, 3, and 4:
a. One hole S 19° W, + 60°, 50 ft.
b. One hole S 60° W, + 45°, 50 ft.

(2) At Station 5:
One hole S 19° W, + 60°, 50 ft.

(3) At Station 6:
a. One hole S 19° W, + 60°, 50 ft.
b. One hole S 20° W, + 45°, 75 ft.
c. One hole S 60° W, + 15°, 75 ft.

Total requested footage is the allowable 690 feet in 10 holes with lengths of 50 ft. or less, and 150 feet in holes exceeding 50 ft. in length.

The proposed drilling, in our opinion, is feasible and should be done to test for radioactive zones above the adit and to determine if additional explorations are justified.

W. H. Romale, Mining Engineer
U. S. Bureau of Mines

J. H. Falck, Geologist
U. S. Geological Survey

THR:JHF:rmt
cc: Executive Officer (3)
Harstman (8)
Stamps
Remrick

ORIGINAL FILE COPY
DMEA
RECEIVED MAY 1 1957
DATE | INITIAL | CODE

Box No. 6,
Young, Arizona,
April 10, 1957.

Mr. W. R. Storms,
U. S. Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

Re: DMea - 4249m - Uranium
Contract No. Idm. E1019
Big Six Explorations, Inc.
Box No. 6, Young, Arizona.

Attention: Mr. Traver.

Dear Sir:

We are writing to make application for drilling on Stage I as per our contract. Having completed all the drifting in Stage I we are now ready to start drilling upon approval. We would also ask that this request be made retroactive as of April 16, 1957.

The program will be started by a series of short holes to be drilled by the owners. From these short holes we will get information that will prove valuable to us. We would like to set four (4) stations in drift for 1 - 50' hole up at 60° and 1 - 50' hole at a lesser angle into the right rib; one (1) station for 1 - 50' hole at 60°; and one (1) station at the face of drift where we would like to place 1 - 75' hole at right angle to the drift and to the west, and 1 - 75' hole in the general direction of the drift and up at 15°, and 1 - 50' hole at 60° S. 20° West. Additional holes and extensions to some 50' holes to help explore the most favorable horizon which extends from the top of drift to a thickness of 90' would also be made, with extension to at least two of the 50' holes at 60° to crosscut entire structure, these additional holes and extensions to be made at owners' expense.

Vertical holes could be drilled but would require a raise for each station. Therefore, it is less expensive to drill longer holes at about 60°.

The right rib of drift shows more and stronger mineralization. We feel that contract long holes should be used to explore the right rib and back of drift. Some exploration holes will be done by owners in left rib because we feel the contract does not allow enough drilling to explore all favorable places.

Maps showing stations and direction and angle of holes will accompany this application; Station No. 1 at 20' from portal; Station No. 2 at 45' from portal; Station No. 3 at 70' from portal; Station No. 4 at 130' from portal; Station No. 5 at 175' from portal; and Station No. 6 at 250' from portal.

Very truly yours,

BIG SIX EXPLORATIONS, INC.

R. J. Allison

R. J. Allison, Director.

RJa:wb
Encls.

224 New Customhouse
Denver 2, Colorado

May 28, 1957

Memorandum

To: Chairman, Operating Committee, DMEA

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

Subject: Docket DMEA-4249 (Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona

Enclosed are two copies of the Engineer's Report, Operator's Narrative report, and covering memorandum by the Superintendent, Southwest Experiment Station, covering progress under the subject contract during April, 1957. No vouchcrable progress was accomplished during the month, therefore no Forms MF-104 and MF-104A were submitted by the Operator.

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures

JDC:hmh
cc: Harshman)
Storms)w/copy above reports
MF-104 file, Region III) and memorandum
Townsend)
Chron.

6/5 Letter (Volume) 700

DMEA
DEPARTMENT OF THE INTERIOR
MAY 27 1957
REGION III
DENVER, COLORADO

May 24, 1957

Memorandum

To: E. N. Marshman, Acting Executive Officer, DMEA
Field Team, Region III

From: Superintendent, Southwest Experiment Station

Subject: April 1957 Progress Report, Docket DMEA-4249 (Uranium), Contract Idm-K1019, Big Six Explorations, Inc. (Serrell Morse & Citation Claims), Gila County, Ariz.

Enclosed in quintuplicate are the following:

1. Bureau of Mines engineer's report;

2. Operator's narrative report.

As no work was done during April under terms of the Contract, no Forms MF-104 nor MF-104A are enclosed.

Signed by Walter R. Storms

Walter R. Storms

CC Exec. Off (8)
DMEA-4249
RF

WRStorms:frj

May 23, 1957

Memorandum

To: Walter R. Storms, Superintendent, Southwest Experiment Station

From: T. M. Romale, Mining Engineer, Tucson, Ariz.

Subject: Progress Report for April 1957, Docket DMEA-4249 (Uranium) Contract Idm-21619, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

At Young, Ariz. on May 7, 1957, Mr. R. J. Allison told me that no voucherable progress was made in explorations of subject contract during April 1957. He said that the entire month was spent in obtaining, repairing and setting-up long hole drilling equipment. He also reported that hole 2 was started May 4 and completed May 6. This progress was checked when I visited the project after completion of an inspection of explorations at the nearby Black Brush claims.

Mr. Allison's letter to you of May 13, 1957 contains statements that confirm the above findings. It is considered as the Operator's Narrative Report for April 1957.

Original signed by
T. M. Romale

T. M. Romale, Mining Engineer
Southwest Experiment Station

DMEA
RECEIVED 1957
DATE | INITIALS | CODE

CC Exec. Off. (Orig. & 3)
DMEA-4249
RF

TMRomale:frj

Box No. 6,
Young, Arizona,
May 13, 1957.

Mr. W. R. Storms,
U. S. Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.,
Box No. 6, Young, Arizona.

Attention: Mr. Traver.

Dear Sir:

There was no work done on the Drilling, Stage I, of the above project during the month of April, 1957.

However, since receiving Government Approval from Mr. E. N. Harshman, Acting Executive Officer, DMEA Field Team, Region III, from 224 New Customhouse, Denver, Colorado, under date of April 29th, 1957, we have commenced drilling and will report this on our May report.

Very truly yours,

R. J. Allison

R. J. Allison.

RJa;wb

FINAL DISTRIBUTION

MADE APR 24 1957

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

Administrative Audit Difference Statement

[illegible] Exploration, Inc.
Box 6,
Tours, Arizona

Date: April 22, 1957
Payee's Reference: March 1957

DMEA-4249

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 2,770.00

Difference $

Amount Approved $ 2,770.00

The reason for the difference was due to:

Withheld: 500.00 pending performance of additional work under the Contract.

EXTRA COPY
DMEA
RECEIVED APR 29 1957

DATE	INITIALS	CODE
4/29	[illegible]	110
4-30	[illegible]	700

Any reclaim for deductions made above must be supported by the ORIGINAL of this form.

Very sincerely yours,

N. E. Stokes
Audit Section

R-III-B & F Form No. 4
4-15-52 D

224 New Customhouse
Denver 2, Colorado

April 18, 1957

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket-4249, (Uranium) Contract Ldm-E1019
Big Six Explorations, Inc. (Sorrel Horse and Citation claims) Gila County, Arizona - Operator's Monthly Progress Report for the month of March 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for March, 1957, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations, except for the following deductions:

Withhold an amount of $500.00 pending the performance of additional work under the contract. All authorized Stage I work has been completed except for the percussion drilling which has not yet been approved by the Government.

Remarks

Date of Report——————————April 4, 1957
Date Received in Field Office——————April 8, 1957
Date Received in Region Office——————April 17, 1957

Original signed by
E. N. HARSHMAN
E. N. Harshman

Enclosures
JDC:hh
cc: Chem. Op. Comm. (2)
Storms
Harshman) w/copy of Engr's
Townsend) report
MF-104 File, Reg.III
Chron.

April 15, 1957

Memorandum

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

From : Superintendent, Southwest Experiment Station

Subject : March 1957 Progress Report, Contract IAm-21619 (Uranium) Docket DMEA-4249, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A.

Also enclosed are 4 extra copies of our engineer's report.

As all work is in accordance with terms of the contract, I recommend that the Government's share of the costs be paid.

Signed by Walter R. Storms

Walter R. Storms

CC E. N. Harshman (8)
DMEA-4249
WF

DMEA
DEPARTMENT OF THE INTERIOR
APR 17 1957
REGION III
DENVER, COLORADO

WRStorms:frj

EXTRA COPY
DMEA
RECEIVED
DATE

April 15, 1957

Memorandum

To : Walter R. Stearns, Superintendent, Southwest Experiment Station

From : T. M. Romale, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for March 1957, Docket DMEA-4249 (Uranium), Contract Ldm-21619, Big Six Explorations, Inc. (Serrell Horse and Citation Claims), Gila County, Ariz.

On April 9, 1957, I visited the exploratory project of captioned contract and checked progress with R. J. Allison, Director of the Corp. and project supervisor, and Melvin Stechman, a practical mining engineer. Mr. Stechman does survey work and prepares reports for the corporation and other operators on part-time basis. Also present was J. H. Faick of the U. S. Geological Survey who completed mapping of the adit and obtained data relative to additional explorations.

I found that the adit had been advanced from 160 feet to completion at 250 feet from the portal. Significant uranium mineralization in the 90-feet section was noted only at 248 to 250 feet where it occurs in the upper 1 feet of the west half of the adit. A chip sample of the zone was obtained for analysis.

The sample obtained last month from the 4-inch thick zone at 137 to 142 feet was analysed by the Bureau. It assayed 0.34 percent U_3O_8, chemically.

The operator's plan of long hole drilling from the adit, discussed by all present, shortly will be submitted for approval.

ANALYSIS OF THE OPERATOR'S REPORT

The report was received at Tucson April 8, 1957. The map of the report was found inadequate and returned to the Operator the same day. It was revised and returned April 15, 1957.

CC K. N. Harshman (Orig. & 8)
DMEA-4249
DF

TMRomale:frj

Form MF- 104

Drifting - The $2,790.00 is for the 90 feet of authorized adit at $31.00 per foot. The 250 feet of allowable adit now has been completed to cross-sectional dimensions of not less than 5 by 7 feet.

Totals - The monthly total, $2,790.00, is correct. The other totals, $12,615.01 and $13,405.01, included disallowed road costs totalling $1,000.01.

Form MF-104 A

The form has been properly completed.

Narrative Report

The report with attached map is acceptable.

Original signed by
T. M. Romelo

T. M. Romelo
Mining Engineer
Southwest Experiment Station

Box No. 6,
Young, Arizona,
April 4, 1957.

Mr. W. R. Storms,
U. S. Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

Re: Mica - 4249 - Uranium
Contract No. Idn. E1019
Big Six Explorations, Inc.
Box 6, Young, Arizona.

Attention: Mr. Traver.

Dear Sir:

Pursuant to MCA 4249, Contract No. Idn. E1019, we herewith submit work report for March, 1957, complete with maps and Forms MF104 and MF104A.

The final 90 feet of Adit included in Stage I was completed this month, and we are now ready to start long hole drilling as per Stage I.

The maps will show all mineralized areas encountered in the entire 250' of drift. The extent of mineralization will be determined by drilling of long and some shorter holes.

Apparently the lack of sulfides in the drift between 160 feet and 230 feet back is due to recent fracturing. We believe that as we advance the drift we are entering a more favorable area. The last 20 feet show more sulfides and less oxidation; therefore, should be more suitable for Uranium mineralization.

The final four feet show mineralization on the right rib and extending into the face, which gives readings up to 1.3 M.R./H.R. Apparently water seepage has already started redepositing secondary mineralization on the right wall from ore above. All 250 feet of drifting has been done under the most favorable beds, with a maximum of 12 inches of favorable beds showing in the drift.

All known ore bodies in Dripping Springs Quartzite are on North, 20° East fracture patterns, and, in view of this fact, we have parallelled such structures. Also, due to the fact that we are immediately under favorable beds, we feel is the reason for lack of structure showing in drift.

We are now preparing drilling program as per Stage I, to be submitted for approval.

Very truly yours,

R. J. Allison

R. J. Allison.

RJA:mb
Encls.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1957 Docket No. DMEA 4249 Contract No. Ion 2019
Operator's Name Big Six Explorations, Inc.. Minerals Uranium
Address Box 6, Young, Arizona
Contract Amount, $20,703.00 Government Participation 75 % Amount, $20,091.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
~~Sinking~~ Assaying		13.00	13.00			
Crosscutting						
Drifting	2790.00	4960.00	7750.00			
Timbering		10.00	10.00			
(2) Labor and Supervision:						
Labor		1175.02	1175.02			
Supervision		650.00	650.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		169.50	169.50			
Pipe						
Track						
(4) Operating Equipment:						
Rental		4212.50	4212.50			
Purchase		153.14	153.14			
Depreciation		63.60	63.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		174.12	174.12			
Sampling and Analysis						
Payroll Taxes		40.52	40.52			
Liability Insurance		173.28	173.28			
Gas and Oil		396.06	396.06			
Telephone		2.20	2.20			
(8) Contingencies (specify):						
Accounting		141.67	141.67			
Miscellaneous		19.52	19.52			
TOTALS	2790.00	12615.01	15405.01	2,790.00	12,615.01	15,405.01
				—	1,098.01	1,098.01
					11,517.00	14,307.00
					$1592.50	

RECEIVED APR 29 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4-4-57 *Payee Big Six Explorations, Inc.
Per L. G. Ellison Title Director

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
Signature
(Authorized Certifying Officer)
Date 4/22/57 Vou. No. 2270a 57-114
(See other side)

Previous Disallowance
Note: Withhold $500.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Edm-E1019 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 4-10-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title acting Executive Officer Date APR 18 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March, 195 7 Docket No. DMEA 4249 Contract No. Ida 21019
Operator's Name Big Six Explorations, Inc.. Minerals Uranium
Address Box No. 6, Young, Arizona

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	Ft.	2790.00	90	7750.00	250	31.00	520	31.00
Crosscutting								
Raising								
Shafts								
Timbering	Ft.			18.00	4	4.50	70	4.50
Drilling: -50 ft.	Ft.						1000	1.50
-50 Ft.	Ft.						300	3800
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				7622.01	3000	2.45		6324.00
Assays	Ea			15.00	3			5.00
Total Distributed Costs		2790.00		15405.01				Total Costs Authorized by Contract
					Road			6324.00
Operating Equipment Purchased					Drifting			17050.00
Initial Rehabilitation and Repairs					Timbering			315.00
New Buildings, Improvements, etc.					Drilling			2400.00
					Assaying			500.00
Total Costs		2790.00		15405.01	Total (rounded to)			26700.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 4-4-57 Operator Big Six Explorations, Inc.

Per R. J. Allison Title Director

Remarks:

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

(Instructions on reverse)

(For Government use only)

RECEIVED APR 30 1957 D.M.E.A.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIAL	CODE
4/22	C	220
4/22		800
"	~~[illegible]~~	700

224 New Customhouse
Denver 2, Colorado

April 18, 1957

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket DMEA-4249 (Uranium)
Contract Ium-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citations claims)
Gila County, Arizona

Dear Mr. Ashford:

Form MT-104, Operator's Monthly Report and Voucher, for March 1957, has been received in this office and is being processed for payment.

An amount of $500.00 is withheld from reimbursement to you pending the performance of additional work under the contract. All authorized Stage I work has been completed except for the percussion drilling which has not yet been approved by the Government.

Yours very truly,

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

JDC:hh
cc: Chmn. Op. Comm. (2)
Harshman
Storms
Townsend
Corres. File, Reg. III
Chron.

cc: R. J. Allison
Big Six Explorations, Inc.
Box 6, Young, Arizona

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

March 19, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 21 1957

DATE	INITIALS	CODE
3/21	C	220
	22 Com	100

Memorandum

To: Chairman, Operating Committee

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

Subject: Docket-DMEA-4249 (Uranium) Contract Idm-E1019, Big Six Explorations, Inc., (Sorrell Horse and Citation claims) Gila County, Arizona - INTERIM REPORT.

Enclosed are four copies of an interim geologic report dated March 15, 1957, by J. N. Faick, Geologist, U. S. Geological Survey, covering operations under the subject contract through March 7, 1957.

E. N. Harshman

E. N. Harshman

Enclosures

MINERAL DEPOSITS
DMEA
RECEIVED
MAR 18 1957
U.S. GEOLOGICAL SURVEY
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 21 1957

DATE	INITIALS	

Box 4126 University Station
Tucson, Arizona

March 15, 1957

Memorandum

To: Executive Officer, DMEA Region III

From: J. N. Faick

Through W. L. Emerick WLE
E. N. Harshman ENH

Subject: Interim Examination, Docket DMEA 4249 (Uranium)
Big Six Exploration, Inc. Sorrell Horse and Citation Claims, Gila County, Arizona.

A brief inspection of the above subject property was made by the writer and T. M. Romslo on March 7, 1957, for the purpose of evaluating the DMEA exploration work thus far completed. The examiners were accompanied by "Dusty" Williams, who is contracting the driving of the adit for the operating company. The adit is on a bearing of S. 19 W. and had reached a depth of 167 feet by March 7.

Zones showing unusually high radioactivity were found in the back of the adit at distances from the portal of about 35, 50, 75, 140, and 150 feet. These radioactive zones seem to be confined to a single stratum of altered coarse-grained arkosic quartzite ranging in thickness from 3 to 12 inches. The bed is radioactive in several places where exposed in the drift, but gives the impression that the radioactivity is "spotty". The radioactivity does not seem to be related to jointing or fracturing of the quartzite. Radioactivity in the mineralized bed is several times background as measured by the geiger counter. From 137 to 142 feet from the portal a bed about 4 inches thick was sampled by the examiners but assays are not yet available.

The work completed is insufficient to permit evaluation of the project, but it appears to be somewhat more encouraging than the nearby Black Brush.

J. N. Faick

J. N. Faick

DMEA
DEPARTMENT OF THE INTERIOR
MAR 18 1957
REGION III
DENVER, COLORADO

JNF:ms

cc. Executive Officer (8)
Harshman
Storms
Emerick

EXTRA COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE
3/26/57		1/
"	Knoline	700

224 New Customhouse
Denver 2, Colorado

March 19, 1957

FINAL DISTRIBUTION
MADE MAR 21 1957

Memorandum

To: T. A. Christensen

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

Subject: DMEA Docket-4249, (Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona Operator's Monthly Progress Report for the month of February, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for February, 1957, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Remarks

Date of Report——————————March 13, 1957
Date Received in Field Office———March 14, 1957
Date Received in Region Office——March 18, 1957

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures
JDC:HH
cc: Chmn. Op. Comm. (2)
Storms
Harshman, w/copy of engr's report
MF-104 File E1019
Chron.

EXTRA COPY
DMEA
RECEIVED
DATE | INITIALS | CODE

March 14, 1957

Memorandum

To : E. N. Harabaugh, Acting Executive Officer, DMEA Field Team, Region III.

From : Superintendent, Southwest Experiment Station

Subject : February 1957 Progress Report, Contract Ibs-41019 (Uranium), Docket DMEA-4249, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A.

Also enclosed are 4 extra copies of our engineer's report.

As all work is in accordance with terms of the contract, I recommend that the Government's share of the costs be paid.

Signed by Walter R. Storms

Walter R. Storms

CC Exec. Off. (8)
DMEA-4249
DF

WRStorms:frj

DMEA
DEPARTMENT OF THE INTERIOR
MAR 18 1957
REGION III
DENVER, COLORADO

March 14, 1957

Memorandum

To : Walter E. Steams, Superintendent, Southwest Experiment Station, Region III

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for February 1957, Docket DMEA-4249 (Uranium), Contract Ida-41613, Big Six Exploration, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

I visited the exploratory project of subject contract and checked progress with "Dusty" Williams, March 7, 1957. Mr. Williams, who had been employed as a miner, reported that he now was driving the adit under a contract with the corporation. He also reported that Mr. Allison, project supervisor, had gone to Globe, Ariz. to attend a meeting of the Uranium Producers Association. Mr. Allison was expected to return to the project the following day.

J. H. Faick, geologist, U. S. Geological Survey, accompanied me to the property where he obtained data for an Interim Report.

Progress for February was confined to 60 feet of advance in the adit. The advance was from 100 feet to 160 feet from the portal of the adit.

Zones of abnormal radioactivity have been encountered in the adit at approximately 3, 50, 75 and 140 to 150 feet from the portal. They appear to be confined to a single 4 to 12 inch thick stratum of the nearly horizontally-bedded quartzite. A sample of 4-inch thick zone at 137 to 141 feet was obtained for analysis by the Bureau of Mines. The assay of the sample was not available at this writing.

CC Executive Officer (Orig. & 2)
DMEA-4249
RF

TMRomslo:fvj

ANALYSIS OF THE OPERATOR'S REPORT

Form MF-104

Drifting - The only cost incurred is the $1,060.00 for the 60 feet of authorized advance in the adit at $18.00 per foot.

Totals - The Monthly Total, $1,060.00, is correct. The other totals, $10, 745.[illegible] and $18,815.[illegible], include disallowed costs of road construction totalling $1,[illegible].[illegible]

Form MF-104A

The form has been properly completed.

Supervisor's Report

I have accepted the report with reluctance because the attached map is entirely too sketchy. Mr. Allison will be informed that his future reports will not be accepted unless they contain a map showing pertinent geological features and workings of the project area.

Original signed by
T. M. Romslo

T. M. Romslo
Mining Engineer
Southwest Experiment Station

EXTRA COPY
DMEA
SEPTEMBER 26 1957
CODE

Box 6,
Young, Arizona.
March 7, 1957.

Mr. W. R. Storms,
United States Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson 5, Arizona.

Re: DMEA - 4249 - Uranium
Contract No. Idm. 21019
Big Six Explorations, Inc.,
Box 6, Young, Arizona.

Attention: Mr. Traver.

Dear Sir:

Pursuant to DMea 4249, Contract No. Idm. 21019, we herewith submit narrative report for February, 1957, with maps and completed Forms RF104 and RF 104A.

An additional sixty (60) feet of adit was driven in February, showing increasing mineralization as the adit is advanced. The ribs and floor show only weak mineralization, increasing strongly in the back.

Small lines or kidneys of ore show in the back, beginning at 110 feet from the portal to 145 feet. At 145 feet from the portal ore, 18 inches wide, was exposed in the back of the adit and continues to the present face. This ore will be sampled and assay reports sent with next month's report. It is very possible that this is a N. 20° E. Fracture. Counter readings show ore 0.25 U_3O_8. Test holes will be drilled up in this ore and probed for more information.

Very truly yours,

R. J. Allison

R. J. Allison.

RJa:wb
Encls.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February 195 7 Docket No. DMEA 4249 Contract No. Ida 21019
Operator's Name Big Six Explorations, Inc. Minerals Uranium
Address Box No. 6, Young, Arizona
Contract Amount, $ 26,700.00 Government Participation: 75% Amount, $ 20,091.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
~~Bulldozing~~ Assaying		15.00	15.00			
Crosscutting						
Drifting	1060.00	3100.00	4960.00			
Timbering		18.00	18.00			
(2) Labor and Supervision:						
Labor		1175.82	1175.82			
Supervision		850.00	850.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		169.58	169.58			
Pipe						
Track						
(4) Operating Equipment:						
Rental		4212.50	4212.50			
Purchase		103.14	103.14			
Depreciation		83.60	83.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		174.12	174.12			
Sampling and Analysis						
Payroll Taxes		40.52	40.52			
Liability Insurance		173.28	173.28			
Gas and Oil		396.06	396.06			
Telephone		2.20	2.20			
(8) Contingencies (specify):						
Accounting		141.67	141.67			
Miscellaneous		19.52	19.52			
TOTALS	1060.00	10755.01	12615.01	1,860.00	10,755.01	12,615.01
					- 1,098.01	1,098.01
					9,657.00	11,517.00
					$1395.00	

RECEIVED MAR 25 1957 D.M.E.A.

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

Date 3-13-57 *Payee Big Six Explorations, Inc.

Per R. G. Ellison Title Director

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

Signature _____ (Authorized Certifying Officer)

Date 3/20/57 Vou. No. DMA 57-103

(See other side)

H Previous Disallowance

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Edm-E 1019 in accordance with the terms of the contract.

Signature D M Ramalo WRA Title Mining Engineer Date 3-14-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature E. M. Hardinson Title acting Executive Officer Date MAR 19 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED MAR 1957 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February, 195 7 Docket No. DMEA 4249 Contract No. 1dm 61019
Operator's Name Big Six Explorations, Inc. Minerals Uranium
Address Box No. 6, Young, Arizona.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	Ft.	1060.00	60	4960.00	160	31.00	550	31.00
Crosscutting								
Raising								
Shafts								
Timbering	Ft.			10.00	4	4.50	70	4.50
Drilling: Core -50 Ft.	Ft.						1000	1.50
Churn 150 Ft.	Ft.						300	3.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				7622.01	3000	2.40	1	6524.00
Assays	Ea.			15.00	3		100	5.00
Total Distributed Costs		1060.00		12615.01				Total Costs Authorized by Contract
Operating Equipment Purchased					Road			6524.00
Initial Rehabilitation and Repairs					Drifting			17030.00
New Buildings, Improvements, etc.					Timbering			315.00
					Drilling			2400.00
					Assaying			500.00
Total Costs		1060.00		12615.01	Total (rounded to)			26769.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 3-13-57 Operator Big Six Explorations, Inc.

Per R. J. Ellison Title Director.

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

(Instructions on reverse)

Remarks:

(For Government use only)

W. Romslo

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

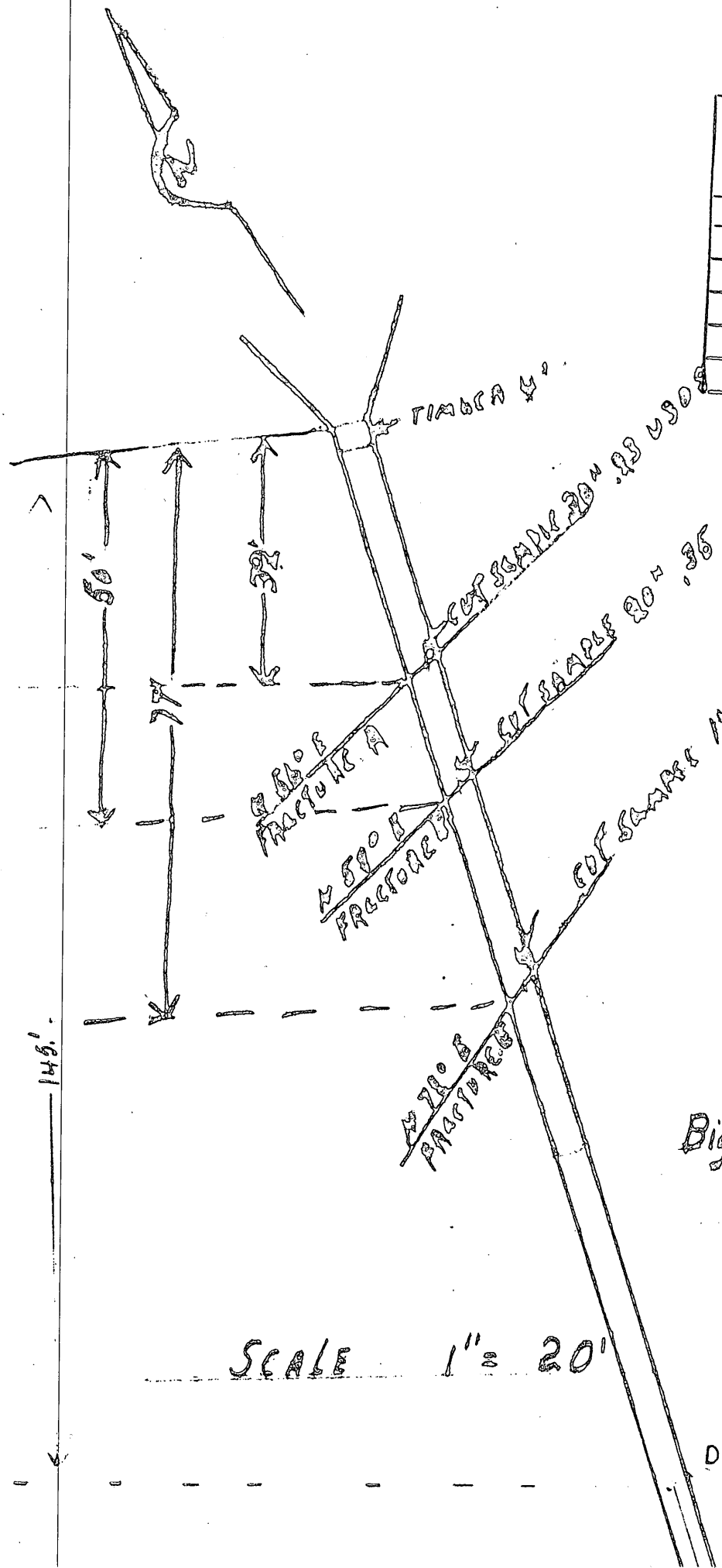
Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXTRA COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE



Big Six Explorations Inc
DMEA 4249

SCALE 1" = 20'

D FOR USE MINES
AMINES TO BE S.
SHOWS

224 New Customhouse
Denver 2, Colorado

February 7, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE
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2/13	[illegible]	800
		225

Mr. Roger Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket DMEA 4249 (Uranium)
Contract Idm-E1019
Big Six Explorations, Inc.
(Sorrel Horse and Citations claims)
Gila County, Arizona

Dear Mr. Ashford:

Form MF-104 Operator's Monthly Report and Voucher for November and December 1956 has been received in this office and is being processed for payment. The following deductions have been made:

1. Several items of cost were reported which are not applicable to the construction of the access road, and therefore these costs are disallowed.

2. In addition, the applicable costs incurred in connection with the access road are in excess of the maximum allowable cost established in the contract for this item of work. The excess costs are disallowed. You will be notified of the exact amounts disallowed by means of an Administrative Audit Difference Statement, which will be mailed to you by the Finance Office, Region III.

Yours very truly,

Original signed by
W. M. TRAVER

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

JDC:ytl
cc
Chmn. Op. Comm. (2)
Harshman (2)
Storms
Townsend
Corres. E-1019
Chron.
copy sent to: Big Six Explorations, Inc.
Box 6, Young, Arizona

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

February 4, 1957

Memorandum

To: The File

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Docket No. DMEA-4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

telephone Federal 2-5713

I talked with Mr. Ashford of Odessa, Texas, today. He wanted to know how he could speed up the processing of his voucher covering the work done for November and December so that he could get some money to carry on the work. I told him Mr. Traver was the man for him to contact, as he handles the administrative problems on this contract and payments are made from his office.

F. L. Knouse

F. L. Knouse

EXTRA COPY
D M E A
RECEIVED MAR 26 1957

DATE	INITIALS	CODE
3/26/57	[illegible]	110
"	[illegible]	700

224 New Customhouse
Denver 2, Colorado

FINAL DISTRIBUTION

MADE MAR 21 1957

Memorandum

To: ~~T. A. Christensen~~

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

Subject: DMEA Docket-4249, (Uranium) Contract Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona - Operator's Monthly Progress Report for the month of January, 1957

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

We consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended for 75 percent of the amount reported on Form MF-104 for January, 1957, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Remarks:

Date of Report——————————March 13, 1957
Date Received in Field Office——————March 14, 1957
Date Received in Region Office——————March 18, 1957

Original signed by
E. N. HARSHMAN
E. N. Harshman

Enclosures
JDC:hh
cc: Chmn. Op. Comm. (2)
Storms
Harshman) w/copy of engr's.
MF-104 report
File E1019
Chron.

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D.M.E.A.
RECEIVED MAR 25 1957
DATE | INITIALS | CODE

March 14, 1957

Memorandum

To : E. M. Harshman, Acting Executive Officer, DMEA Field Team Region III

From : Superintendent, Southeast Experiment Station

Subject : January 1957 Progress Report, Contract AT- K1619 (Uranium) Docket DMEA-4249, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

Enclosed in quintuplicate are the following:

(1) Bureau of Mines engineer's report;

(2) Operator's narrative report with map;

(3) Forms MF-104 and MF-104A, with certified assay certificate.

Also enclosed are 4 extra copies of our engineer's report.

As all work is in accordance with terms of the contract, I recommend that the Government's share of the costs be paid.

Signed by Walter R. Storms

Walter R. Storms

CC Exec. Off. (8)
DMEA-4249
WF

WRStorms:frj

DMEA
DEPARTMENT OF THE INTERIOR
MAR 18 1957
REGION III
DENVER, COLORADO

March 14, 1957

Memorandum

To : Walter R. Storms, Superintendent, Southwest Experiment Station, Region III

From : T. M. Ramale, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for January 1957, Project WSA-4249 (Uranium), Contract Ibn-21819, Big Six Explorations, Inc. (Sorrell Nerve and Citation Claims), Gila County, Ariz.

On February 13, 1957, I visited the Sorrell Nerve and Citations claims and checked progress under the captioned contract with R. J. Allison, a Director of the Corporation and project supervisor. Approximately 10 miles of roads near the claims were barely passable with the supervisor's 4-wheel drive pick-up. The roads had been made impassable by intermittent heavy rain and snowfalls that started early in January. Provisional repairs to the road were made with bulldozers furnished by the county highway department and mine operators.

I found work accomplished under the contract during January 1957 was confined to the adit where the face was advanced 60 feet, 4 lineal feet of timber was installed in a cut at the portal, and 3 samples were obtained and assayed. The 60 feet of advance was from 40 to 100 feet from the portal. Locations and extents of the 3 samples assayed are shown on the map of the Operator's Narrative Report. Since the samples were taken across fractured zones at the back of the adit only the width of the mineralized zone has been indicated. Initial testing of the zones will be done at the Operator's expense by drilling and probing a few short auger holes.

ANALYSIS OF THE OPERATOR'S REPORT

The Operator's report was received and checked at Tucson on February 19. On the same day the RF-184 forms were returned for corrections and additional data. On March 4, the forms were resubmitted, found unacceptable and returned to the operator. Acceptable forms were received March 14.

CC Exec. Off. (Orig. & 2)
WSA-4249
RF

TMRamale:frj

Form MW-104

Drifting - The $1,[illegible].00 is for the authorized 60 feet of advance at $[illegible].00 per ft. The cross-sectional dimension of the adit is nowhere less than the specified minimum of 5 by 7 feet.

Timbering - The $18.00 is for the 4 feet of authorized timbering at $4.50 per foot.

Assaying - The $15.00 is for the authorized assays of 3 channel samples at $5.00 per sample. The cost is supported by a certified assay certificate showing an actual cost of $[illegible].50 or $7.50 per sample.

Totals - The monthly total of $1,[illegible].50 is correct. The other totals, $[illegible] and $10,[illegible], include disallowed road costs totalling, $1,[illegible], costs reportedly incurred during November and December 1956.

Form MW-104A

The form has been properly completed.

Narrative Report

The report with attached sketch is considered acceptable. For future reports, the operator will be requested to replace the sketch with a map of the project area showing principal workings and both surface and underground mineralized zones.

Original signed by
T. M. Romslo

T. M. Romslo
Mining Engineer
Southwest Experiment Station

January 31, 1957

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DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE
DMEA		

Mr. W. R. Storms, Supt.
Southwest Experiment Station
United States Bureau of Mines
P. O. Box 4097
University Station
Tucson, Arizona:

Attention: Mr. W. M. Traver, Executive Officer,
Field Team, Reg. III

Re: Docket No. DMEA 1249 (Uranium)
Contract No. Idm. 1019
~~BIG~~ SIX EXPLORATION, INC
(Sorrell Horse & Citation
Claims)
Gila County, Arizona

Dear Sir:

Pursuant to Article 76 (3) I am herewith submitting a narrative report of the work performed during the reporting period ending January 31, 1957.

Sixty additional feet of adit was driven in January. Mineralization was found on three fractures at 32 feet, 50 feet and 77 feet from the portal which have been assayed by Arizona Testing Laboratories. A copy of the assay will be submitted with this report.

Work was hampered by the weather for approximately half the month. The A.E.C. road was washed out in spots and a dozer was required to clear before operations could be resumed.

The three above fractures were located at approximately where surface showings indicated. Fractures B and C show mineralization over an approximate width 20 to 30 inches. Fractures will be drilled in February to determine the extent of mineralization. Phyrite and Calco Phyrite are very consistent along fracture patterns at approximately 85 feet from portal and oxidized zone was encountered and continuous to 100 feet, which indicates we are about to pass through a strong north east fracture zone that shows some mineralization other than the above named fractures.

From indications of fractures, the main ore body lies west.

Operations were slowed down after 85 feet of drifting due to oxidation and over breaking. As a result of that we had to move about one and a half times as much muck as previously.

Respectfully submitted

R. J. Allison

g

R. J. Allison

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1957 Docket No. DMEA 4249 Contract No. Id 61019
Operator's Name Big Six Explorations, Inc. Minerals Uranium
Address Box No. 6, Young, Arizona
Contract Amount, $ 26,780.00 Government Participation: 75 % Amount, $ 20,091.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Assaying	15.00	none	15.00			
Bulldozing						
Crosscutting						
Drifting	1060.00	1240.00	3100.00			
Timbering	10.00	none	10.00			
(2) Labor and Supervision:						
Labor		1175.02	1175.02			
Supervision		650.00	650.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives		169.50	169.50			
Pipe						
Track						
(4) Operating Equipment:						
Rental		4212.50	4212.50			
Purchase		103.14	103.14			
Depreciation		63.60	63.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment		174.12	174.12			
Sampling and Analysis						
Payroll Taxes		40.52	40.52			
Liability Insurance		173.28	173.28			
Gas and Oil		396.06	396.06			
Telephone		2.20	2.20			
(8) Contingencies (specify):						
Accounting		141.67	141.67			
Miscellaneous		19.52	19.52			
TOTALS	1093.00	8862.01	10755.01	1,893.00	8862.01	10,755.01
				1,098.01	1,098.01	

RECEIVED MAR 25 1957 D.M.E.A.

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

Date 3-13-57 *Payee Big Six Explorations, Inc.

Per [signature] Title Director

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: 9,657.00
7,764.00
$1419.75

Signature [signature] (Authorized Certifying Officer)

Date 3/20/57 Vou. No. DMA 57-103

(See other side)

4 Previous Disallowance

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 1019 in accordance with the terms of the contract.

Signature D.M. Romalo Title Mining Engineer Date 3-14-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Signature E.M. Hershman Title acting Executive Officer Date MAR 19 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED MAR 25 1957 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of: January, 7

Docket No. DMEA: 4249

Contract No.: Idm 61019

Operator's Name: Big Six Exploration, Inc.

Address: Box No. 6, Young, Arizona

Minerals: Uranium

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
	Ft.	1860.00	60	3100.00	100	31.00	550	31.00
Drifting								
Crosscutting								
Raising								
Timbering	Ft.	18.00	4	18.00	4	4.50	70	4.50
Winzes -50 Ft.	Ft.						1000	1.50
Drilling: Core 150 Ft.	Ft.						300	3.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Assays				7622.01	3000	2.40	1	6524.00
Road Trails	Ea.	15.00	3	15.00	3		100	5.00
TOTAL DISTRIBUTED COSTS		1893.00		10755.01				

		TOTAL COSTS AUTHORIZED BY CONTRACT
	Road	6524.00
	Drifting	17050.00
	Timbering	315.00
	Drilling	2400.00
	Assaying	500.00
	Total (rounded to)	26780.00

Operating Equipment Purchased		
Initial Rehabilitation and Repairs		
New Buildings, Improvements, etc.		
TOTAL COSTS	1893.00	10755.01

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date: 3-13-57 Operator: Big Six Exploration, Inc.

Per: [signature] Title: Director

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

(Instructions on reverse)

REMARKS:

(For Government use only)

[signature]

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

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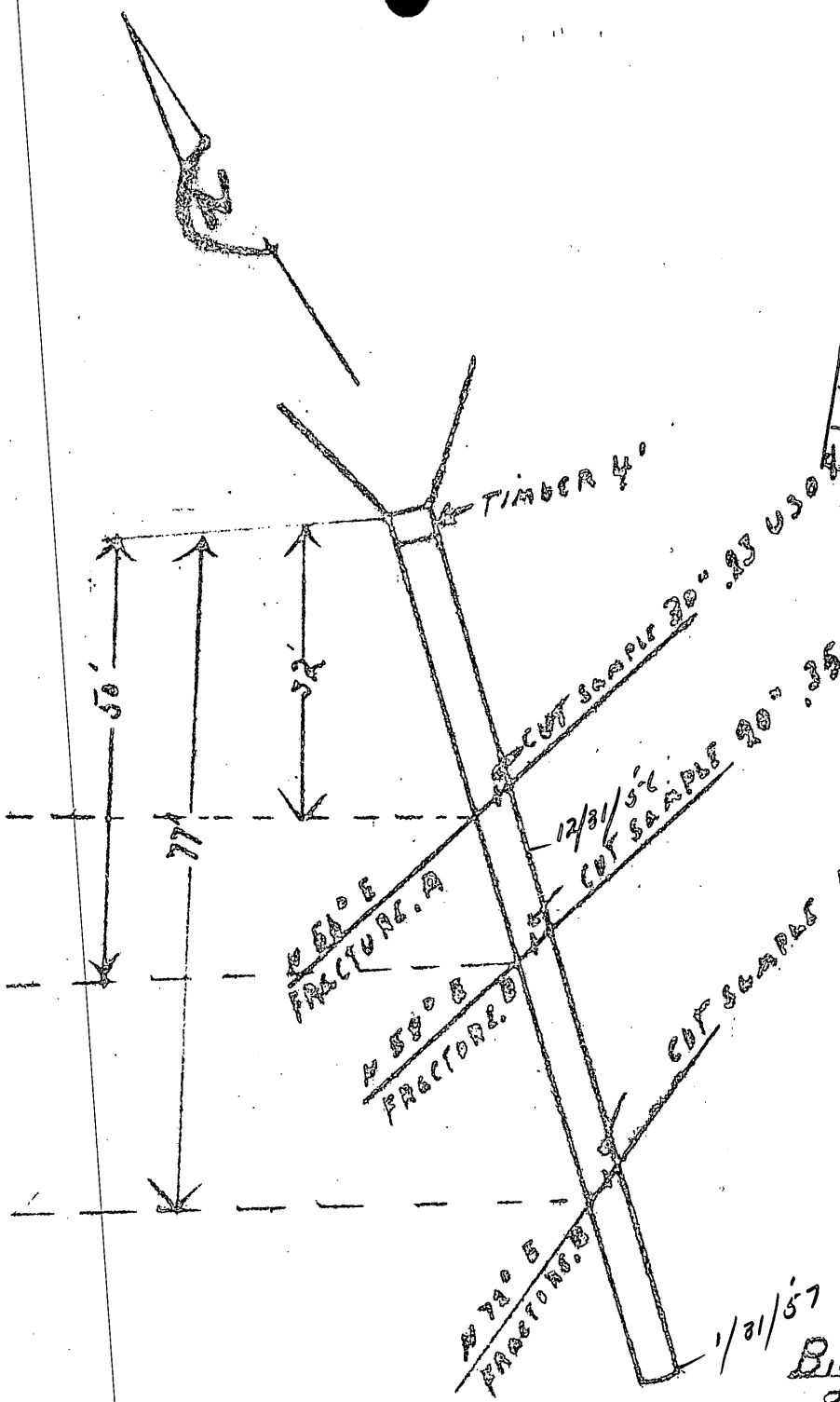
RECEIVED MAR 25 1957

DATE	INITIALS	CODE



Big Six Exploration's Inc
D.M.E.A. 4249

Scale - 1" = 20'

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

Administrative Audit Difference Statement

Big Six Explorations, Inc.
Box 6,
Young, Arizona

Date February 6, 1957
Payee's
Reference: Voucher 6,
December 1956

FINAL DISTRIBUTION
MADE FEB 7 1957

DMEA-4249

Gentlemen:

Upon examination of the above Payee's Reference a difference was found which made it necessary to suspend your account accordingly:

Amount Claimed $ 8,562.01

Difference $ 1,098.01

Amount Approved $ 7,764.00

The reason for the difference was due to:

Disallowances, Access Road

1. Supervision: time not spent on road work (151.23)
Operating Equipment purchased: Camp materials & supplies not used on road work. 69.04
Depreciation: Used 3 yr. straight line computation instead of allowable 5 yr straight line computation. 39.72
Repairs to Equipment: costs not documented (18.37)
repairs related to adit work. (12.00) 118.34
repairs prior to starting of road work (87.77)
Payroll taxes: in excess of 2% of accepted labor & supervision costs. 1.05
Liability Insurance: on truck (12.80) in excess of allowable 7.65% of acceptable labor and supervision costs (17.10) 29.90
Gas & Oil (groceries (64.61), tires & tubes for station wagon not assigned to road work (27.34). 111.95
Telephone: - - - - - - - - - - 2.20
Recounting - duplication of work. 66.67
Total costs not applicable to road work. 598.98

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RECEIVED FEB 11 1957

DATE	INITIALS	CODE
2/12	C	420
"	[illegible]	760
"	Kaczmarek	700

2. Total amount reported access road. 7,622.01
Costs not applicable. 613.90

Total costs applicable to access road. 7,008.11

Maximum allowable cost as established in the Contract, 3000 ft. @ 2.17/ft. 6,524.00

Excess costs to be disallowed. $ 484.11

Total Amount to be disallowed. $3,090.01

Very truly yours

W. E. Stokes
Audit Section

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

224 New Customhouse
Denver 2, Colorado

February 5, 1957

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Memorandum

To: T. A. Christensen

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 4249 (Uranium) Contract Idm-K1019
Big Six Explorations, Inc. (Sorrel Horse and Citations claims) Gila County, Arizona.
Operator's Monthly Progress Report for the period November and December 1956.

Enclosed are the original and four copies each of Forms MF-104 and MF-104A, Operator's Narrative Report, and Engineer's Report for the above period.

Except as otherwise indicated below, we consider that the Operator has complied with the intent of the contract, and the work for which payment is recommended is acceptable to the Government. Payment is recommended on the following basis, contingent on your verification of the correctness of applicable rates and arithmetical accuracy of computations.

Disallowances, Access Road:

1. Costs not applicable to construction of access road

Item (2) Supervision: time not spent on road work----------$153.23

Item (3) Operating Equipment purchased: camp materials and supplies not used on road work---------- 89.04

Depreciation: Operator used 3 year straight line computation instead of allowable 5 year straight line computation----------39.72

Item (7) Repairs to Equipment: costs not documented (18.37), repairs related to adit work (12.00), repairs prior to starting of road work (87.77)--------$118.14

Payroll taxes: in excess of 2% of accepted labor and supervision costs-------3.05

Liability Insurance: insurance on truck (12.80), in excess of allowable 7.65% of acceptable labor and supervision costs (17.10)----------29.90

Gas and Oil: Groceries (84.61), tires and tubes for station wagon not assigned to road work (27.34)----------111.95

Telephones----------2.20

Item (8) Accounting: duplication of work----------66.67

Total costs not applicable to road work--------$613.90

2. Costs in excess of maximum allowable unit and total costs as established in the contract

Total amount reported, access road----	$7622.01	
Costs not applicable----------	613.90	
Total costs applicable to access road----------	$7008.11	
Maximum allowalbe cost as established in the contract, 2800 feet at 2.33/ft.----------	6524.00	
Excess costs disallowed----------		$484.11
Total amount to be disallowed		$1098.01

Reconciliation with amount reported by the Operator on Form MF-104 for November and December, 1956

Amount Reported on Form MF-104 for November-December, 1956----------	$8862.01
Amount to be disallowed----------	1098.01
Total acceptable cost for Nov.-Dec. 1956----------	$ 7764.00
Government participation at 75 percent----------	$ 5823.00

REMARKS

Date of Report----------January 8, 1957
Date Received in Field Office----------January 11, 1957
Date Received in Region Office----------January 23, 1957

Original signed by
W. M. TRAVER

W. M. Traver

Enclosures

JBC:ytl

cc
Comm. Op. Comm. (2)
Storms
Karshman) w/copy of engr's. report
Townsend)
NF-104 File Idm-H1019
Chron.

DMEA
DEPARTMENT OF THE INTERIOR
JAN 25 1957
REGION III
DENVER, COLORADO

January 22, 1957

Memorandum

To : Walter R. Storms, Superintendent, Southwest Experiment Station.

From : T. M. Romalo, Mining Engineer, Tucson, Ariz.

Subject : Progress Report for November and December 1956, Docket DMEA-4249 (Uranium), Contract Idm-21019, Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Ariz.

A final check on progress under subject contract for November and December 1956 was made by me on January 8, 1957 in the presence of R. J. Allison, project supervisor. Information obtained during the period is contained in my Interim Reports of November 16 and December 13, 1956.

During the final inspection I found that 3,000 feet of access road and 40 feet of adit had been completed during the report period. Preparatory work and actual construction of the access road reportedly were started on November 1 and November 8, 1956, respectively. The road reportedly was completed on December 5, 1956. Upon completion of the road a 30-foot long trench was excavated from the end of the road to the site of the authorized adit. Cost of the trenching, an item not included in the contract, reportedly was absorbed by the operator. The adit, started shortly after completion of the trench, was driven a total of 55 feet of which 40 feet reportedly was completed on December 31, 1956.

Construction of the access road, as reported in the Operator's Narrative Report, was done on an actual cost basis. Equipment used consisted of a Model D-8 bulldozer, a 105 CFM compressor, and an International Pick-up. The road closely followed the prescribed route, but is 300 feet longer than the estimated and authorized 2,700 feet. The excess probably is due to errors in mapping. Drilling and blasting was required on about 950 lineal feet of solid rock and on boulders covering approximately 400 lineal feet of the road.

CC W. M. Trever (Orig. & 3)
DMEA-4249
DF

TMRomalo:fr;

The adit is being driven to a minimum cross section of 5 by 7 feet in lightly fractured quartzite that requires no timber support. At 32 feet from the portal a weak cross-fracture shows abnormal radioactivity. A chip sample was taken along the fracture by Mr. Allison for assay. Equipment in use includes the pick-up, a 210 CFM compressor, a slusher-loader (ramp-type) and jack-leg pneumatic drills.

ANALYSIS OF THE OPERATOR'S REPORT

The report was received at Tucson on January 11, 1957. Mr. Allison was notified in a letter of January 14, 1957 that transmittal of the report to Denver would be expedited if he would visit Tucson and work with us on necessary changes and additions to documented costs. Some of the changes were made during his visit on January 18 and the remainder were included in invoices that he corrected at Young, Ariz. and personally returned to Tucson on January 21.

Form AF-104

Drifting - The $1,240.00 is for the 40 feet of authorized drifting at $31.00 per foot.

The remaining costs are for construction of the road on an actual cost basis.

Labor - The $1,175.02 is for wages paid and documented by certified payrolls. Wages of G. E. Adams for work performed prior to actual construction of the road (Nov. 5, 6, and 7) reportedly were for assisting Mr. Allison in detailed flagging of the road. According to Mr. Allison, the hourly wage of $1.87½ for laborers and $2.25 for driller-blaster are the same as underground rates at the nearby Hope Uranium Mine. He said payment of these wages for surface work were necessary to obtain good and steady employees. He also said that considerable overtime work was done with the object of getting underground before the start of winter rain and snow storms.

Supervision - Mr. Allison reported his salary is $600.00 per month. On this basis the corrected cost for supervision is $600 for November plus 5/31 of $600.00 for December, or a total of $687.74.

Explosives - The $160.50 is an acceptable cost for powder, caps, and fuse. Cost of these items is supported by certified copies of individual invoices and a statement by the Valley store, Young, Ariz.

Operating Equipment -

Rental - The $4,212.50 is for the following items, each of which is supported by a certified invoice.

Item 1, Rental of a model D-8, Bulldozer from Wayne Hammon for 214 hours at $16.00 p er hour, a total of $3,424.00. The charge of $16.00 includes fuel and repairs and is in line with the prevailing contract rate of about $18.00 per hour that also includes the operator.

Item 2, Rental of a 105 CFM compressor from Frank Mathews for 1 month at $280.00. This rental rate prevails in the district.

Item 3, Labor of Wayne Hammond, the bulldozer operator and owner, for 214 hours at $3.75 per hour. The hourly rate of pay is in line with prevailing schedules. The total cost of this item, $508.50, should have been charged to Labor.

Purchases - The $183.14 is documented by 2 certified invoices, one of $94.10 for drill steels and miscellaneous tools and bits, and another of $89.04 for camp materials and supplies. The total amount should have been charged to Operating Materials and Supplies.

Regarding the materials of the $94.10 invoice, Mr. Allison said each of the 4 pieces of steel was broken and the bits were essentially unusable at completion of the road work. Salvage value of the steel, bits, and tools was estimated to be about $25.00. On this basis, the allowable cost of these items would be $94.10 minus $25.00 or $68.10.

No part of the $89.04 is allowable because although the camp was set-up it was neither necessary nor utilized during road construction.

Depreciation - The $83.60 is supported by a statement certified by Roger F. Ashford, president of the corporation. It is for 40 days depreciation of the identified pick-up truck on a 3-year straight line basis. The allowable cost, based on 100 percent depreciation in 3 years and actual use for 35 days (Nov. 1 to Dec. 5), is $2,508.12 / 3(365) X 35 or $243.88.

Miscellaneous

Repairs to equipment - The $174.12 is partially supported by 3 invoices totalling $155.75. Of the $155.75, only $55.90 is considered allowable as it represents the replacement cost of a windshield that reportedly was broken during construction of the road. The other costs are disallowed for reasons given below.

Invoice	Explanation
$12.00	Repairs were made for hauling equipment for driving adit.
77.61) 7.96) 2.00)	The repairs of these 3 costs evidently were needed prior to starting construction of the road.

Payroll Taxes - The certified taxes are 2 percent of $2,055.81, the reported cost of labor and supervision, of $40.32. On the basis of my accepted total cost of $1,373.96 for these items the approved taxes would be $27.47. This cost is for November. Costs for December were not reported.

Liability Insurance - The $173.28 includes $150.48 for Workmens Compensation Insurance for November and $12.00 for insurance on the pick-up. The $150.48, certified as a true and correct expense by Mr. Ashford, is supported by Payroll Report to The Industrial Commission of Arizona. Taxes on December wages were not reported. The approved cost based on my accepted labor and supervision cost would be 7.65 percent of $1,373.96 or $105.20. The $12.00 of the certified statement for insurance on the pick-up is not approved because the insurance is on equipment in which Government has no financial interest.

Gas and Oil - The $386.06, supported by certified invoices and statement of the Valley Store, includes $54.61 for groceries and $331.45 for gas, oil, and miscellaneous items. The $54.61 for groceries is not an acceptable cost. The $331.45 includes an unacceptable cost of $27.34 for tires and tubes used on a station wagon. According to Mr. Allison, the station wagon was used for a few days while the pick-up was being repaired and the cost of the tires was inadvertently included. The remaining costs, $304.11, are acceptable. They include $292.16 for gas and oil for the pick-up and compressor, and miscellaneous items costing a total of $11.95. The miscellaneous items should have been charged to Operating Materials and Supplies, and to Repairs to Equipment. They include: friction tape, $0.45; brake fluid, $13.5; Freezene, $6.00; tire boots, $3.85; and tire repairs, $1.20.

Telephone - The $2.30 of the uncertified telephone bill is not an acceptable cost.

Contingencies

Accounting - The $141.67 is supported by 2 certified statements, $66.67 and $75.00 for accountants of Globe, Ariz. and Odessa, Tex., respectively. An acceptable cost is $75.00 for the accountant at the applicant's home office. Services of a second accountant are not considered necessary.

Miscellaneous - The $19.52 includes $17.50 for gas and oil, and $2.02 for repairs, both for the pick-up. It represents acceptable costs that should have been charged to the categories identified by the invoices.

Totals The $8,062.01 includes $1,240.00 for the 40 feet authorized drifting at $31.00 per feet and $7,522.01 for construction of 3,000 feet of road on an actual cost basis.

Reported and by acceptable costs of road construction are shown in the following table. Changes in the distribution of costs which have been mentioned above have not been included in the table.

Cost of Road

Labor and Supervision	Operator's Report	Miscellaneous	Acceptable Costs
Labor	$1,175.82	—	1,175.82
Supervision	850.00	152.26	697.74
Operating Mat'ls & Supplies			
Explosives	169.58	—	169.58
Operating Equipment			
Rental	4,212.50	—	4,212.50
Purchase	183.14	114.04	69.10
Depreciation	83.68	38.72	43.96
Miscellaneous			
Repairs to equip.	174.12	118.14	55.98
Payroll taxes	40.52	3.05	37.47
Liability Ins.	173.36	30.00	143.36
Gas & Oil	384.04	111.96	284.12
Telephone	8.38	2.20	6.18
Contingencies			
Accounting	141.67	66.67	75.00
Miscellaneous	19.52	—	19.52
Totals	$7,622.01	637.93	$6,984.08

Accepted costs per foot are $6,984.08 / 3,000 or $2.33

The approved total cost of the road is 3,000 feet at $2.33 per foot or $6,324.00, the maximum allowed by the contract.

Form 1K-104A

The form has been properly completed.

Narrative Report

The report with attached map is acceptable. It is signed and reportedly was prepared by William S. Bradbury, mining engineer, Globe Engineering & Development Company. This company, according to Mr. Allison, is consultant for the applicant. Exception is taken to Bradbury's statement that the decision of construction of the road by the applicant was decided by the writer and Messrs. Purdue and Allison. This statement was called to Mr. Allison's attention when he visited Tucson on January 21, 1957. He said Mr. Bradbury was furnished information for the report and evidently assumed that I had been consulted.

A large scale map of the underground exploratory area is being prepared for future reports.

Original signed by
T. M. Romslo

T. M. Romslo
Mining Engineer
Southwest Experiment Station

December 31, 1956.

Mr. W. R. Storms, Supt.,
Southwest Experiment Station,
United States Bureau of Mines,
P. O. Box No. 4097,
University Station,
Tucson, Arizona.

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

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm. E 1019
BIG SIX EXPLORATIONS, INC.
(Sorrell Horse & Citation Claims)
Gila County, Arizona.

Dear Sir:

Pursuant to Article 7b (3), I am herewith submitting a narrative report of the work performed during the reporting period ending December 31st, 1956.

Three thousand (3000) feet of access mine road has been constructed. Before construction of this road bids were requested from licensed contracting firms. Two bids were submitted. Bid No. I, by Johnson Brothers of Phoenix, Arizona, was Ten Thousand ($10,000.00) Dollars for twenty-eight hundred (2800) feet of road. Bid No. II, by Hagen Construction Company of Globe, Arizona, stated that the only way they would consider doing the job was on a cost-plus basis. After due consideration of these bids by Mr. Romslo, Mr. Pardee and Mr. Allison it was decided that by renting a dozer and operator on an hourly basis, under company supervision, the road could be constructed for less money. Three thousand (3000) feet was constructed for considerably less than the above stated bids

on twenty-eight hundred (2800) feet.

Approximately 250' of road required drilling and blasting of diabase boulders, which were too large for dozer to move. 150' feet of road required drilling and blasting of quartzite float and diabase. 100' of road, at switchback, was in a basaltic flow and required drilling and blasting. The last 850' of road was in solid rock and required drilling and blasting. The grade of the road carried it through the diabase to the diabase-quartzite contact, thence on into the quartzite entirely.

At proposed adit, marked (A) on enclosed plan, it was necessary to make a fifteen (15) foot open cut in order to ensure a safe portal. Forty (40) feet of 5 X 7 drift has been driven from this portal to date. This drift has a bearing of S 19° W.

At a distance of 32' from the portal the first mineralization was encountered in a small cross fracture. This fracture gave a reading of .60 on the second range of a Geiger Counter. Chip samples were taken and are being sent for assay.

Respectfully submitted,

GLOBE ENGINEERING & DEVELOPMENT COMPANY,

William S. Bradbury

William S. Bradbury.

WSB;me
Encls.

COPY

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Nov. and Dec. 1956 Docket No. DMEA 4249 Contract No. Idm.-3 1019
Operator's Name Big Six Explorations, Inc. Minerals Uranium
Address 220 N. Jefferson, Odessa, Texas
Contract Amount, $ 26 788.00 Government Participation: 75 % Amount, $ 20 091.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting	1 240.00	None	1 240.00			
Drifting						
(2) Labor and Supervision:						
Labor	1 175.82	None	1 175.82			
Supervision	850.00	None	850.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	169.58	None	169.58			
Pipe						
Track						
(4) Operating Equipment:						
Rental	4 212.50	None	4 212.50			
Purchase	183.14	None	183.14			
Depreciation	83.60	None	83.60			
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	174.12	None	174.12			
Sampling and Analysis						
Payroll Taxes	40.52	None	40.52			
Liability Insurance	173.28	None	173.28			
Gas and Oil	396.06	None	396.06			
Telephone	2.20	None	2.20			
(8) Contingencies (specify):						
Accounting	141.67	None	141.67			
Miscellaneous	19.52	None	19.52			
TOTALS	8 882.01	None	8 882.01	7764.00	—	7764.00

RECEIVED FEB 11 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 1-8-57 *Payee Big Six Explorations, Inc.
Per Roger F. Hopper Title President

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 5823.00
Signature
(Authorized Certifying Officer)
Date 3/6/57 Vou. No. DMA 57-85

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E1019 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date 1-22-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer Date FEB 5 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED JAN 11 1957 D.M.E.A.

Month of Nov. & Dec. 1956 Docket No. DMEA 4249 Contract No. TEX.- E 1019
Operator's Name Dig Six Explorations, Inc. Minerals Uranium
Address 220 N. Jefferson, Odessa, Texas

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	Ft.	1 240.00	40	1 240.00	40	31.00	250	31.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	Ft.	7 430.67	3000	7 430.67	3000	2.48	2000	2.33
Total Distributed Costs		8 670.67	40	8 670.67				Total Costs Authorized by Contract
Operating Equipment Purchased		109.14		109.14	Stage 1-Indep. Contract			6 524.00
Initial Rehabilitation and Repairs					Stage 1-Fixed Unit Cost			9 357.00
New Buildings, Improvements, etc.					Stage 2-Fixed Unit Cost			10 907.00
Total Costs		8 662.01	40	8 662.01				26 788.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 1-8-57 Operator Dig Six Explorations, Inc.

Per Roger F. Hanfman Title President

Remarks:

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

(Instructions on reverse)

(For Government use only)

M Romolo

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

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

RECEIVED
DEC 21 1956
D.M.E.A.

224 New Customhouse
Denver 2, Colorado

December 18, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket No. 4249, (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc., (Sorrell Horse and Citation claims), Gila County, Arizona - Interim Report

Enclosed are four copies of an interim report by T. M. Romslo and transmittal memo by Walter R. Storms covering progress under the subject contract through December 4, 1956.

W. M. Traver

W. M. Traver

Enclosures

December 13, 1956

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team

From : Superintendent, Southwest Experiment Station

Subject : Interim Report, Docket DMEA-4249 (Uranium), Contract Ldm-X1019, Big Six Exploration, Inc. (Sorrell Morse and Citation Claims), Gila County, Ariz.

Enclosed are original and 8 copies of an interim report on the above property by T. M. Romale.

Signed by Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
DMEA-4249
WF

WRStorms:frj

DMEA
DEPARTMENT OF THE INTERIOR
DEC 17 1956
REGION III
DENVER, COLORADO

RECEIVED
DEC 17 1956
GENERAL

December 13, 1956

Memorandum

To : Walter R. Storms, Superintendent, Southwest Experiment Station

From : T. M. Romslo, Mining Engineer, Tucson, Ariz.

Subject : Interim Report, Docket DMEA-4249 (Uranium), Contract Idm-21619, Big Six Exploration, Inc., (Sorrell Horse and Citation Claims), Gila County, Ariz.

On December 4, 1956, I visited the property of subject contract and checked progress with R. J. Allison, project supervisor.

I found that work to date was confined to construction of the road. The road probably will be completed within 4 or 5 days. Its length as measured with a steel tape will be 3,000 feet, 200 feet more than allowed.

According to Mr. Allison all work is being done on an actual cost basis. This includes the bulldozer work which I previously reported as being done under an independent contract. During our discussions regarding preparation of the operator's initial report for November and December, I learned that rental of the bulldozer on an hourly rate included fuel and repairs. I told Mr. Allison that I would request the Field Team's opinion as to the acceptability of a rental cost on this basis. He decided to phone Denver for the opinion in order to expedite assembly and transmittal to the corporation's office of all road cost invoices.

Detailed information about the road will be given in my Progress Report covering the initial Operator's Report.

Original signed by
T. M. Romslo
T. M. ROMSLO

CC W. M. Traver (Orig. & 8)
DMEA-4249
BF

TMRomslo:frj

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

RECEIVED
OCT 26 1956

224 New Customhouse
Denver 2, Colorado

October 24, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4249 (Uranium), Contract No. Idm-E1019, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

Enclosed are the Government's, Division, and Docket copies of Exploration Project Contract No. Idm-E1019, which was forwarded by your letter of October 16, 1956, for signature by the Applicant.

As instructed in your letter of October 16, 1956, we are enclosing two photostats of Assignment of lease which was rendered by the Applicant.

Also enclosed are four copies of a letter from this office, dated October 24, 1956, whereby we forwarded the Operator's copy of the contract, forms, and instructions relative to reporting on work performed under the contract.

The Operator has requested that all correspondence be directed to the home office, at 220 North Jefferson, Odessa, Texas, and we presume that reimbursement in the future for work performed will be forwarded to that address instead of the address in the heading of the contract.

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

W. M. Traver

W. M. Traver

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

RECEIVED
OCT 26 1956

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

October 24, 1956

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. DMEA 4249 (Uranium)
Contract No. Idm-E1019
Big Six Explorations, Inc.
(Serrell Horse and Citations claims)
Gila County, Arizona

Dear Mr. Ashford:

Enclosed herewith is the "Operator's Copy" of Exploration Project Contract No. Idm-E1019, Docket No. DMEA 4249.

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 Mr. W. H. Storms, U. S. Bureau of Mines, P. O. Box 4097, University Station, Tucson 5, Arizona. 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 to you 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 and approve your accounts, after which they will be sent to the Regional Office, Region III, U. S. Bureau of Mines, 224 New Customhouse, Denver 2, Colorado, 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 Mr. Storms or this office for assistance.

The contract is prepared on form MF-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 MF-104 for such work must be supported each month by a signed copy of the billing from the subcontractor; or, submit for our records a certified copy of the subcontract agreement. Amounts reported on the basis of "Fixed Unit Costs" require no documentation, as they are otherwise verified.

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, and such requests are <u>not</u> to be incorporated in your narrative report accompanying monthly progress report forms MF-104 and MF-104A.

The location of the work to be performed under Stage I is indicated on the map, "Figure 4," attached to the contract. Should conditions encountered necessitate any appreciable change in the location or direction of any of the work, approval of this office for the change must be obtained prior to performance of the work. Otherwise, the work may not be acceptable for reimbursement to you under the terms of the contract.

Your attention is directed to the provision that Stage II work is contingent on the results obtained from Stage I, and performance of the work under Stage II is subject to the prior written approval of the Government.

When work under Stage I has been completed, you must request approval from this office for the work you propose to perform under the next stage. Your request for the work approval must be in sextuplicate, each copy complete with a map showing the location and extent of the work completed and the location of the additional work proposed. Also, your request must include an evaluation of the work completed and include assay returns and any other pertinent data which will be of value to the Government in appraising the results of the work.

You should anticipate a suspension of operation between stages of work, to enable the Government geologist and engineer to evaluate the results of the work performed and make their recommendations to this office relative to the additional work you propose.

To eliminate as much delay to operations as possible, if that is of serious consideration, you should expedite forwarding of the results of the work completed and your request for the Government's approval of the additional work you propose.

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 Mr. Storms.

Very truly yours,

Original signed by
W. M. TRAVER

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

Enclosures

JWT:prl

cc: Chairman, Oper. Comm. (5)
Finance Office, Reg. III
Amendment file, Reg. III
Harshman
Storms
Emerick
Townsend
Corres. file
Chron.

10-23-56

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

RECEIVED
OCT 22 1956

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

October 18, 1956

Mr. Roger F. Ashford, President
Big Six Explorations, Inc.
220 North Jefferson
Odessa, Texas

Re: Docket No. DMEA 4249 (Uranium)
Big Six Explorations, Inc.
(Sorrell Horse and Citation Claims)
Gila County, Arizona -
Proposed Exploration Project
Contract No. Idm-E1019

Dear Mr. Ashford:

Enclosed are the Government's, Division, Docket, Finance Office, and Field Team copies of proposed Exploration Project Contract No. Idm-E1019, which has been prepared pursuant to your 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 Big Six Explorations, Inc. authorized to sign such instruments, 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.

Upon return of the properly executed copies of the contract, the "Operator's Copy" will be forwarded to you, together with forms and instructions relative to reporting on the work performed under the contract.

When the executed copies of the contract are returned, please advise the date on or before which work will be commenced, for our insertion under Article 3 of the contract form.

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

1. The contract requires completion of the exploration work by the date or within the period fixed

therefor. Approval must be obtained for any appreciable work stoppage which may result in failure to complete the work by the date or within the time fixed.

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

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

Very truly yours,

J. W. Townsend

J. W. Townsend
Acting Executive Officer
DMEA Field Team, Region III

Enclosures

JWT:prl

cc: Chairman, Oper. Comm. (2)
Harshman
Storms
Emerick
Townsend
Corres. file
Chron.

9/11/56

Mr. Kazan

When contract approved give Mr. Rozen copy, 2 to Jefferson, Odessa, two Chas W to bring matrix to Dist. term. JEP.

Surname copy F.K. Knouse

Department of the Interior

UNITED STATES
DEPARTMENT OF THE INTERIOR

DMEA

DEFENSE MINERALS EXPLORATION ADMINISTRATION

WASHINGTON 25, D.C.

14X1.4C1(C1) Revolving Fund, Defense Production Act, Interior (Allocated Working Fund to the Office of the Secy.)

ROGER ASHFORD
220 NORTH JEFFERSON
ODESSA, TEXAS

OCT 16 1956

Ellis
Kilgaard
Lloyd
Selfridge

RE OUR TELEPHONE CONVERSATION, DOCKET DMEA-429, BIG SIX EXPLORATIONS, INC., CONTRACT MAILED TODAY TO W. M. TRAVER, EXECUTIVE OFFICER, DMEA FIELD TEAM, REGION III, 2nd NEW CUSTOMHOUSE BUILDING, DENVER 2, COLORADO, FOR OPERATOR'S SIGNATURE.

C. O. Mittendorf

C. O. MITTENDORF, ADMINISTRATOR

FIKnouse/gla
10-1-56
cc to: Admr.'s Reading File
Docket
Code 700
Mr. Knouse
DMEA Field Team, Region III (2)

R.C.S.

Surname copy

700

Illmonce
Chambers
Selfridge
Mathews

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

OCT 16 1956

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

Re: Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Dear Mr. Traver:

Enclosed are the original and five copies of a long-form contract between the Government and the subject Applicant, signed by the Administrator. The contract consists of Form MF-200; Annex I, one page; Exhibit "A," four pages; one Consent to Lien and Subordination Agreement; and two maps (Fig. 2 and Fig. 4). Also enclosed are two extra copies of Annex I, Exhibit "A," and two maps (Fig. 2 and Fig. 4) for the use of the Field Team. In addition, there are enclosed two copies of a memorandum, dated September 28, 1956, from the Associate Solicitor, Division of Mineral Resources, relating to the project contract.

If you and the Applicant find the contract satisfactory, it is ready for the signature of the Applicant providing the following requirements are met:

1. Insertion of a suitable starting date under Article 3; and

2. Receipt by you of a satisfactory assignment of the interest in the land from the Big Six Exploration Company to the Applicant as set forth in the memorandum, referred to above, from the Associate Solicitor.

   In this connection, on September 28, 1956, Mr. Roger Ashford, in a telephone conversation, advised the Administrator that he would forward said assignment to you and, also, that none of the officials of the Big Six Exploration Company retained an interest in the subject property.

After the contract is signed, please make the usual distribution of the document.

R.C.S.

In the event that any part of this proposed contract does not meet with your approval or the Applicant's and cannot be amended within your delegated authority, the original and all copies are to be returned with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2/B)

Enclosures

APPROVED:

Frank D. Lamb (2/B)
Member, Bureau of Mines

Thor H. Kiilsgaard (2/B)
Member, Geological Survey

FIKnouse/gla
9-28-56

cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA
Code 700
Mr. Knouse

rname copy

F. P. Kuomer
Elli Chamberlin

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

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

Re: Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Dear Mr. Traver:

Enclosed are the original and five copies of a short-form contract between the Government and the subject Applicant, signed by the Administrator. The contract consists of Form MF-200A; Annex I, one page; Exhibit "A," three pages; one Consent to Lien and Subordination Agreement; and two maps (Fig. 2 and Fig. 4). Also enclosed are two extra copies of Annex I, Exhibit "A," and two maps (Fig. 2 and Fig. 4) for the use of the Field Team. In addition, there are enclosed two copies of a memorandum, dated September 28, 1956, from the Associate Solicitor, Division of Mineral Resources, relating to the project contract.

If you and the Applicant find the contract satisfactory, it is ready for the signature of the Applicant providing the following requirements are met:

1. Insertion of a suitable starting date under Article 1; and

2. Receipt by you of a satisfactory assignment of the interest in the land from the Big Six Exploration Company to the Applicant as set forth in the memorandum, referred to above, from the Associate Solicitor.

   In this connection, on September 28, 1956, Mr. Roger Ashford, in a telephone conversation, advised the Administrator that he would forward said assignment to you and, also, that none of the officials of the Big Six Exploration Company retained an interest in the subject property.

After the contract is signed, please make the usual distribution of the document.

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

SEP 28 1956

Memorandum

To: The Administrator, DMEA
Attention: Chief, Rare and Miscellaneous Metals Division

From: Associate Solicitor, Division of Mineral Resources

Subject: Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

As requested in Mr. Ellis' memorandum dated September 12, 1956, we have prepared the attached Contract.

It should be noted that the applicant is a corporation, but the lease submitted with the application is executed with the partnership "Big Six Exploration Co." Accordingly, before the Contract is executed by the Government, evidence of assignment of said lease by the partnership to the corporation applicant should be submitted. In addition, if the assignment reserves any rights in the lease to the partnership or to any individuals therein, a Consent to Lien is required for each interest reserved.

Robert P. Dwyer

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

RECEIVED
SEP 27 1956

AIRMAIL

224 New Customhouse
Denver 2, Colorado

September 25, 1956

Mr. Donald T. Delicate
LaSal Mining and Development Company
P. O. Box 563
Moab, Utah

Re: Docket DMEA-4249 (Uranium) Proposed Contract I6m-E1010, LaSal Mining and Development Company, (LaSal Project), San Juan County, Utah

Dear Mr. Delicate:

On September 14, 1956 in reference to the captioned Proposed Exploration Project Contract, we forwarded to Mr. Donald H. McLaughlin at your address the original and six copies of "Guaranty of Royalty" forms for signature as explained in the transmittal letter.

In the meantime we have received all copies of the proposed contract and are holding them pending receipt of the "Guaranty of Royalty" forms for attachment to the contract forms after which they will be forwarded for signature.

It is presumed that the contracts will have to be signed by Mr. McLaughlin. Therefore, it is suggested that you expedite return of the forms and advise if the contracts should be sent to some address other than Moab, Utah for signature.

Very truly yours,

W. M. TRAVER

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

WMT/pw

cc: Sec.Op.Comm. (2)
Harshman
Hasler
Shaw (2)
Corres. E1010
Chron

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

September 14, 1956

Memorandum

To: The File

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Telephone call to W. M. Traver, Denver, Colorado, on September 13, 1956
Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Knouse: Bill, I am calling again about DMEA-4249, Big Six Explorations, Inc. I am having a rough time trying to justify the cost of the access road recommended in the Field Team report. The report did not give a detailed breakdown of costs for any of the items of work recommended and, without such a breakdown, we have a rough time justifying the recommended cost. We have used the detailed cost breakdown for DMEA-3935, Contract Idm-E904, Western Mining andDevelopment Company because the property is nearby. Therefore, drilling, drifting and crosscutting conditions are no doubt similar.

However, we are unable to understand why the unit cost per foot to construct the road to this property would be the same as the unit cost to construct the road to the property of the Western Mining and Development Company. The figures submitted in both cases show the estimated cost per foot to be $2.33 per foot, and the cost approved for the completed road of Western Mining is $2.33/ft.

Traver: My understanding from the various memos and reports I have read about the terrain of the road location and the road location of the Western Mining is that it is similar. How long is the road they recommended?

DN 235 BUR MINES 9-17-56 8-58

RECEIVED
SEP 17 1956

SECRETARY TO OPERATING COMMITTEE, DMEA
ATT-- F L KNOUSE

REUR TELEPHONE CALL ON ROAD COSTS DOCKET DMEA 4249, BIG SIX EXPLORATION INC. WE QUOTE TELETYPE FROM T M ROMSLO AS FOLLOWS--

REURTT SEPTEMBER 13 ON DMEA 4249, BIG SIX EXPLORATION INC. ESTIMATE PROBABLY BEST SUPPORTED BY REPORTED ACTUAL COST $1,734.25 AND PER FOOT COST $2.325 FOR 746 FEET SIMILAR ROAD AT BLACK BRUCH CLAIMS DMEA 3935. REPXXXXXX REPORTED ACTUAL COSTS ATTACHED TO MEMORANDUM OF JUNE 25, 1956 BY ROMSLO AND FAICK. END QUOTE.

THIS REPLIED TO OUR TELETYPE OF SEPTEMBER 13 TO STORMS. ESTIMATED AMOUNT OF ROCK AND NON-ROCK NOT SUPPLIED AS REQUESTED. DO YOU NEED THIS INFORMATION OR IS THAT IN ROMSLO,XS TELETYPE SUFFICIENT/Q/

W M TRAVER

F. L. Knouse
D.M.E.A.

Denver, Colo.

Knouse: The recommended road is 2800 feet and the road completed on the other property is about 700 feet.

Traver: I begin to understand your point.

Knouse: Could you contact the examining team and teletype the breakdown estimate they used to arrive at the recommended cost of this road? If you could furnish the estimated total cubic yards of rock to be excavated, cost peryard, and the estimated tractor time, and cost per hour, and later supplement these figures with a more detailed breakdown, we could proceed with the contract through our Legal Division when we receive your teletype.

Traver: I will teletype the fellows in Tucson to teletype this information and supplement it with a more detailed breakdown. I am not sure if the examiners are in the field and, if they are, it may be several days before you receive their reply.

F. L. Knouse

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM Denver, Colorado

BUREAU Defense Minerals Exploration Adm.

CHG. APPROPRIATION

RECEIVED
SEP 17 1956

U. S. GOVERNMENT PRINTING OFFICE 10—1723

September 13, 1956.

U. R. Stowe
Tucson, Ariz.

Joint field memorandum of August 27 on DMEA 6240, Big Six Explorations, Inc. considered work justification for access road instead of pipe line for small amount of exploration work proposed. However, to support road costs Washington requests a summary breakdown of your estimated costs as was furnished on Docket DMEA 5929 report showing amount of rock and non rock work. Rush information by teletype if possible to expedite preparation of contract.

W. M. TRAVER

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

WMT:grl
cc: Harshman
Emerick
Secr. Op. Comm. (2) Attn. F.L.Knouse

Surname copy

700

Ellis

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

September 12, 1956

Memorandum

To: Associate Solicitor,
Division of Mineral Resources

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Proposed contract
Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation Claims
Gila County, Arizona

Attached is a draft of a short-form contract covering the subject application. Nine copies each of maps, Figures 2, 3, and 4, are forwarded for attachment to the contract copies and to the extra copies of Exhibit "A." Also attached are the original and five copies of a Consent to Lien, dated August 11, 1956.

Ernest Wm. Ellis

Ernest Wm. Ellis

FLKnouse/gla
9-11-56
cc to: Docket
Code 700
Mr. Knouse

9/14/56

P. S. Applicant states that in the event a contract is approved, all six partners will sign the contract. However, Applicant is incorporated (Texas) and it would not seem necessary to include theirnames on the first page of the contract even though they do all propose to sign the contract as is shown on the draft.

EWE

9/10/56 gla

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

RECEIVED
SEP 10 1956

224 New Customhouse
Denver 2, Colorado

September 7, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA-4249 (Uranium) Big Six Explorations, Inc., (Sorrell Horse and Citation Claims), Gila County, Arizona

Enclosed are four copies of a memorandum from T. M. Romslo, USBM, and W. L. Emerick, USGS, through their respective Supervisors, prepared in response to Mr. Knouse's suggested revision of the proposed contract on the subject docket.

Their recommendations have the Field Team's approval.

DMEA Field Team, Region III

By W. M. Traver
Executive Officer

Enclosures

RECEIVED
SEP 10 1956
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

August 31, 1956

MEMORANDUM

To: Executive Officer, DMEA Field Team, Region III

From: T. M. Romslo
W. L. Emerick

Through: E. N. Harshman Rec'd for ENH
W. R. Storms

Subject: DMEA Docket 4249 (Uranium), Big Six Explorations, Inc. (Sorrell Horse and Citation Claims), Gila County, Arizona

In reference to your memorandum dated August 27, 1956, regarding suggested changes by F. L. Knouse in the work proposals recommended in the examining field team report of June 1956, the following points are made in sustaining objections to the changes suggested by Mr. Knouse.

In the examining field team's opinion, the adit and particularly the cross cuts to the east and west are needed to adequately explore the northerly trending mineralized fracture system in Area A under Stage I. Exploration of the mineralized parallel fracture systems in Area A, under Stage I, with the adit and east-west crosscuts, supplemented by long-hole drilling, should determine if any work under Stage II would be warranted.

Drift A could be shortened from 400 feet to 250 feet by eliminating the portion of the drift south of the crosscuts; the east and west crosscuts would then be driven at or near the end of the drift.

Exploration from the present adit portal, southeast of site A, would mean extension of the presently proposed access road around a cliff. This would require heavy rock work and added costs in constructing the road; therefore site A was selected for exploration of the mineralized fracture system.

The access road proposed to site A under Stage I is needed for haulage of materials, such as timbers, rails, drills, drill steel, and powder, to be used in prosecution of the contract work. The topography shown on Figure 4 of the report has been greatly generalized, but actually there is a rugged 400 feet difference in elevation between the camp and site A. Elimination of the access road to site A under Stage I would necessitate packing materials up the steep slope to the mine, with probable consequent delays and added labor costs.

It is recommended that the work in the A area include the access road in its entirety, 250 feet of adit, 300 feet of crosscuts, 1,000 feet of less than 50-foot percussion drill holes, 300 feet of percussion drill holes more than 50 feet deep, 70 feet of timbering in drifts and crosscuts, and approximately 100 samples.

An allowance of $3.00/foot for long-hole drilling of more than 50-foot holes is correct. Recommendation of $3.50/foot was an error.

T. M. Romslo, Engineer
U. S. Bureau of Mines

W. L. Emerick, Geologist
U. S. Geological Survey

WLE:ms

cc: Harshman (5)
Storms
Emerick

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

AIR MAIL

224 New Customhouse
Denver 2, Colorado

August 27, 1956

Memorandum

To: W. L. Emerick
W. R. Storms

From: DMEA Field Team, Region III

Subject: Docket DMEA-4389 (Uranium) Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

The Washington Office of DMEA is preparing a contract on the subject docket following more or less the suggested outline of the Field Team in their recommendation of July 27, 1956.

F. L. Emerson telephoned August 23 and suggested substituting a pipe line for the delivery of compressed air to the proposed adit portal in the "A" area rather than constructing the access road. The pipe line to the present adit portal could no doubt be extended to your proposed adit portal. He suggests a 2-stage program, Stage I to comprise 400 feet of "A" adit driving only and Stage II to include approximately 1,000 feet of less than 50-foot percussion drill holes and 300 feet of more than 50-foot percussion drill holes with 200 feet of crosscut directed to the west if that appears geologically to be the most favorable direction. Stage II work should be subject to Government approval and it might possibly be advisable to throw the crosscutting into a third stage or stage it as you consider advisable.

Washington requests revised cost estimates for the proposed new two or three stage project. They are deferring completion of preparation of a contract until the estimates are provided. Therefore, your compliance at an early date will be appreciated.

Mr. Emerson also calls attention to the fact that in the case of Docket DMEA-3935, Contract XDm-2904 which is on a project in the near vicinity and must be operating under similar conditions, the

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AUG 29 1956

engineer recommended an allowance of $3.00 a foot for long-hole drilling of more than 50-foot holes, whereas in this instance $3.50 a foot is recommended.

SMA Field Team, Region III

W. M. TRAVER

W. M. Traver
Executive Officer,

WMT/pw

cc: Sec.Op.Comm. (2)
Robert Hay
Marshman
Chrem

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

August 24, 1956

Memorandum

To: The Files

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Proposed Contract Costs
Docket No. DMEA-4249 (Uranium)
Big Six Exploration, ~~Ltd.~~ Inc
Sorrell Horse and Citation claims
Gila County, Arizona

The Report of Examination did not contain a detailed breakdown of costs for the access road, long hole percussion drilling, drifting and crosscutting. However a detailed breakdown of cost per unit for access road construction, long hole percussion drilling, drifting and crosscutting are the same as for DMEA-3935, Contract Idm-E904, Western Mining and Exploration Company, project located about within the same section 4 of this property, and the project work is designed to explore the same geological horizon for uranium.

There are two exceptions to the unit cost figures set forth in this contract: (1) In the contract for DMEA-3935 only $3.50/sample was allowed for chemical analysis for uranium, whereas in this contract $5.00/sample was allowed. The Examiners' Report states the prevailing cost for chemical analysis by reputable assayers in the Southwest has been increased from $3.50 to $5.00 for such analysis. (2) The Examiners' Report a cost of $3.50/ft. for percussion drill holes in excess of 50 feet deep. A detailed breakdown for drilling holes of this depth was submitted by the Examiners for DMEA-3935 which showed the cost to be $3.00/ft. which was allowed in the contract. Therefore, only $3.00/ft. was allowed for such drilling in this contract. The thinking being that cost for similar project work in practically adjoining mines should be the same provided the other costs are the same.

F. L. Knouse

F. L. Knouse

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

August 24, 1956

Memorandum

To: The Files

From: F. L. Knouse, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Telephone call to W. M. Traver, Denver, Colorado, August 23, 1956
Docket No. DMEA-4249 (Uranium)
Big Six Explorations, ~~Ltd.~~ INC
Sorrell Horse and Citation claims
Gila County, Arizona

Knouse: Bill, I am calling about the Field Team's recommended exploration program on DMEA-4249, Big Six Explorations, ~~Ltd.~~ INC. We feel there is sufficient showing for a small program to explore this property. However, we would like to get your opinion on the access road and a few other items.

On Page 6 of the Examiner's Report it states "A pipe line for compressed air is installed from the portal of the adit to a compressor site near the 1-tent camp." This adit is about 500 feet, as scaled on the Examiner's map, from the proposed adit site that you and Harshman recommended. The cost recommended to construct the 2,800 feet of road is $6,524.00 and the total recommended cost of the project (as recommended by you and Harshman) is $28,340.00 including the cost of the road. Do you think a pipe line and receiver could be constructed from the end of the existing ~~cut~~ old (pipe line) to the site of the proposed adit and cut out the cost of constructing the road? If this could be done possibly some additional cost should be allowed for the excavation of the adit portal as the tractor they would use for the road construction would not be available for this work if the road is cut out.

Traver: That makes sense to me; certainly the cost for the road does not appear justified for the small amount of work we have recommended to be done; and if we find anything we can always expand the program if it is justified. Are there any additional modifications you have in mind?

8/15/56

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

August 14, 1956

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee

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

Subject: Report of Examination, Docket DMEA 4249, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

I have reviewed the report of examination, Docket DMEA 4249, Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona, dated July 9 and received in this office August 3, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

The field examiners recommend for approval a two-stage exploration project which includes (1) construction of access roads, (2) drifting and crosscutting, and (3) long hole drilling. The total estimated cost of the project is $60,564.

It is suggested that consideration be given to an alternate method of exploration which would efficiently test the most promising area on the claims and would eliminate needless expenditures not directly associated with exploration. The alternate plan would include about 400 feet of drifting in a direction N. 35° W. from the present working face of adit A (shown on fig. 3). The unit cost of $33 per foot of drift could be raised to approximately $34 per foot to include the installation of roof bolts which in all probability will be most practical in the type of rock encountered.

The foregoing alternate method of exploration will (1) eliminate a considerable amount of access road and (2) will serve to test the area in which the highest radiometric readings and most significant samples originated.

The report is being forwarded to the Chief, Division of Minerals, in accordance with the routing slip attached thereto.

RECEIVED
AUG 15 1956

James Paone

James Paone

700

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

FILE COPY
Surname: Murphy

AUG - 8 1956

Mr. R. J. Allison, Agent
Big Six Explorations, Inc.
Box 6
Young, Arizona

Re: Docket No. DMEA-4249 (Uranium)
Sorrell Horse & Citation Claims
Gila County, Arizona

Dear Mr. Allison:

In order to continue processing the above-referenced application we will require six executed copies of the Owners' Consent to Lien on the claims involved. Enclosed are six sets of the form required. In signing the paper each individual should indicate his or her address.

We note the subject claims are leased to six individuals d/b/a "Big Six Explorations, Inc." In the event a contract to explore the claims is approved, will all the individuals sign such a contract, or does one of the members have the power to act for the group? In the latter case, we will require documentary evidence of such authority signed by all members of the group.

Sincerely yours,

Ernest Wm. Ellis, Chief
Rare and Miscellaneous
Metals Division

Enclosures

FMMurphy/izm 8-8-56
cc to: Docket
Code 700
Mr. Murphy
Admr.'s Reading File
DMEA Field Team, Region III (2)
Messrs. JECrawford, Rm. 3643
THKiilsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

R.C.H.

8/8/56

IN REPLY REFER TO:

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

RECEIVED
AUG - 8 1956

August 7, 1956

Re: DMEA 4249
Big Six Exploration, Inc.
Citation Group
Gila Co., Ariz.
Appl. Est. $81,250.00
Rec'd. Est. 60,564.00
Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The applicant requested assistance in searching for and exploring near-vertical uranium-bearing fractures, fracture zones and joints in the Dripping Springs quartzite.

Based largely on the need for geologic criteria useful in judging deposits in the Dripping Sprihgs quartzite, the examiners with reservations, recommend a 2-stage work program.

The Black Brush prospect (3935) is near the Citation, or referenced, group, but probably the best example of the Dripping Springs quartzite type mineralization in the immediate neighborhood is found at the Sue mine, where work under contract E834 (DMEA 3669) has been unsuccessfully completed. The details of the work done there are not at hand and I do not know wherein the project turned sour. The program at the Sue was based on the results of an estimated $60,000 worth of pre-contract work by the operator. The 800 feet of underground work and 1500 feet of rim stripping had developed 2,500 tons of inferred 0.19% U_3O_8 material.

Except for a 42.5-foot drift, little preliminary work has been done on the referenced property.

The results, because of the disparity in thickness, appear not to equal those for an equal amount of work at places in the Junction No. 2 workings of the Sue Mine. See Fig. 6 Field Team report, DMEA 3669. If the thickness given for samples 12788-90, DMEA, p. 9 of the subject report, 4249, are the total for the ore-bearing bed, the results at the referenced property are not impressive tonnagewise.

Reference is made, p. 13, to work and a small production of uranium ore, in the Workman Creek area, 4-5 airline miles southwesterly of the Citation claims. Particulars concerning the value of the production or the ore-bearing structures are not given.

The joints and radiometric readings around the physiographic nose as shown on Fig. 3 of the subject Field Team report, appear to warrant investigation but the 2 feet of 0.12% U_3O_8, of sample 12789, does not promise as well as the 3.4, 4.0, 5.0, etc., MR/Hr readings. Likewise the one sample in the adit, 12788, showing 18 inches of 0.006% U_3O_8, seems not to agree with radiometric readings 1.0 and 2.5 MR/Hr on either side. The 0.13% U_3O_8 of the dump sample, 12791, if it represents the ore bed as taken from the adit is not encouraging.

In view of the qualified recommendations of the examiners and the Field Team I recommend denial of the application without prejudice.

N. E. Nelson

N. E. Nelson

8/6/56 gla

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

RECEIVED
JUL 30 1956

July 27, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Joint Report of Examination, Docket DMEA 4249 (Uranium) Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona

Enclosed are the original and three copies of a joint engineering and geologic report on the subject property.

The field examiners recommend a two-stage exploration project at an estimated total cost of $60,564.00.

The Field Team is not impressed with the possibility of worthwhile ore discoveries in the Dripping Spring formation. Docket DMEA 3669, (Uranium) Contract Idm-E834, Arizona Globe Uranium, Inc. (Sue Mine) has been unsuccessfully completed. Docket DMEA 3935 (Uranium) Contract Idm-E 904, Western Mining and Exploration Company (Black Brush Mine) has not reached a point where an appraisal can be made. Docket DMEA 4323 (Uranium) Gerald Gidwitz, d/b/a Western Mines Development Company (Hope Group of Claims), application is in the field for examination. The reviews of this application by the Washington Office were discouraging.

Because of the fact that other applications have been acted on favorably and the possibility that the Hope Group may well also be treated likewise by the field, the Field Team, subject to Operating Committee agreement, would be willing to recommend some work in the A area to include the access road which is necessary in its entirety, 400 feet of adit, 200 feet of crosscut, 1,000 feet of less than 50 foot percussion drilled holes and 300 feet of percussion drilled holes more than 50 feet deep. Approximately 100 samples should be allowed. All work should be figured at the engineer's estimated costs.

The memorandum from E. N. Harshman to the Executive Officer dated July 17, 1956, accompanying the Report of Examination, contains pers

Reviewed by
DMEA OPERATING COMMITTEE
8/3/56
(Date)

ON-SITE EXHIBIT

tinent information on the evaluation of this property.

Enclosed for possible use in the contract are nine copies each of Figures 2, 3, and 4. Figure 4 could be changed in the Washington Office to conform with their final decision.

The Powers of Attorney you requested from the Applicant in the Administrator's letter dated April 30, 1956 are attached hereto. We have not requested Owner's Consent to Lien.

DMEA Field Team, Region III

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Defense Minerals Exploration Administration
Denver Federal Center
Denver, Colorado

DMEA
Date Rec'd.
JUL 17 1956
BUREAU OF MINES
Denver, Colorado

July 17, 1956

TRANSMITTED
JUL 27 1956

RECEIVED
JUL 30 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman

Subject: DMEA Docket 4249 (Uranium), Big Six Explorations, Inc. (Sorrell Horse and Citation claims), Gila County, Arizona

Enclosed are the original and nine copies of a joint examination report on the subject property in which exploration, estimated to cost $60,564, is recommended.

I find it difficult to concur with the program of exploration proposed and the reasons given for proposing it. In a transmittal memorandum of July 9, 1956, the field examiners state: "We are recommending Government participation in exploration of this property because we believe it is at least as good as the Sue mine area (DMEA 3669) and the Black Brush claim (DMEA 3935) and we believe it is desirable to gain additional experience in exploration of the Dripping Spring quartzite. Without this additional experience it is difficult to properly evaluate the geological criteria by which this and all other projects in the Dripping Spring formation is (are) to be judged."

With respect to the Sue mine, the same field examiners recommended, in a memorandum of June 28, 1956, that Stage II

Reviewed by
DMEA OPERATING COMMITTEE
8/3/56
(date)

work under contract Idm-E 834 be denied by the Government and that the contract be terminated. Work under Stage I of the contract failed to achieve significant results. It appears that exploration at the Sue mine can be used as justification for exploration on the Big Six property only if geologic data are given to show why the ore potential of the Big Six property is greater that that of the Sue mine; such data are not given in the examination report.

Work under contract Idm-E 904 on the Black Brush claims has not been sufficient to prove or disprove the ore potential of that area. The fact that a contract was approved on the Black Brush claims, therefore, might be considered as justification for approval of work on the Big Six property.

It is my opinion that approval of a program of exploration costing a least $39,489 (Stage I estimated costs) "to gain additional experience in exploration of the Dripping Spring quartzite" is not warranted. DMEA has one principal objective - that of discovering and roughly delineating reserves of strategic minerals or metals. Data upon which to evaluate other projects in the Dripping Spring quartzite can certainly be gained by discussions with Government geologists now working in the area (Granger, Moore, and Raup of the U. S. Geological Survey and various members of the A. E. C. geological staff) and by analysis of various explorations projects, both private and Governmental, now being prosecuted in the Dripping Spring quartzite.

The data contained in the section of the report titled "Conclusions and Justification of Exploration" appears to me to be inadequate to justify the program proposed by the examiners. The statement that "as most of the deposits thus far explored in the Dripping Spring are disappointingly small and low grade, there is no assurance that significant quantities of minable ore will be found on the Sorrell Horse and Citation claims" leads me to question the propriety of Government participation in the project as recommended. I am unable to find a single positive statement that the examiners expect to find significant deposits of uranium ore by the proposed exploration and the section on justification of the project appears to have been correctly worded to avoid such positive statements.

I note that R. V. Schwartz of the A. E. C. considers the property worthy of exploration because the property is located "within a few (actually 3 to 4) airline miles of the Workman Creek area, from which a small amount of uranium ore is continuously being produced." An expenditure of about $40,000 on this observation does not seem justified.

I suggest that after you review the accompanying report we discuss the possibility of limited exploration on the Big Six property based on the limited number of ore-grade samples taken by the applicant and the A. E. C. on the subject property.

E. N. Harshman
Member, Field Team

Enclosures
ENHarshman:mp

MINERAL DEPOSITS
DMEA
RECEIVED
JUL 13 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

TRANSMITTED

JUL 27 1956

DMEA
Date Rec'd
JUL 12 1956
BUREAU OF MINES
Denver, Colorado

July 9, 1956

RECEIVED
JUL 30 1956

Memorandum

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

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report Docket DMEA-4249 (Uranium), Big Six Explorations, Inc. (Harvell Mesa and Citation Claims), Gila County, Ariz.

Enclosed are original and 10 copies of a transmittal memorandum by T. M. Ramelo of the Bureau of Mines and J. H. Feick of the Geological Survey, and a joint field examination report on the above property. Messrs. Feick and Emerick of the Survey, and Ramelo of the Bureau left Tucson this morning for the field without signing the transmittal memorandum but asked me to send it and the report to you without their signatures. Mr. Emerick has read and concurs with the report recommendations, but he also was in the field when it was typed.

Signed by Walter R. Storms

Walter R. Storms
Superintendent
Southwest Experiment Station

CC W. M. Traver (10)
J. F. Shaw
K. N. Harshman
W. L. Emerick
DMEA-4249
SF

WRStorms:rj

8/3/56

RECEIVED
JUL 30 1956

TRANSMITTED
JUL 27 1956

July 9, 1956

Memorandum

To : Executive Officer, DMEA Field Team, Region III

From : T. M. Romslo
J. H. Faick

Through: E. H. Harshman
W. R. Storms
M. L. Emerick

noted & cmtd
WRS

Subject : Project DMEA-4248 (Uranium), Big Six Explorations, Inc. (Sorrell Horse and Gilmartin Claims), Gila County, Ariz.

Enclosed are the original and 10 copies of a joint examination report of the above subject property. We are recommending Government participation in exploration of this property because we believe it is at least as good as the Sun mine area (DMEA-3868) and the Black Brush claim (DMEA-3865) and we believe it is desirable to gain additional experience in exploration of the Dripping Spring quartzite. Without this additional experience it is difficult to properly evaluate the geological criteria by which this and all other projects in the Dripping Spring formation is to be judged.

We are not optimistic about the outcome of exploration of most of the Dripping Spring formation, but believe we are justified in making reasonable efforts to test a few of the better deposits such as the Sun, Black Brush and Big Six properties, and upon the Mogul mine for which we understand an application is being submitted.

Enclosed are two copies of the docket which were provided for use of the Bureau and Survey offices in Tucson.

T. M. Romslo
by H. M. Lemon

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

J. H. Faick
by ENH

J. H. Faick, Geologist
U. S. Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
8/3/56

cc W. H. Tranor (Orig. & 10)
E. H. Harshman
M. L. Emerick
DMEA-4248
BF

TMRomslo:JHFaick:fr:j

RECEIVED
JUL 30 1956

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

TRANSMITTED
JUL 27 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-4249 (Uranium), Big Six Explorations, Inc.

Sorrell Horse and Citation Claims

Gila County, Arizona

J. N. Faick, Geologist
U.S. Geological Survey

T. M. Romslo, Mining Engineer
U. S. Bureau of Mines

June 1956

Released by
DMEA OPERATING OFFICER
8/3/56

RECEIVED
JUL 3 0 1956

DMEA-4249 (URANIUM), BIG SIX EXPLORATIONS, INC.
SORRELL HORSE AND CITATION CLAIMS
GILA COUNTY, ARIZONA

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SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

On April 12, 1956 the Defense Minerals Exploration Administration received from the Big Six Explorations, Inc. an application, Docket DMEA 4249, for Government aid in exploration for uranium on the Sorrell Horse and Citation claims located in Cherry Creek, about 20 miles south of Young, Gila County, Ariz. In this area relatively small amounts of uranium is found to occur extensively in the lower part of the upper member of the Dripping Spring quartzite. Most of the uranium apparently occurs in comparatively thin bedded quartzite where cut by northerly trending or easterly trending joint systems.

The Sorrell Horse and Citation claims, which lie in an area of greater than normal radioactivity, have been explored by a 43-foot long adit, and by radiometric surveys, but no production has been made from this property. It is regarded by Atomic Energy Commission geologists as being one of the most favorable prospects for additional exploration in the Dripping Spring.

The DMEA examining team concludes that the property deserves exploration and cooperated with the applicant company in working out a feasible program consisting of (1) construction of an access road, (2) drifting and crosscutting, and (3) long hole drilling. The work is to be done in 2 stages; the first is estimated to cost $39,489.00;

and the second is estimated to cost $21,075.00. The project is to be evaluated at the end of Stage I. Stage II is not to be undertaken unless the results of Stage I are reasonably successful.

INTRODUCTION

On April 12, 1956, the Defense Minerals Exploration Administration received from Big Six Explorations, Inc. an application for aid in an exploratory project for uranium at the Sorrell Horse and Citation claims in Gila County, Ariz. The application was given Docket No. DMEA-4249, reviewed by the Operating Committee, and forwarded to the Field Team, Region III, for a field examination of the property.

The well-prepared application requested aid in a proposed project that involved road building, rim-stripping, long hole drilling, drifting, and crosscutting. Cost of the project was an estimated $81,250.00.

The property was examined for DMEA on June 4 and 5, 1956 by J. N. Faick, geologist, U. S. Geological Survey and T. M. Romslo, mining engineer, U. S. Bureau of Mines. The examining team was accompanied by R. J. Allison, a director of Big Six Explorations, Inc., and J. McK. Pardee, the corporation's consulting mining engineer.

R. J. Schwartz, geologist, Atomic Energy Commission, Globe, Ariz., was contacted by the examining team.

TOPOGRAPHY, PHYSICAL FEATURES AND CLIMATE

The Sorrell Horse and Citation claims are situated on the northwestern slope of McFadden Horse Mountain that has a peak altitude of 7,523 feet. The claims at an average altitude of about 5,400 feet

are in an extremely rugged area. A range of 1,000 feet in elevation within a half mile is not unusual and 50- to 100-foot vertical cliffs are common.

A heavy growth of vegetation includes juniper, piñon pine and oak trees, some of which are suitable for mine timbers. However, cutting of trees is restricted since the claims are within the Tonto National Forest. Drainage is easterly to Cherry Creek, a perennial, south-flowing stream about 1 mile from the claims. Water for domestic and mining purposes is obtainable from springs, of which a few flow the year around.

The climate is generally mild. However, snow storms and heavy rainfalls may render roads impassable and force suspension of mining operations for short periods. Annual precipitation of 15 to 18 inches probably occurs about equally as rain and snow.

LOCATION AND ACCESSIBILITY

The Sorrell Horse and Citation claims are about 30 air miles north of Globe, Ariz. and are situated in the W½ of sec. 4, T. 6 N., R. 14 E., Gila County, Ariz. (fig. 1). They are accessible from Globe via highways and unimproved roads that at present are not readily passable with other than 4-wheel drive vehicles. A log of trip, from the Junction of U. S. Highway 60 and State Highway 88 a few miles west of Globe follows:

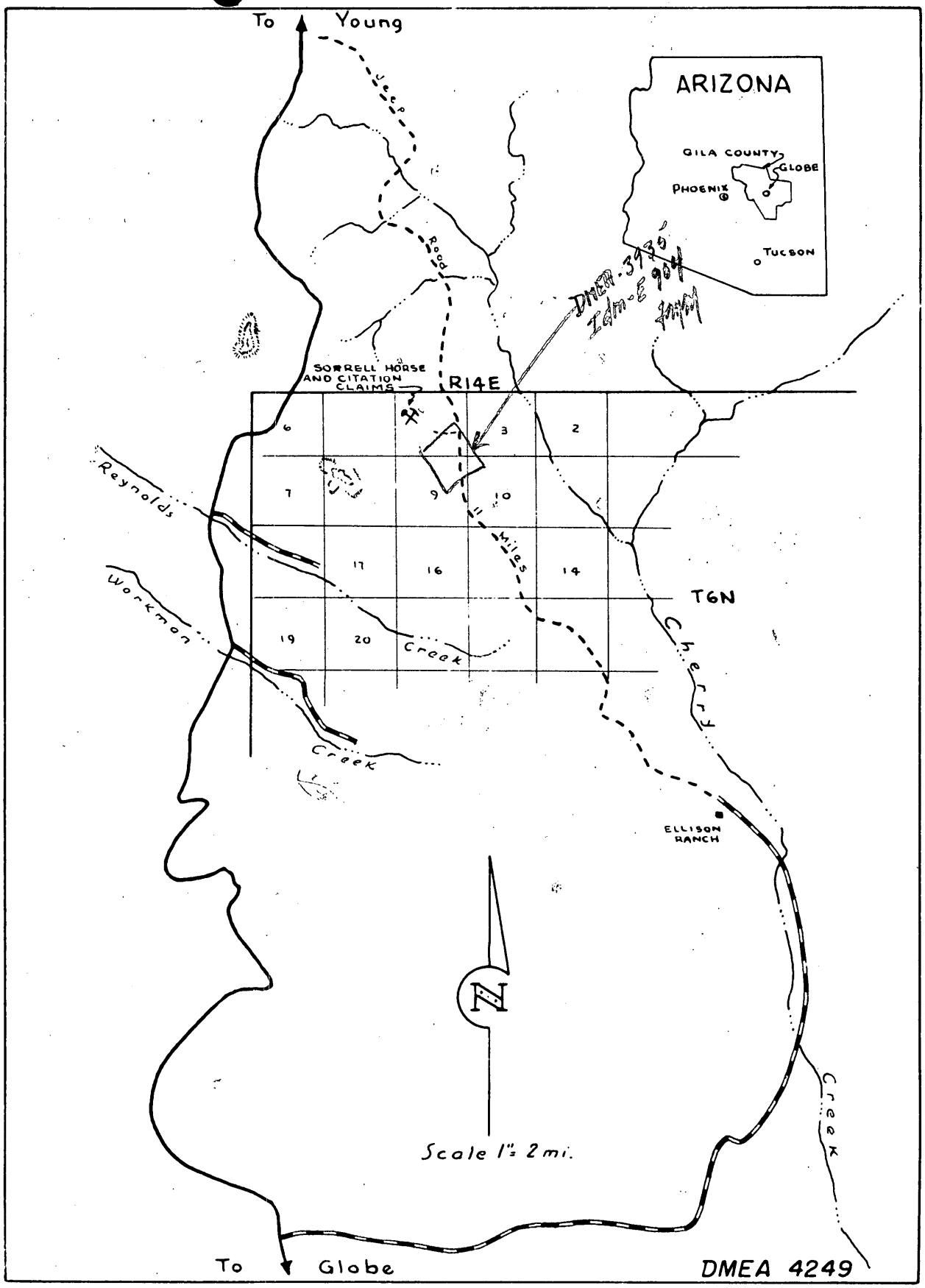


FIG.-1-LOCATION MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ.

	Miles
At junction	0.0
North on paved State Highway 88	14.0
Northeasterly on graded "Young" road to Board Tree Saddle	49.3
Turn east and follow trail to the Black Brush mine's tent camp	58.3
Turn west and follow trail to applicant's tent camp	59.8

A graded Atomic Energy Commission road now under construction from Board Tree Saddle will skirt the 2 tent camps. Completion of the road, probably within a few months, will shorten the distance to the camp by 2 or 3 miles and will allow the trip to be made by passenger cars except during periods of heavy rains and snows.

Globe and nearby Miami are the nearest towns having mine supply houses and machine shops. Gasoline and camp supplies are obtainable at Young, a village about 12 miles north of Board Tree Saddle.

A branch of the Southern Pacific railroad services Globe and nearby Cutter where an Atomic Energy Commission ore purchasing depot is located.

HISTORY AND PRODUCTION

Uranium first was discovered north of Globe in early 1950. Since then the area has been intensely prospected and many properties containing radioactive zones have been located. To date all favorable zones have been found in the pre-Cambrian Dripping Springs quartzite formation. Some of the favorable zones have been explored by drill holes and drifts, but only a few small deposits of shipping grade ore have been developed.

Uranium first was discovered on the Big Six property by the present owners in 1954. The discovery was made shortly after the Atomic Energy Commission made an areal survey of the area and released a map showing anomalous readings in the area of the Big Six property. This area includes the adjacent Black Brush property which presently is being explored with Governmental aid under contract Idm-904, Docket DMEA-3935.

Little work was done on the Big Six property until December 1955, shortly after the applicant acquired the property under a lease and option agreement. During the following 2 months, a tent camp was established, bulldozer trails were built, radiometric surveys were made, location work was done, and a short adit was driven. A geologist of the Atomic Energy Commission cooperated with the applicant on the surveys. Subsequent activity has been confined to sampling some of the outcrops and surveying.

No ore has been produced.

EXTENT AND OWNERSHIP OF PROPERTY

The Big Six property comprises a group of 7 unpatented lode mining claims, Citation Nos. 1 to 5, and Sorrell Horse Nos. 1 and 2 (fig. 2).

Big Six Explorations, Inc. is the owner of Citation claim No. 5 by location during 1955. All the other claims are held by the company under a Mining Lease of November 1, 1955 with the following persons, all of Gila County, Ariz.:

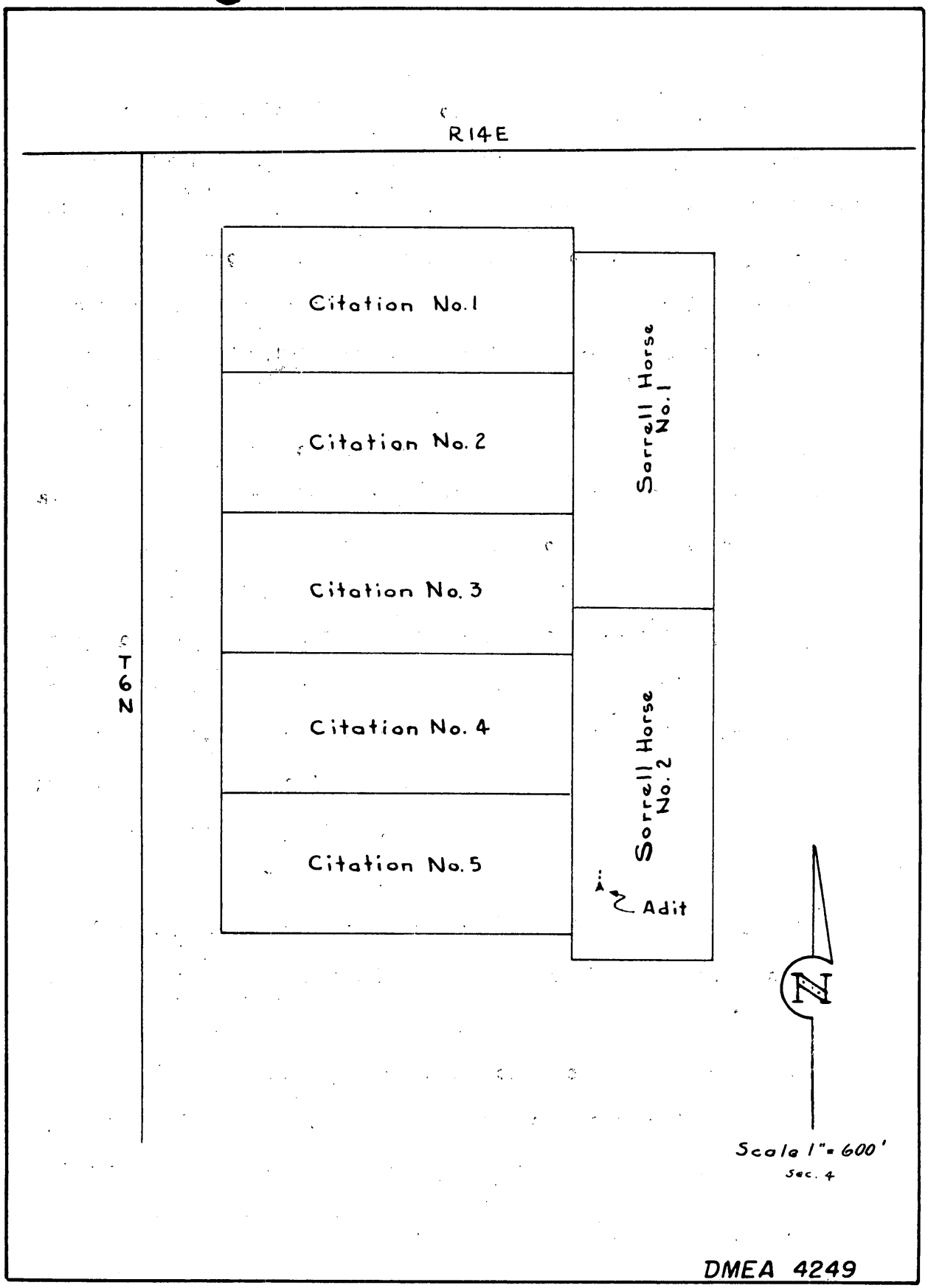


FIG.-2- CLAIM MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ.

Alfred Haught and wife, Susie Mae
Homer Haught and wife, Betty
C. A. Haught
Joe Haught
Donald Wayne Haught
Glenn Morris Haught
Van Baker
Virgil Baker
Richard Baker
Clifford Martin
Jack Martin
Mrs. Arthur Maurel
D. K. Murphy
Nikie Murphy
Frank Chapman
Harvey McKee

Signers of the lease for Big Six Explorations, Inc. are: Roger F. Ashford, Charles Chick Fair, Bill R. Casstevens, David L. Greenless, and Wilson E. Connell, all of Odessa, Texas, and R. J. Allison of Young, Ariz. Officers of the company include Roger F. Ashford, president; Bill R. Casstevens, Secretary; and R. J. Allison, director.

PRESENT STATUS

The property is inactive.

Mine workings are confined to a 40-foot adit containing no track nor pipe lines. A pipe line for compressed air is installed from the portal of the adit to a compressor site near the 1-tent camp.

All mining equipment was removed from the property shortly after completion of the adit.

GEOLOGY

The Sorrell Horse and Citation claims, which are the properties of Big Six Explorations, Inc., are situated on the west side of the Valley of Cherry Creek, at an airline distance of 3 or 4 miles north of Workman Creek, which is at present the most productive uranium area

in Central Arizona. The Sorrell Horse and Citation claims are adjacent to the Black Brush claims, on which exploration is now being done with DMEA assistance. These two groups of claims lie in an area in which radioactivity is sufficiently intense to have caused considerable activity in prospecting and exploration.

The mine area is underlain by nearly horizontal beds of Dripping Spring quartzite which has been intruded at the contact between the upper and lower units by a diabase sill which appears to be about 1,000 feet thick. The sill, which apparently is concordant with the beds in the vicinity of the mine, is said to be discordant in its broader aspect and cuts obliquely across the quartzite beds at a small angle. East of the mine area, along Cherry Creek, it is said that the quartzites are intensely deformed, probably as a result of faulting and intrusion of the sills.

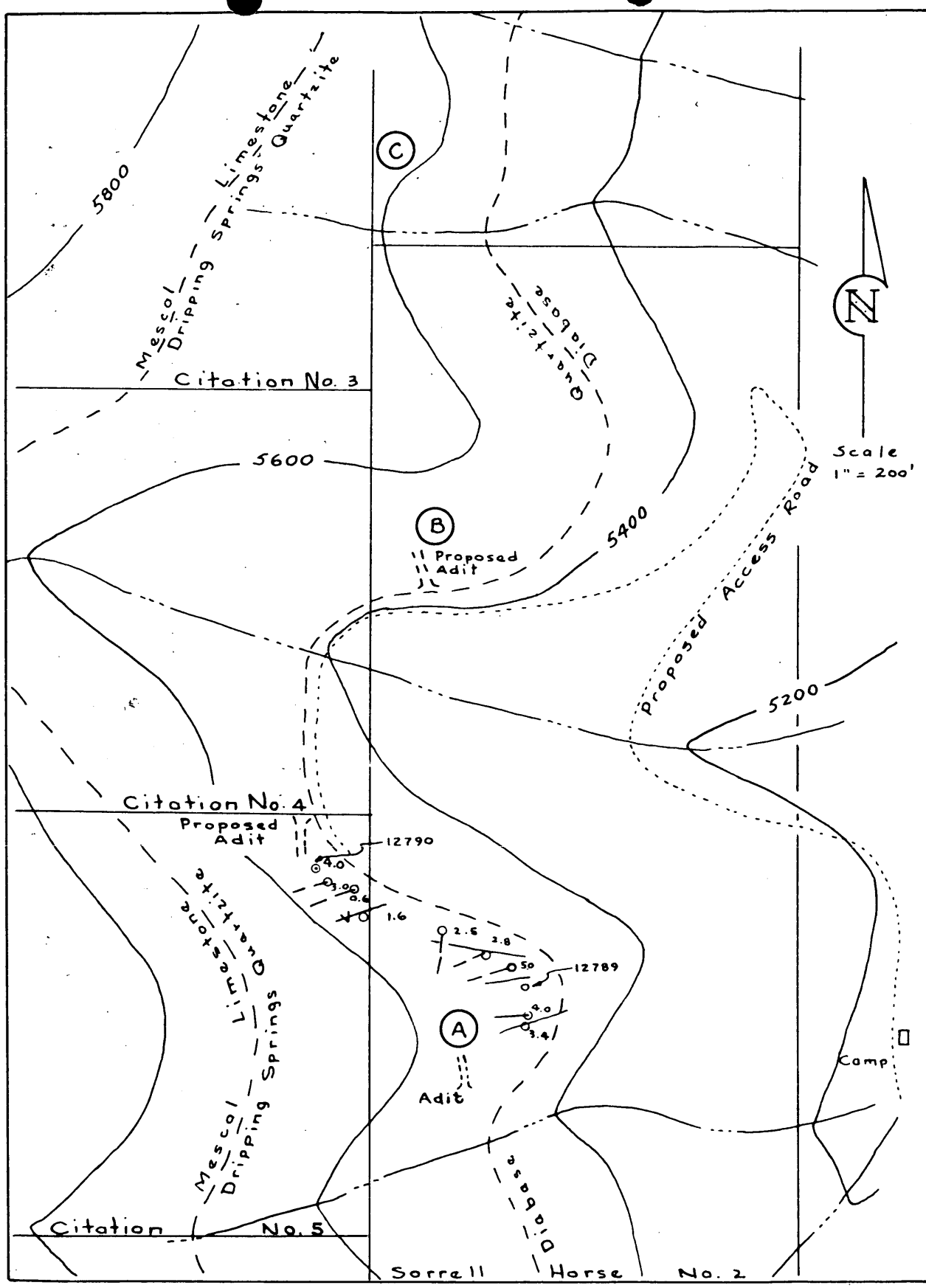
The Dripping Springs quartzite beds that lie from a few feet to about 40 feet above the sill contain small amounts of uranium, and the radioactive zone appears to be about 35 feet thick. The radioactive zones are concentrated on joints of two principal systems: (a) northerly trending system; and (b) a N 70° E system. These are exposed in prominent cliffs from 40 to 50 feet high above the diabase sill.

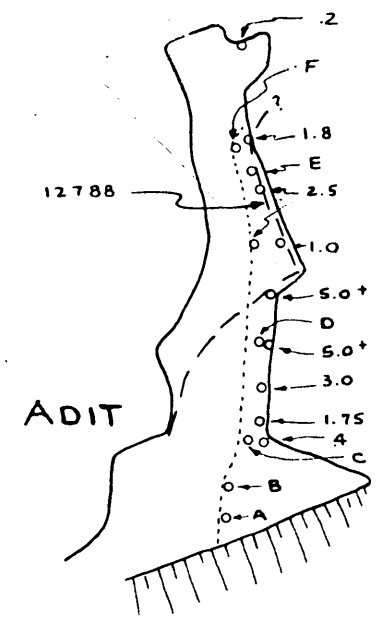
Radiometric surveys indicate that abnormal radioactivity is erratically distributed over a relatively large area, and is readily traced along the cliff face for a distance of a couple of thousand feet. In many places radioactivity along the outcrop ranges from 3 to 5 times

background when tested with a geiger counter; however, all of the upper part of the Dripping Spring quartzite is more or less radioactive. The radioactivity, where measured at the outcrop, is not uniformly distributed, but is concentrated mostly in zones where jointing is a prominent feature in the Dripping Spring formation.

The radioactive zone has been tested by underground work in only one place, at an adit about 43 feet long near the south end of the radioactive zone. This adit (fig. 3) was started on a radioactive fracture zone, but deviated from the fracture and passed into barren quartzite in a short distance. The geologic map, figure 3, shows the applicant's radiometric survey of this adit and the applicant's radiometric survey along the outcrop northward from the adit. It is to be noted that most of the radioactivity apparently is concentrated in a jointed quartzite that underlies a prominent physiographic "nose" in the southwestern part of Sorrell Horse No. 2 claim. Another zone of greater than normal radioactivity lies approximately 800 feet north of the adit. At the southernmost locality the radioactivity appears to be associated with westerly trending joints and at the northern locality it apparently is associated with northerly trending joints.

Only a few samples of the ore are available, as follows:





A or 12788 Location of samples

o 2.5 Radioactive spots in MR/Hr.

- - - - - - Approximate western limit of Radioactive zone in adit.

— — Joints

Scale 1" = 20'

DMEA 4249

FIG. - 3 - GEOLOGIC MAP, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZONA

No. or Letter	Sampled by	Date Reported	U_3O_8 Radiometric	U_3O_8 Chemical	Description
A	AEC	12/23/55	0.20	0.17	
B	Applicant	12/30/55	0.47		
C	AEC	12/30/55	0.27		
D	Applicant	12/19/55		2.36	Selected specimen.
CR	"(?)	1/24/56	0.29	0.24	Repeat of "C"
E	"	2/28/56	0.33		Vert. cut 3.3 ft. in east wall.
F	AEC	12/30/55	0.72		Probably grab sample.
12788	DMEA	1/26/56	0.01	0.006	18 in. sample 2-3.5 ft. above floor, 25 ft. from portal.
12789	"	1/26/56	0.26	0.12	Mark "R", 2 ft. vertical, Chip sample.
12790	"	1/26/56	0.16	0.16	Mark "Z", 4 ft. vertical, chip sample.
12791	"	1/26/56	0.12	0.13	Grab sample of ore on dump.

PROPOSED PROJECT WITH COSTS

Original Proposal

The proposal of the application consisted of a 3-stage project involving the following work and estimated costs:

Stage I		
4,800 ft. of road, 3,800 @ 0.50/ft. and 1,000 ft. @ $2.50/ft.	$3,900.00	
900 ft. of benching @ $1.50/ft.	1,350.00	
1,000 ft. of drifting from 3 sites @ $33.00/ft.	33,000.00	
Total Stage I	$38,250.00	$38,250.00
Stage II		
2,000 ft. of long hole drilling @ $2.50/ft.		5,000.00
Stage III		
1,000 ft. drifting @ $33.00/ft.	$33,000.00	
2,000 ft. long hole drilling @ $2.50/ft.	5,000.00	
Total Stage III	$38,000.00	$38,000.00
Estimated total cost of project		$81,250.00

The proposed supervisor of the project is Jack McK. Pardee, an Arizona registered mining engineer, who reportedly has worked as miner, shift boss, and engineer for Miami Copper Co. and as superintendent on a porphyry copper exploration project in southern Peru, S.A. Since returning from South America about 2 years ago, he has acted as a mining consultant, mainly in the Globe area.

Revised Proposal

The examining team and the company's representatives mutually agreed that the property's potential could be adequately determined by exploring 2 of the 3 originally proposed sites, A, B, and C of figure 3. Sites A and B were selected as being most favorable, both from the standpoint of indicated ore mineralization and accessibility. Omission of site C resulted in the reduction of originally proposed work of Stage I by 900 feet of road building, 900 feet of benching, and 300 feet of drifting. An additional 300 feet of road building was eliminated by relocation of operations at site A.

The sequence of proposed work for exploring sites A and B under a 2-stage project is as follows(fig. 4):

Stage I

1. Build a maximum of 2,800 lineal feet of access road from the camp, located off the exploration area, to site A. The length of the road as shown on the map is about 2,400 feet. An estimated 400 additional feet provides for the difference in altitude between starting and ending points and for possible deviations in the planned course.

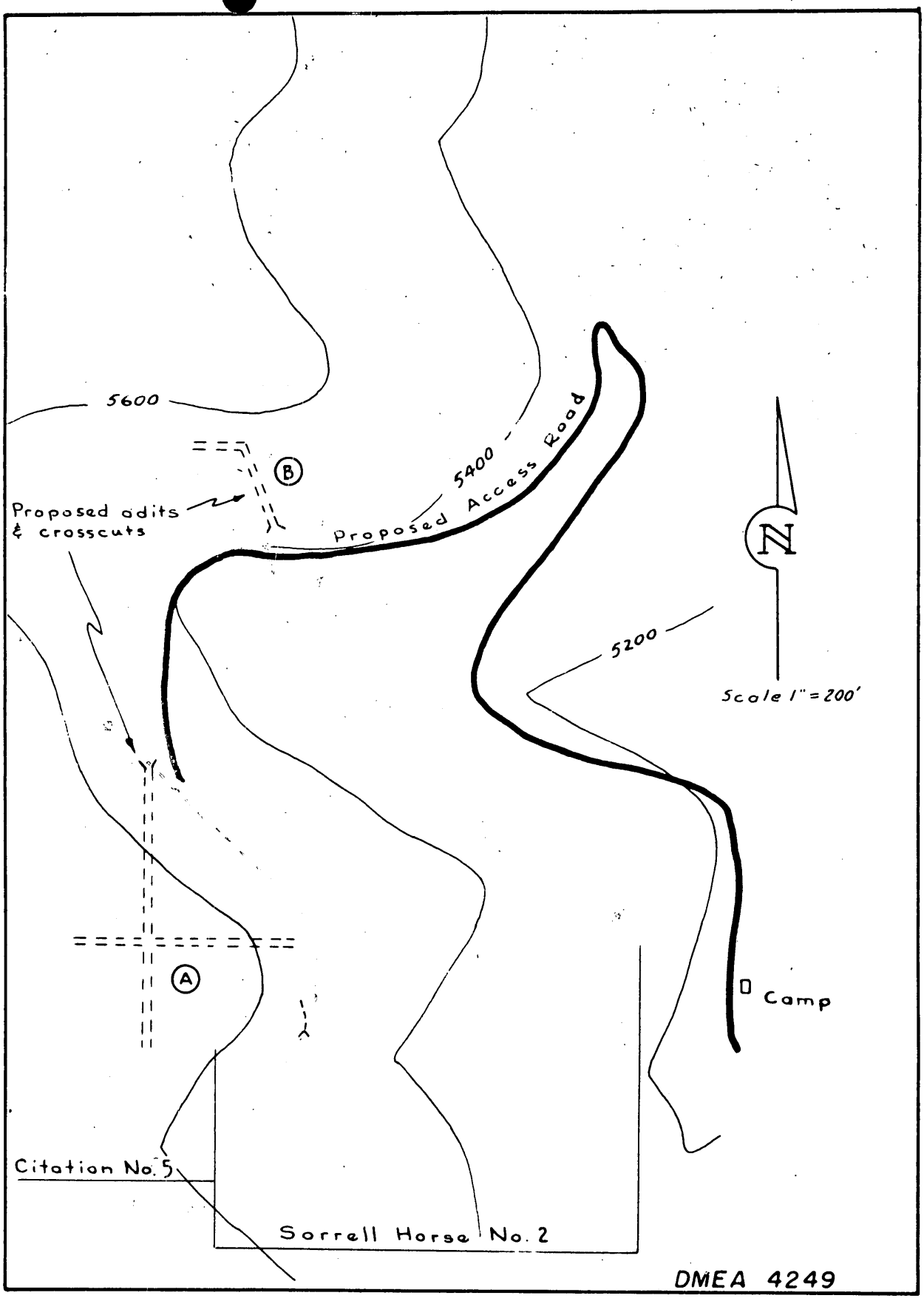


FIG. - 4 - PROPOSED EXPLORATION, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ.

2. Explore each site, A and B, simultaneously by driving an adit, crosscuts, and long holes.

Site A - Drive adit approximately south in favorable horizon for 400 feet, crosscut east 200 feet and west 100 feet, and test favorable zones by drilling percussion drill holes. 1/

Site B - Drive adit northwesterly in favorable horizon for 125 feet, crosscut 75 feet to west from end of adit, and test favorable zones by drilling percussion drill holes. 2/

Stage II

Drift and/or crosscut not more than 600 feet at such locations and such directions as are indicated by the results of Stage I work and approved by the Government in advance. In event such drifting and crosscutting are performed, drill a maximum of 1,000 feet of minus 50-foot long percussion drill holes at locations and on directions approved by the Government.

Work Specifications

The drifts and crosscuts shall be timbered as necessary and have a minimum cross section of 5 feet by 7 feet in the clear of timber. The Government will not participate in the cost of any timbering in excess of 70 feet of timbered drift or crosscut in Stage I, and 50 feet in Stage II.

1/ A total of 2,000 feet of percussion drilling is provided for both sites.

2/ A total of 2,000 feet of percussion drilling is provided for both sites.

Representative samples shall be taken in mineralized areas as the drifting and crosscutting progresses. Areas of persistent mineralization should be channel sampled while areas of spotty mineralization should be sampled by chip sampling or by grab sampling the muck from each round. Drill holes should be probed radiometrically. Certified copies of all assay certificates and complete records are to be supplied with the operator's progres reports.

The project shall be supervised by a competent engineer-geologist who shall devote full time to the project work.

ESTIMATED COST OF REVISED PROJECT

The types of proposed explorations and the anticipated operating conditions are essentially the same as those at the nearby Black Brush claims that presently are being explored under DMEA contract Idm-E904. On this basis the unit costs of contract Idm-E904 are applicable to the proposed project, with the following exception. The cost of chemical analysis per sample has been increased from $3.50 to $5.00, the prevailing rate quoted by reputable assayers in the Southwest.

avg. for DMEA Idm E904 39.00 Fancy, Too high.

Stage I

A maximum of 2,800 ft. of access road @ $2.33/ft.	$6,524.00
900 ft. drifting and crosscutting @ $31.000/ft.	27,900.00
70 ft. timbering in drifts and crosscuts @ $4.50/ft.	315.00
1,500 ft. long hole drilling (depth less than 50 ft.) @ $1.50/ft.	2,250.00
500 ft. long hole drilling (depth in excess of 50 ft.) @ $3.50/ft.	1,750.00
150 chemical sample assays @ $5.00/sample	750.00
Total	$39,489.00

Stage II

600 ft. drifting or crosscutting @ $31.00/ft. - - -	$18,600.00
50 ft. timbering drifts or crosscuts @ $4.50/ft. - -	225.00
1,000 ft. long hole drilling @ $1.50/ft. - - - - - - -	1,500.00
150 chemical sample assays @ $5.00/sample - - - - - -	750.00
Total -	$21,075.00
Estimated total cost of the project - - - - - - - - -	$60,564.00
Government participation @ 75% - - - - - - - - - - -	$45,423.00

CONCLUSIONS AND JUSTIFICATION OF EXPLORATION

The area, in which the Sorrell Horse and Citation claims and the nearby Black Brush claims are situated, is considered to be one of the more promising places to search for uranium in the Dripping Spring formation in Arizona. Attention first was directed to this area early in 1954 when the Atomic Energy Commission released a map showing an anomaly over the area. Some geological mapping has since been done in the area by that agency. R. J. Schwartz of the Atomic Energy Commission was contacted in regard to the application, and it is his opinion that the Sorrell Horse and Citation claims are of considerable merit and worthy of exploration. One of the reasons for liking the area is its location within a few airline miles of the Workman Creek area, from which a small amount of uranium ore is continuously being produced. Structurally and lithologically the radioactive zones on the Sorrell Horse and Citation claims are similar to other uranium deposits in the Dripping Spring formation from which some ore has been mined and shipped to the buying station at Cutter, Ariz.

As most of the deposits thus far explored in the Dripping Spring are disappointingly small and low grade, there is no assurance that significant quantities of minable ore will be found on the Sorrell Horse

and Citation claims. However, the known favorable geological conditions and the wide distribution of small amounts of uranium at the surface indicates that the area is worthy of additional exploration. It is reasonable to hope that richer ores will be found behind the face of the cliff on which the ore crops out. The outcrop presumably was subjected to leaching by supergene solutions. The zones that are the most strongly fractured and jointed and that are the most radioactive at the surface are believed to be the most favorable for exploration. The project being recommended is laid out with this in mind.

Presently available data are inadequate for making an estimate of ore reserves. It is believed that if ore is present it will occur in beds or mantos a few feet thick and of variable lengths and widths. It is expected that ore, if present, will be found near the intersections of steeply dipping or vertical fractures with favorable beds and will persist along the beds for indeterminate distances. Exploration of 2 areas is proposed. The southern area (figs. 3 & 4) is a block roughly 300 feet square, and the northern area is a block about 150 feet square.

Exploration of the claims by drilling from the surface is not practical, mainly because the targets are small and topographic conditions are unfavorable.

The revised program for exploring the claims by drifting, crosscutting, and long hole drilling is feasible.

The contemplated supervisor of the project appears to be capable of carrying out the proposed work in an efficient manner.

RECOMMENDATION

Approval is recommended for Governmental participation in a 2-stage exploratory project for uranium on the Sorrell Horse and Citation claims. The estimated costs of the project that can be completed in 1 year are $39,489.00 for Stage I, and $21,075.00 for Stage II, a total of $60,564.00.

5/10/56

RECEIVED
MAY 10 1956

May 4, 1956

Memorandum

To: W. R. Storms

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA 4249 (Uranium) Big Six Explorations, Inc. (Sorrell Horse and Citation claims) Gila County, Arizona

Enclosed please find the subject application in the amount of $81,250.00.

A field examination and suitable report are required. The completed report should be forwarded directly to the Executive Officer, with a copy of the memorandum of transmittal to this office.

JOHN F. SHAW

John F. Shaw

cc: W. M. Traver (3)
E. N. Harshman
J. N. Faick
Sec. Op. Com. (2)

5/8/56

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

RECEIVED
MAY 7 - 1956

May 2, 1956

224 New Customhouse
Denver 2, Colorado

Memorandum

To: J. F. Shaw (2) (With brochure)
J. H. Faick

From: Field Team, Region III

Subject: Docket DMEA 4249 (Uranium) Big Six Explorations, Inc., (Sorrell Horse and Citation claims), Gila County, Arizona

Enclosed is the subject application in the amount of $81,250.00. A field examination and suitable report are requested.

Enclosed for your information is a copy of a letter from the Chairman, Operating Committee dated April 30, 1956 with attached memoranda of review of the application by N. E. Nelson and John E. Crawford.

DMEA Field Team, Region III

W. M. TRAVER,

By W. M. Traver
Executive Officer

Enclosures

WMC:ab

cc: Chair. Op. Comm. (2)
Harshman
Docket 4249
Chron.

700

FILE COPY
Surname:
FKnowe
Selfridge

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

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

Re: Docket No. DMEA-4249 (Uranium)
Big Six Explorations, Inc.
Sorrell Horse and Citation claims
Gila County, Arizona

Dear Mr. Traver:

The captioned application is referred to your office for a field examination and report on the proposed project. A copy of the application was transmitted to your office on April 13, 1956.

Enclosed are copies of memoranda dated, April 24 and 26, 1956, from Mr. John E. Crawford, USBM, and Mr. N. E. Nelson, USGS, respectively, relating to the subject project.

If the Field Team recommends an exploration program, we will require, in addition to the usual information, the following:

1. Nine copies of a map or maps showing mineralized exposures, sample locations and assay values, radiometric survey data, underground workings (as shown on Applicant's maps) and recommended work, all in relation to the property boundaries; and

2. The Applicant should be requested to furnish Consent to Lien forms signed by all the landowners or their legally authorized agent.

We have requested the Applicant to forward to you copies of Powers of Attorney from the landowners to the party or parties who signed the property lease.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (2/3)

Enclosures

APPROVED:

P. F. Yopes (2/3)
Member, Bureau of Mines

N. E. Nelson (2/3)
Member, Geological Survey

Messrs. JECrawford, Rm. 3641
THKillsgaard, Rm. 5224
JOHosted, Rm. 3210, GSA

FIKnouse/izm 4-26-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
Operating Committee

700

FILE COPY
Surname:
F. L. Knouse
Allison
Nelson
Yager
Bridge

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

APR 30 1956

Mr. R. J. Allison, Agent
Big Six Explorations, Inc.
Box 6
Young, Arizona

Re: Docket No. DMEA-4249 (Uranium)
Sorrell Horse and Citation claims
Gila County, Arizona

Dear Mr. Allison:

The application for assistance in exploring your property, under the captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred for a field examination to:

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

In the meantime, so the processing of your application will not be delayed, please furnish this office and Mr. W. M. Traver, at the above address, with copies of Powers of Attorney from the landowners (of the land to be explored) to the party or parties who signed the property lease as "Attorney in Fact."

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf

Administrator

FLKnouse/izm 4-26-56
cc to: Docket
Code 700
Mr. Knouse
Admr.'s Reading File
DMEA Field Team, Region III (2)

4-30-56

IN REPLY REFER TO:

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

RECEIVED
APR 27 1956

April 26, 1956

Re: DMEA 4249
Big Six Explorations, Inc.
Citation Group
Gila County, Arizona
$81,250.00 - Uranium

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

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

Subject: Review of application.

The applicant requests assistance in road building and searching for and exploring fracture zones in Dripping Springs quartzite.

From one such fracture, which was followed 40 feet by open cut and drift, samples of uranium-bearing material were taken, and in and adjacent to the fracture MR/HR readings suggest the mineralization extends outward from the fracture.

Three samples show 0.17, 2.36 and 0.24% U_3O_8 but no widths are ascribed and selected material may have been assayed.

If conditions are more or less as depicted on the Proposed Exploration map, two or three diamond drill holes into the nose of the anticline at A should furnish good information concerning the mineralization and perhaps justify the proposed drifting.

Referral to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

4-25-56

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

RECEIVED
APR 24 1956

April 24, 1956

Memorandum

To: Ernest William Ellis, DMEA Docket
Uranium Commodity Committee

From: John E. Crawford, Bureau of Member
Uranium Commodity Committee

Subject: Application for Assistance, DMEA Docket 4249. Big Six Exploration, Inc., Gila County, Arizona

I have reviewed the attached application, DMEA Docket 4249, Big Six Explorations, Inc., Gila County, Arizona, dated April 7, 1956 and received in this office April 13, 1956. I have also discussed it with Joseph O. Hosted, Washington representative of the Atomic Energy Commission.

Big Six Explorations, Inc., has applied for Federal aid to explore a group of seven contiguous unpatented mining claims in the Tonto National Forest, Gila County, Arizona. The proposed work consists of a three-stage program. Stage I would include road building and benching at a cost of $5,250 and 1,000 feet of drilling at a unit cost of $33.00; Stage II, 2,000 feet of long hole drilling at a unit cost of $2.50; and Stage III, 1,000 feet of drifting and 2,000 feet of long hole drilling. The total estimated cost of the project is $81,250.

A 42.5 foot drift was driven on the subject property in an effort to determine the ore-bearing possibilities of the steep dipping fractures in the upper Dripping Spring quartzite. Three samples taken from the existing adit assayed 0.17, 0.24, and 2.36 percent U_3O_8, respectively.

We recommend that the application be referred to the Field Team for appropriate action, and that they consult with E.E. Thurlow, Chief, Atomic Energy Commission, Salt Lake City, Utah.

John E Crawford
John E. Crawford

Attachment

April 13, 1956
Subject: DMEA-4249
Re: Exploration Assistance
Sorrell Horse Nos. 1 - 2
Citation Nos. 1 - 5

Big Six Explorations, Inc.
c/o R. J. Allison
Box 6
Young, Arizona

Gentlemen:

The receipt of your application dated April 7, 1956, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4249 and referred to the Rare & Misc. Metals Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

RECEIVED
13 11 1957
D.M.E.A.

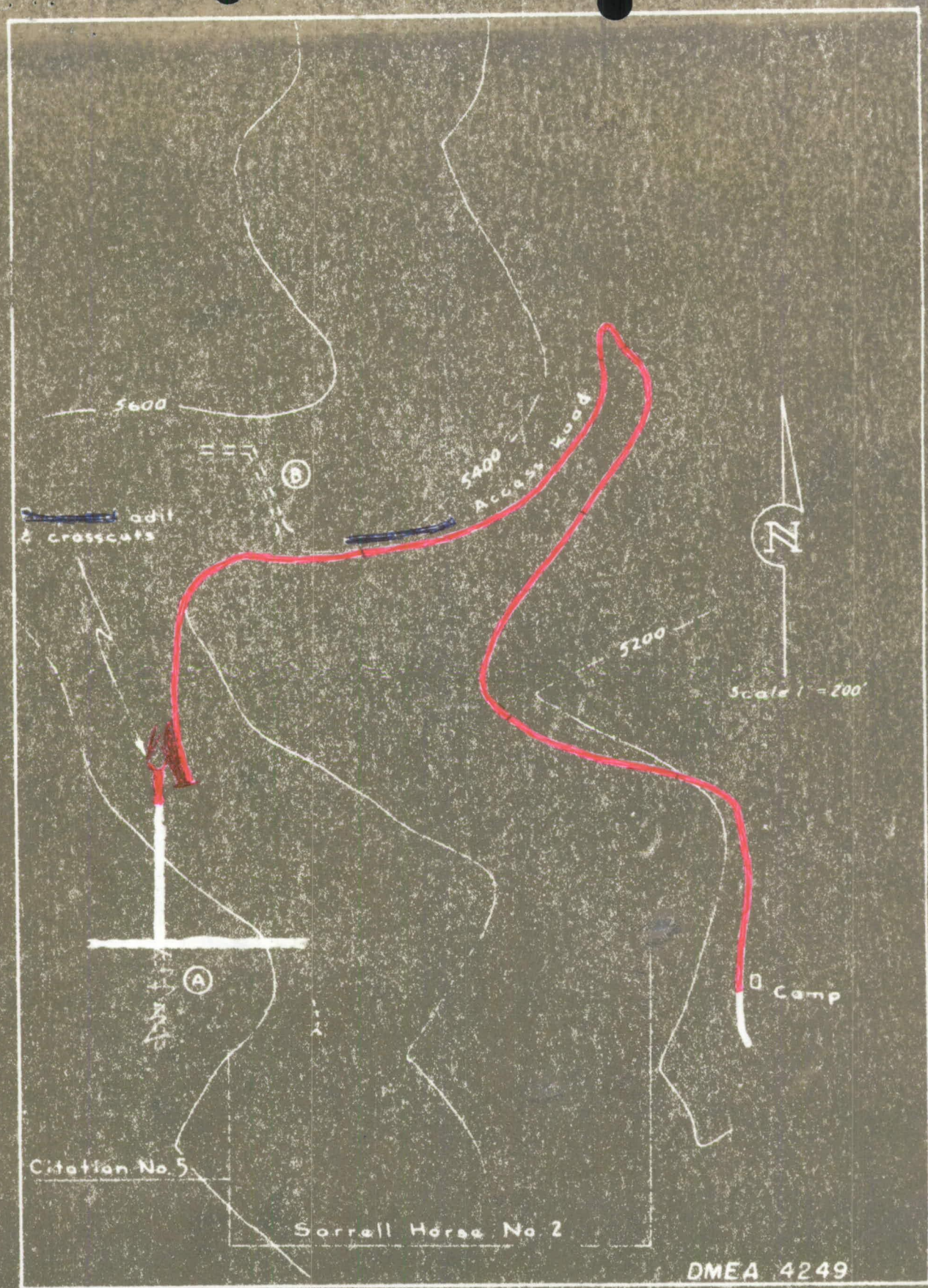


FIG. - 4 - PROPOSED EXPLORATION, BIG SIX EXPLORATION INC.
GILA COUNTY, ARIZ

▬ - Completed

D.M.E.A. # 4249

Big Six Explorations, Inc.
R. J. Allison
Box 6, Young, Ariz.

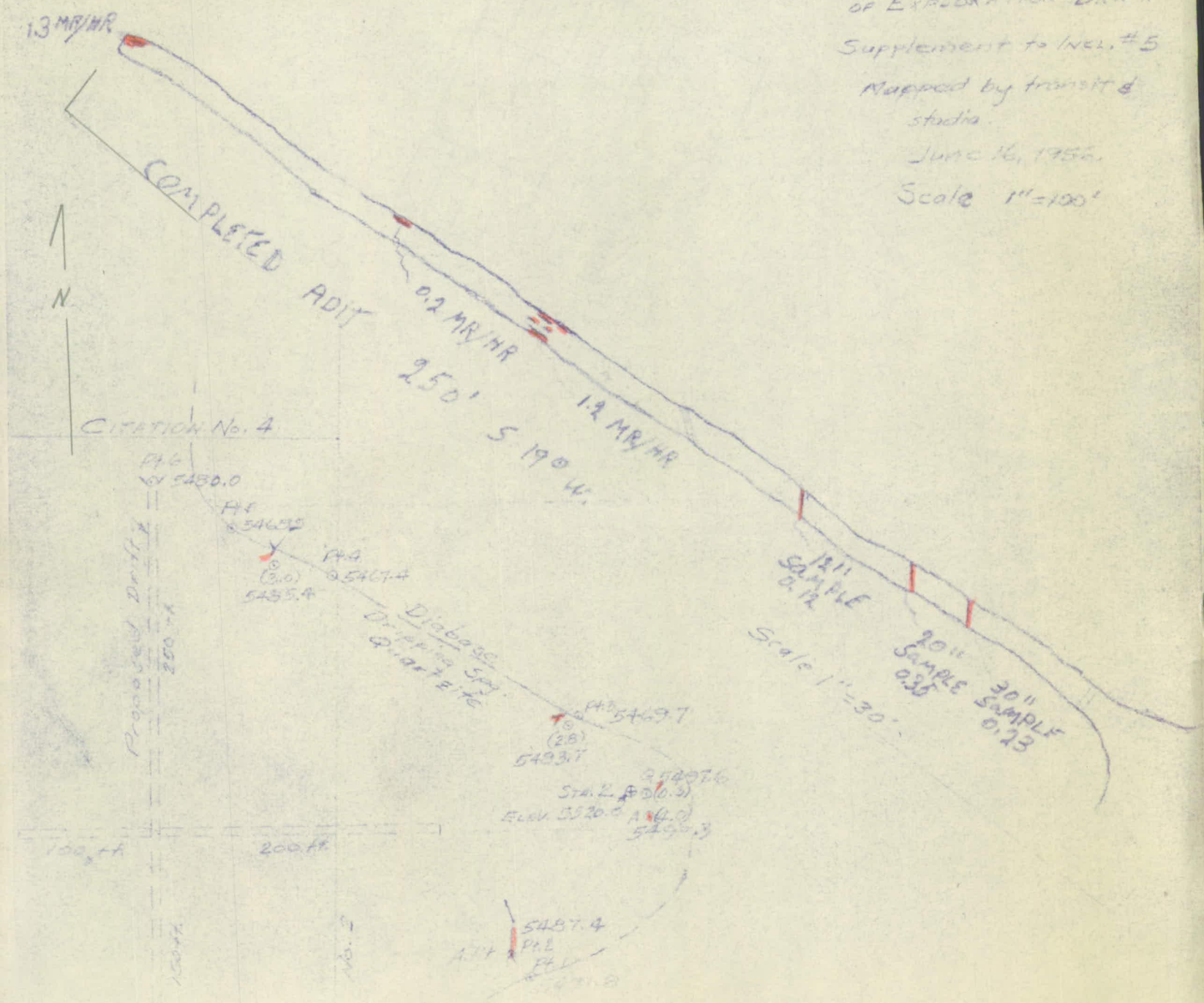
To Determine Elevation of Exploration Drift.

Supplement to Incl. #5

Mapped by transit & stadia.

June 16, 1956.

Scale 1" = 100'

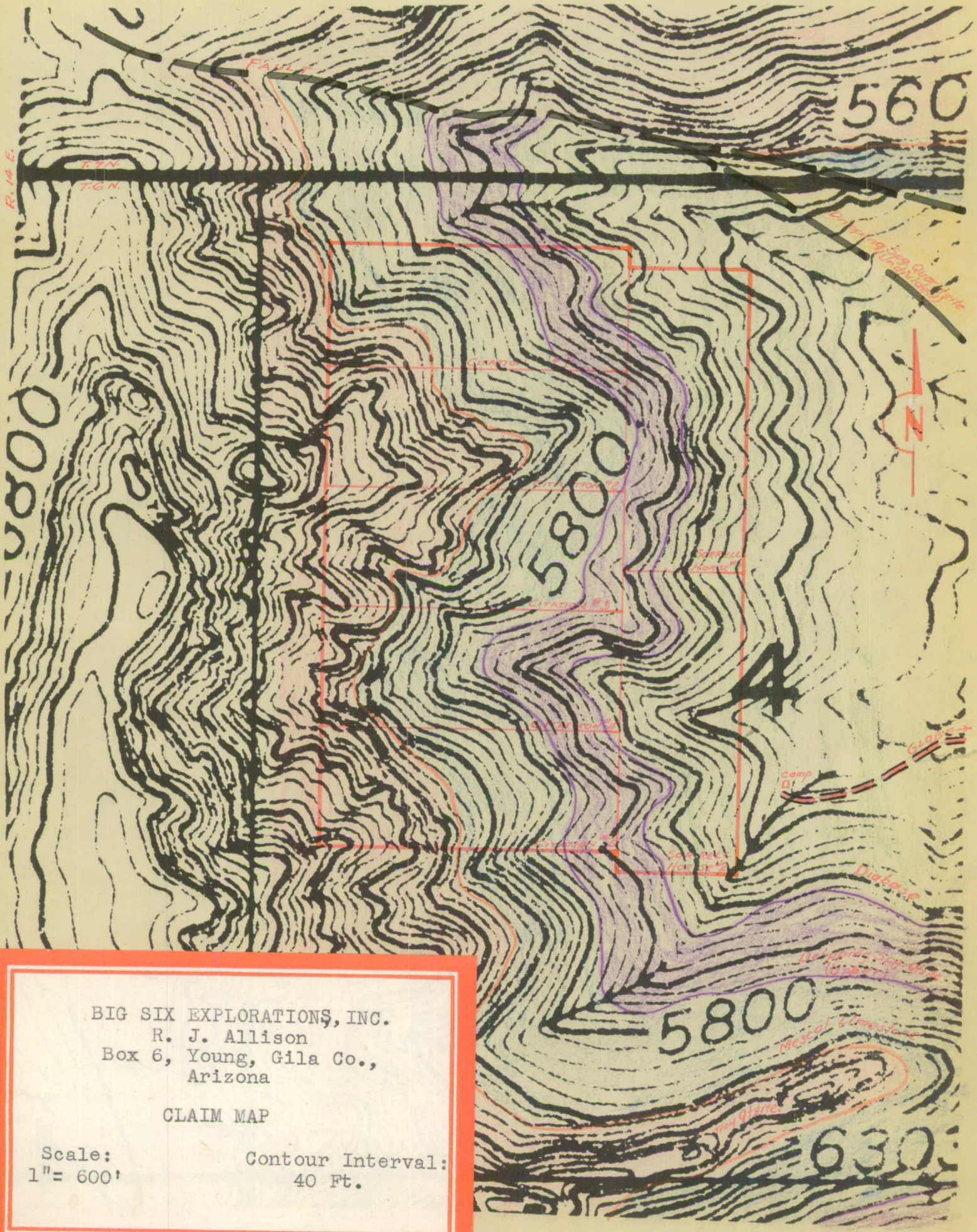


U. S. BUREAU OF MINES
SOUTHWEST EXPERIMENT STATION
APR 15 1957
TUCSON, ARIZONA

EXTRA COPY
D M E A
RECEIVED APR 29 1957

DATE	INITIALS	CODE

INCLOSURE NO. 2.



BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6, Young, Gila Co.,
Arizona

CLAIM MAP

Scale:
1"= 600'

Contour Interval:
40 Ft.

RECEIVED
APR 12 195-

INCLOSURE NO. 6

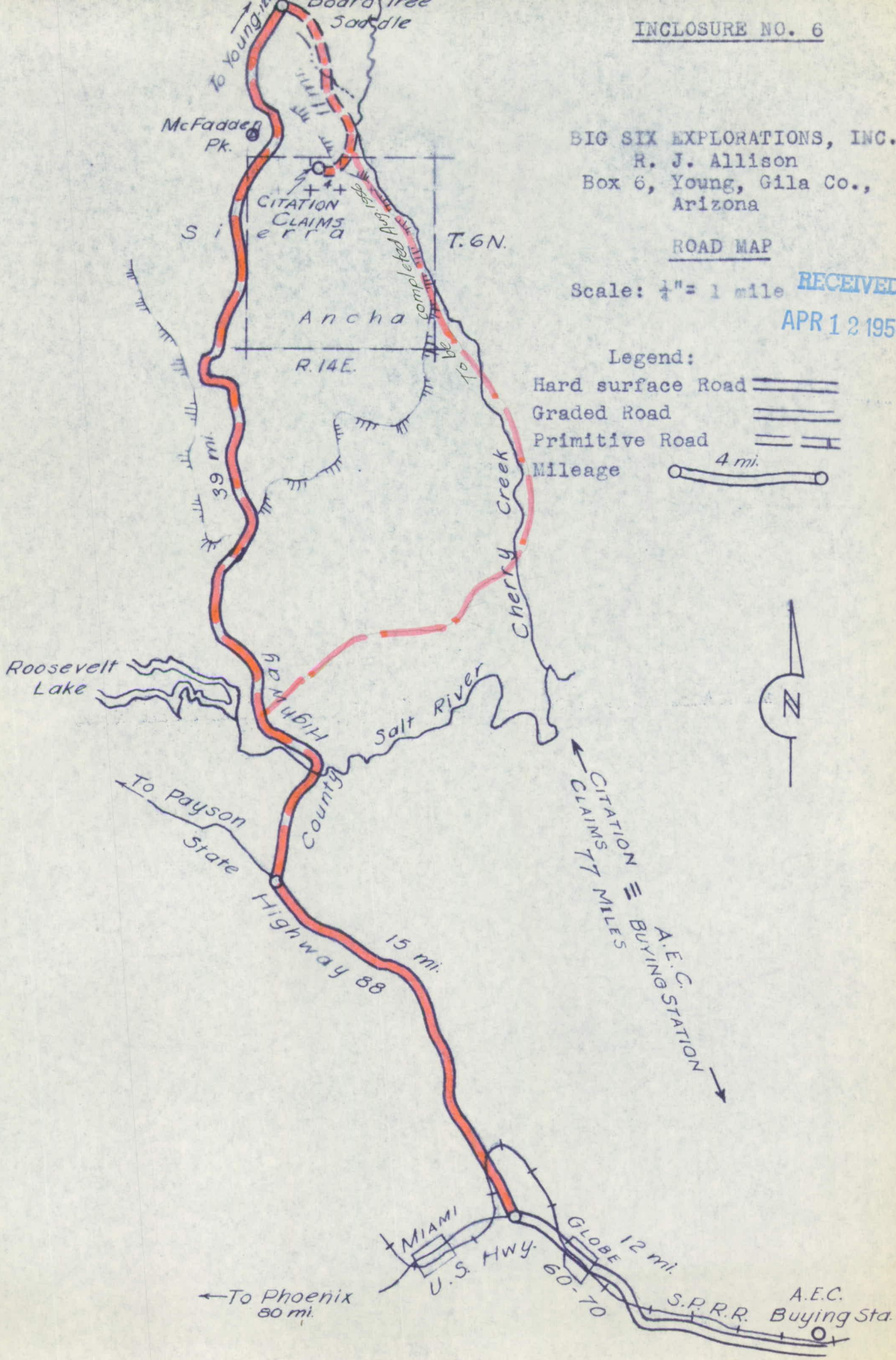
BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6, Young, Gila Co.,
Arizona

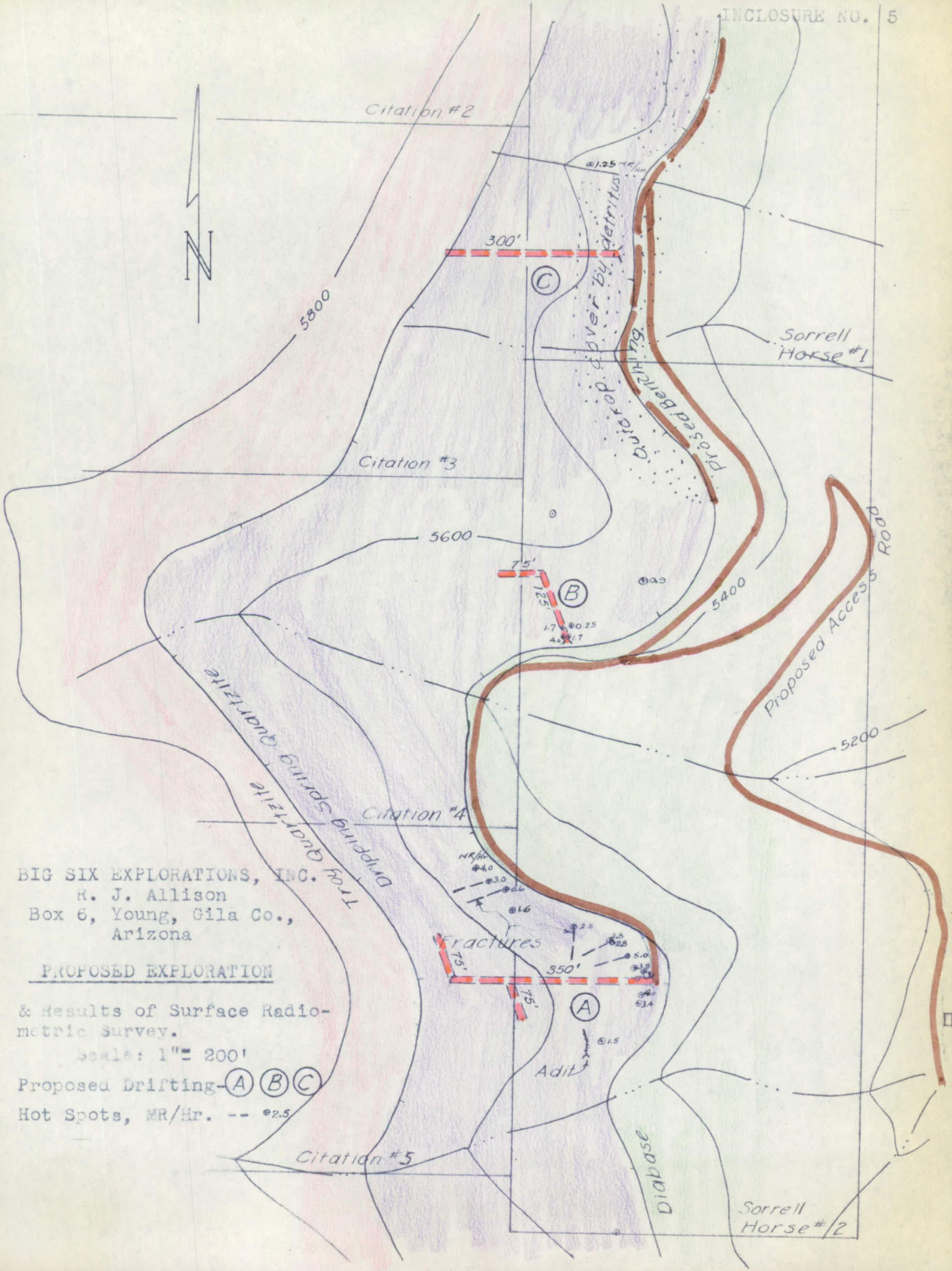
ROAD MAP

Scale: ¼" = 1 mile

RECEIVED
APR 12 1956

Legend:
Hard surface Road
Graded Road
Primitive Road
Mileage 4 mi.





BIG SIX EXPLORATIONS, INC.
R. J. Allison
Box 6, Young, Gila Co.,
Arizona

PROPOSED EXPLORATION

& Results of Surface Radiometric Survey.

Scale: 1" = 200'

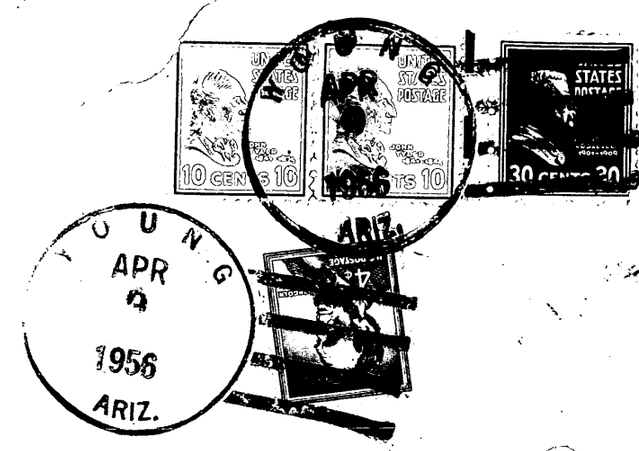
Proposed Drifting - (A) (B) (C)

Hot Spots, MR/Hr. -- 2.5

Box 6

Young, Arizona

1st class



CONSUMER MERCHANDISE
POSTMASTER: THIS PARCEL MAY BE OPENED FOR POSTAL INSPECTION IF NECESSARY. RETURN POSTAGE GUARANTEED.

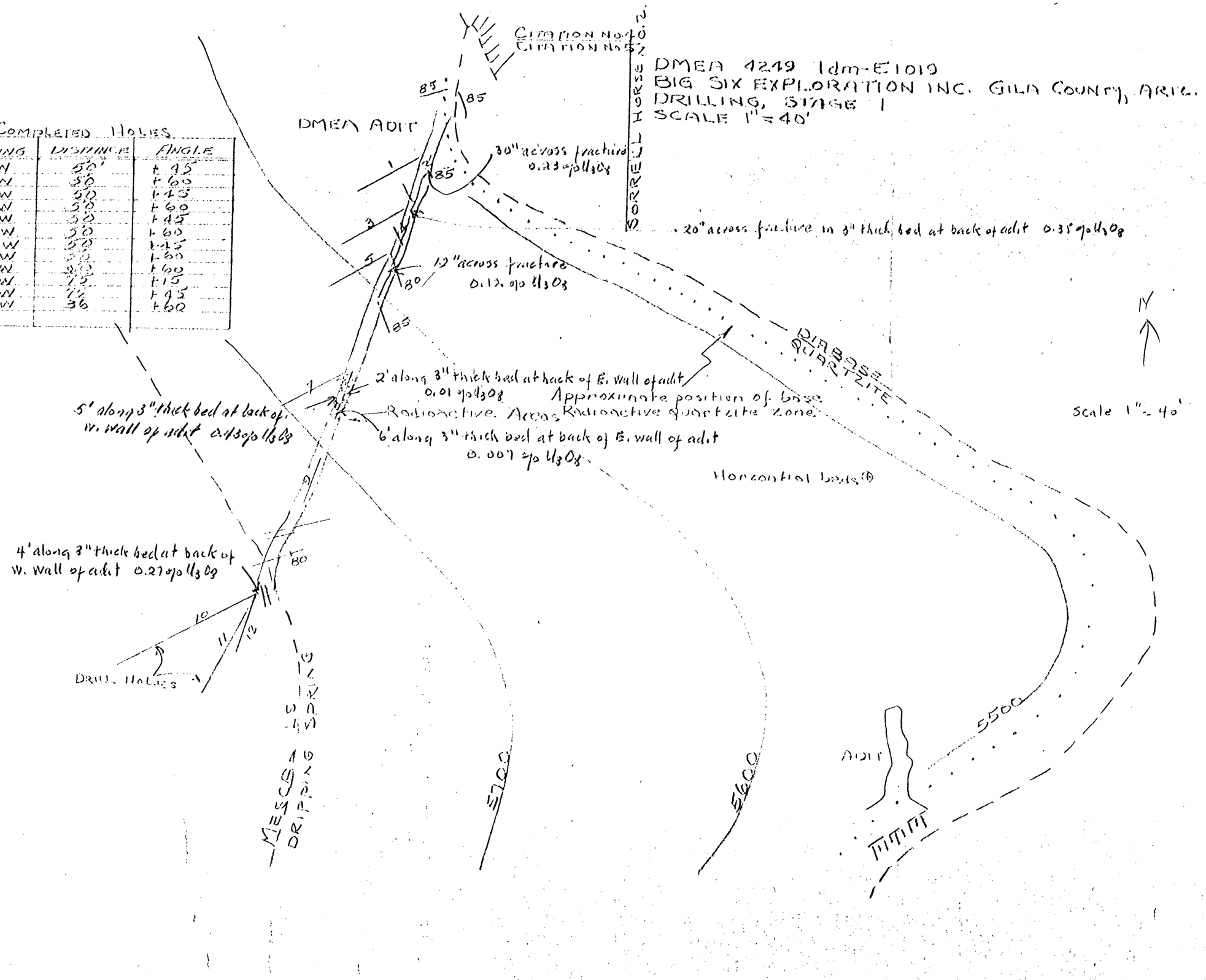
FROM

TO C.O. Mittendorf Administrator for
Defense Minerals Exploration Admin.
Department of Interior
Washington 25 - D.C.

DMEA 4249 Idm-E1019
BIG SIX EXPLORATION INC. GILA COUNTY, ARIZ.
DRILLING, STAGE 1
SCALE 1" = 40'

Completed Holes

No	Bearing	Distance	Angle
1	S 60° W	50'	+45
2	S 19 W	50	+60
3	S 60 W	50	+45
4	S 19 W	50	+60
5	S 60 W	50	+45
6	S 19 W	50	+60
7	S 60 W	50	+45
8	S 19 W	50	+60
9	S 19 W	40	+60
10	S 60 W	75	+15
11	S 28 W	72	+45
12	S 19 W	36	+60



OFFICIAL FILE COPY
DMEA
RECEIVED MAY 1 1957
DATE | INITIALS | CODE

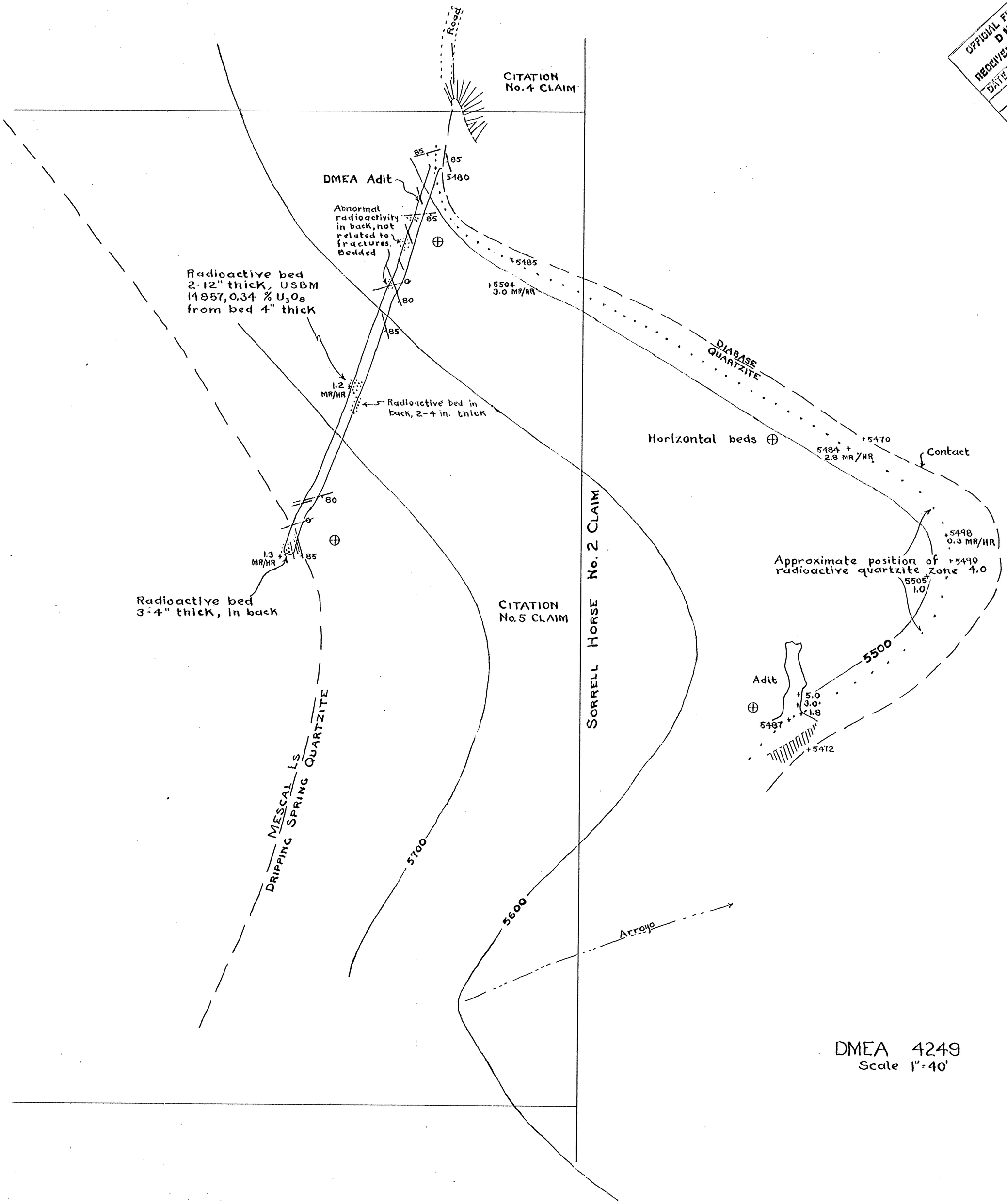


FIG. GEOLOGIC MAP, BIG SIX EXPLORATION INC.; GILA COUNTY, ARIZONA

D.M.E.A. 1241

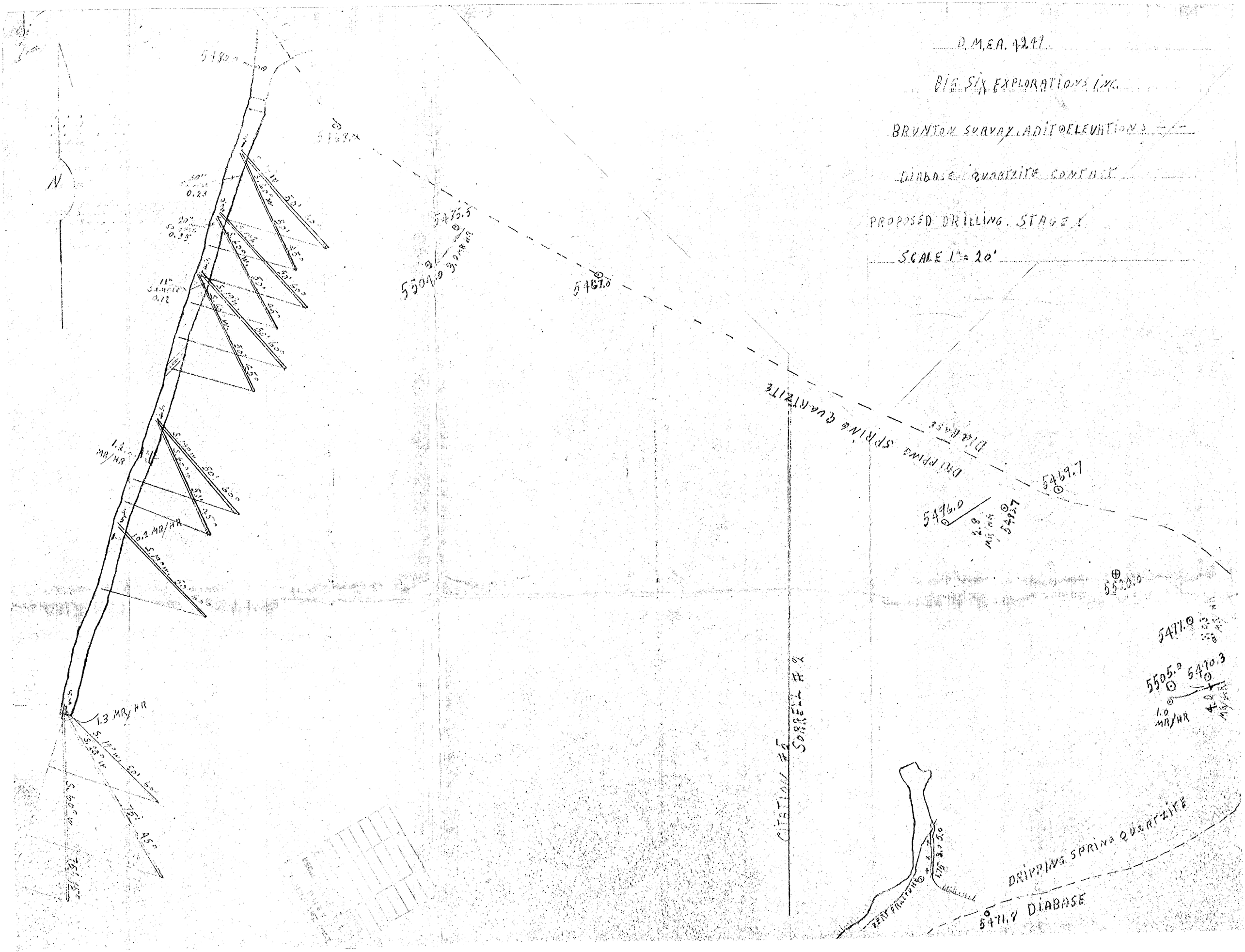
BIG SIX EXPLORATIONS LTD.

BRUNTON SURVAY, ADIT ELEVATIONS

DIABASE - QUARTZITE CONTACT

PROPOSED DRILLING. STAGE I

SCALE 1" = 20'



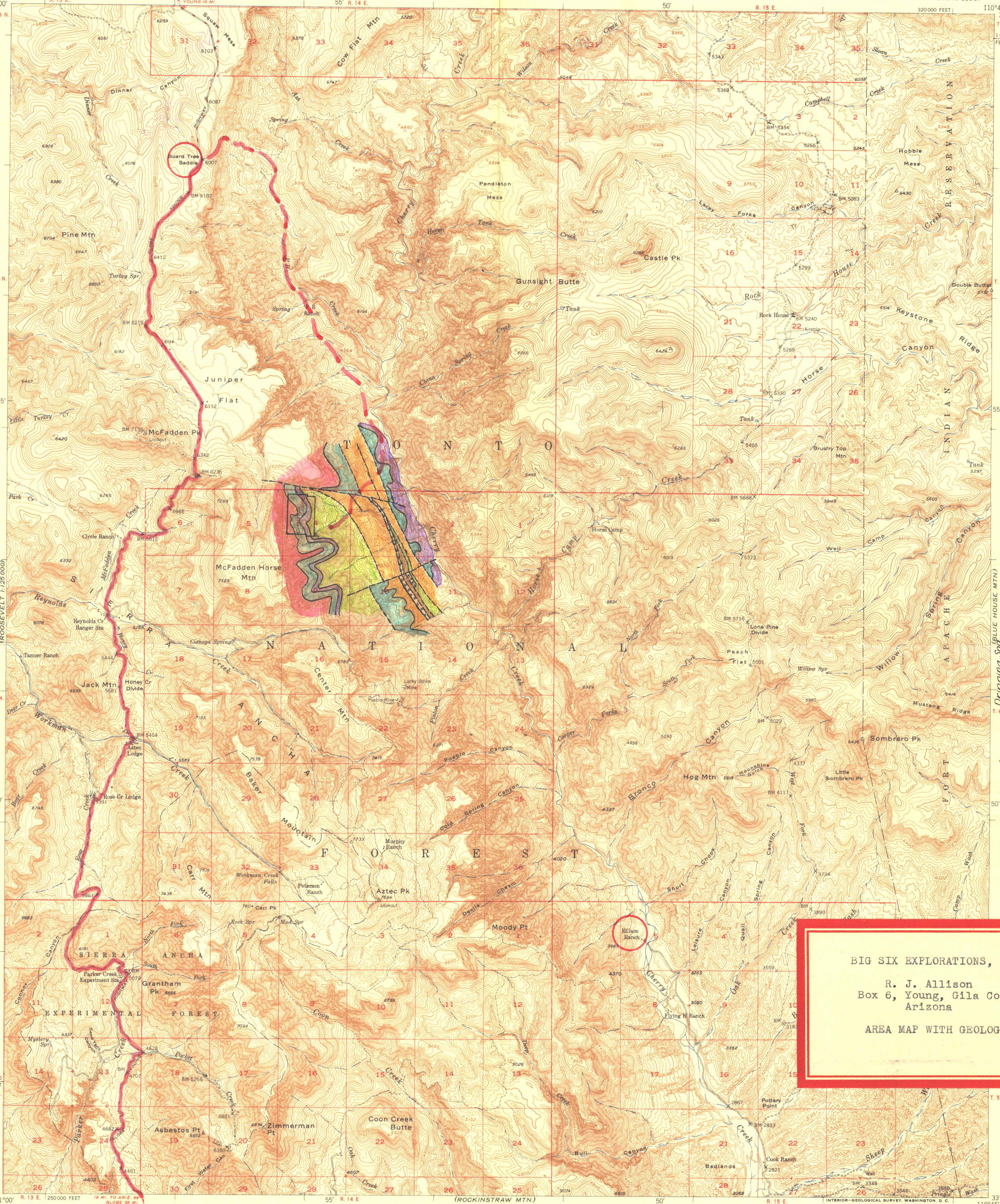
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

INCLOSURE NO. 1

MCFADDEN PEAK QUADRANGLE
ARIZONA-GILA CO.
15 MINUTE SERIES (TOPOGRAPHIC)

(DIAMOND BUTTE)



LEGEND~

- Troy Qtzite
- Mescal Ls.
- Dripping Spg. Qtzite. — Upper
- Dripping Spg. Qtzite. — Undivided
- Barnes Cong.
- Pioneer Shale
- Diabase
- Granite
- Faults
- Contacts

BIG SIX EXPLORATIONS, INC.

R. J. Allison
Box 6, Young, Gila Co,
Arizona

AREA MAP WITH GEOLOGY

(ROOSEVELT) 1:125 000

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and USFS

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1947. Field check 1949

Polyconic projection. 1927 North American datum
10,000-foot grid based on Arizona coordinate system, east zone

Unchecked elevations are shown in brown

TRUE NORTH — MAGNETIC NORTH — 14°
APPROXIMATE MEAN DECLINATION, 1949

SCALE 1:62 500
1 ½ 0 1 2 3 4 MILES
3000 0 3000 6000 9000 12000 15000 18000 21000 FEET
1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U. S. GEOLOGICAL SURVEY, FEDERAL CENTER, DENVER, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

HARD-SURFACE ALL WEATHER ROADS — DRY WEATHER ROADS
Heavy-duty — 4 LANE 6 LANE — Improved dirt
Medium-duty — 4 LANE 6 LANE — Unimproved dirt
Loose-surface, graded, or narrow hard-surface
U. S. Route — State Route

MCFADDEN PEAK, ARIZ.
N3345—W11045/15

EDITION OF 1950